SCOPE OF ACCREDITATION FOR TESTING LABORATORY No. AB 079

issued by
POLSKIE CENTRUM AKREDYTACJI
01-382 Warszawa, ul. Szczotkarska 42

Issue 66 of 18.03.2025

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| PCA POLSKIE CENTRUM AKREDYTACJI | J.S. HAMILTON POLAND Sp. z o.o. TESTING LABORATORY | |
|--|--|--|
| BADANIA AB 079 | ul. Chwaszczyńska 180 81-571 Gdynia | |
| Identification code *) | Field of testing and item: | |
| - B/1, B/4, B/17, B/22, B/42, B/55, B/57 | Biological and biochemical tests of agricultural products – including animal feedstuffs, chemical products, other products, food,cosmetics, fertilizers, animal feedstuffs, objects from food production area | |
| - C/1/P, C/28/P, C/29/P, C/30/P, C/31/P, C/32/P - C/4, C/6, C/10, C/17, C/18, C/21, C/22, C/23, C/25, C/42, C/43, C/44, C/45, C/48, C/49, C/53, C/54, C/55 | Chemical tests and sampling of feedstuffs, water, drinking water, sewage, soil, sediments, waste Chemical tests of agricultural products – chemical products, electrical, products and equipment, fuels (gas, liquid, solid), other products, paper, cardboard, plastic and rubber products, foods, textiles, toys, cosmetics, fertilizers, plant growth substances, paints and lacquers, other petroleum products, packaging materials, electrical, telecommunication and electronic products and equipment, electronic equipment, animal feedstuffs | |
| - K/9/P, K/28/P, K/29/P, K/30/P, K/32/P | - Microbiological tests and sampling of air, water, drinking water, sewage, sediments | |

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This document is an annex to accreditation certificate No. AB 079 of 03.08.2020 Accreditation cycle from 25.05.2022 to 31.05.2026

The status of accreditation and validity of the scope of accreditation can be confirmed at PCA website www.pca.gov.pl

^{*)} The identification code according to the Annex to document DAB-07, available at PCA website www.pca.gov.pl

Q/12, Q/17, Q/18, Q/21, Q/22, Q/42, Q/49

SCOPE OF ACCREDITATION FOR TESTING LABORATORY No. AB 079

issued by **POLSKIE CENTRUM AKREDYTACJI** 01-382 Warszawa, ul. Szczotkarska 42

Issue 66 of 18.03.2025

| | Name and address |
|---|--|
| PCA POLSKIE CENTRUM | J.S. HAMILTON POLAND Sp. z o.o. |
| AKREDYTACJI | TESTING LABORATORY |
| | ul. Chwaszczyńska 180 |
| BADANIA | 81-571 Gdynia |
| AB 079 | |
| Identification code *) | Field of testing and item: |
| - K/1, K/3, K/4, K/9, K/10, K/12, K/17, K/18, K/21, K/22, K/27, K/42, K/49, K/55, K/57 | Microbiological tests of agricultural products, biological materials for testing, chemical products, liquid fuels, glass and ceramics, other products, paper, cardboard, plastic and rubber products, food, wood, cosmetics, packaging materials, animal feedstuffs, objects from food production area |
| N/28/P, N/29P, N/30/P, N/31/P, N/32/P | - Tests of physical properties and sampling of water, drinking water, sewage, soil, sediments, waste |
| - N/1, N/4; N/10, N/18, N/21, N/22, N/23, N/25, N/42, N/48, N/49,N/55 | - Tests of physical properties of agricultural products, chemical products, fuels, paper, cardboard, plastic and rubber products, food, textiles, toys, cosmetics, other petroleum products, packaging materials, animal feedstuffs |
| - Q/28/P, Q/29/P | - Sensory tests and sampling of water, drinking water |
| - Q/1, Q/4, Q/6, Q/10, Q/12, Q/17, Q/18, Q/21, | - Sensory tests of agricultural products, chemical products, electrical products, fuels, glass and ceramics, other products, paper, cardboard, plastic and rubber products, food, cosmetics, packaging materials |

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| Fuel Laboratory Gdynia Chwaszczyńska 180, 81-571 Gdynia | | |
|---|--|---|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Liquid fuels: diesel oil, light heating fuel | Cetane index (calculated) | PN-EN ISO 4264:2018-08 |
| Liquid fuels: diesel oil, unleaded petrol, light heating fuel, marine fuel | Copper strip test Range: corrosion class (1 – 4) Visual method | PN-EN ISO 2160:2004 |
| Liquid fuels: diesel oil, light heating fuel, heavy heating fuel, marine fuel | Kinematic viscosity at temperature 40°C, 50 °C and 100 °C Capillary method Range: (2,000 – 50,00) mm²/s Dynamic viscosity (calculated) | PN-EN ISO 3104:2024-01 Procedure A |
| Liquid fuels: diesel oil, light heating fuel, marine fuel | Water content Range: (0,003 – 0,100) % (m/m) Coulometric titration method | PN-EN ISO 12937:2005+Ap1:2021- 11 |
| | Contamination content Range: (6,0 – 30,0) mg/kg Gravimetric method | PN-EN 12662:2014-05 |
| | Cloud point Range: (-40 – 0) °C Visual method | PN-EN ISO 3015:2019-06 |
| Liquid fuels: diesel oil, light heating fuel, heavy heating fuel, marine fuel | Pour point Range: (-33 – +30) °C Visual method | PN-EN ISO 3016:2019-06 |
| | Ash content Range: (0,001 – 0,180) % (m/m) Gravimetric method | PN-EN ISO 6245:2008 |
| Liquid fuels: light heating fuel, heavy heating fuel, marine fuel | Sulphur content Range: (0,03 – 3,00) % (m/m) Energy-dispersive X ray fluorescence spectrometry method (ED-XRF) | PN-EN ISO 8754:2007+Ap1:2014-02 |
| Liquid fuels: unleaded petrol | Gum content Range: Solvent-washed gum (1,0 – 10,0) mg/100 ml Unwashed gum (1,0 – 100,0) mg/100 ml Gravimetric method | PN-EN ISO 6246:2017-05+A1:2020- 03 except p. 8 and 9 |
| | Oxidation stability Range: (200– 600) min Induction period method | PN-EN ISO 7536:2011 |
| | Air saturated vapour pressure (ASVP) Range: (50,0 – 90,0) kPa Mini Reid method Dry vapour pressure equivalent | PN-EN 13016-1:2024-11 |
| | (DVPE) (calculated) | |
| | Benzene content Range: (0,1 – 2,0) % (v/v) IR spectrometry method (IR) | PN-EN 238:2000+A1:2008 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|--|--|----------------------------------|
| Liquid fuels: unleaded petrol | Hydrocarbon types content Range: Aromatic hydrocarbons (20,0 – 40,0) % (v/v) Olefins hydrocarbons (1,0 – 20,0) % (v/v) Saturated hydrocarbons (45,0 – 68,0) % (v/v) Fluorescent indicator adsorption method (FIA method) | PN-EN 15553:2022-05 |
| Liquid fuels: | Fatty acid methyl esters content | PN-EN 14078:2014-06 |
| diesel oil | (FAME) Range: (0,05 – 22,7) % (v/v) IR spectrometry method (IR) | |
| Liquid fuels: diesel oil, unleaded petrol, light heating fuel, marine fuel | Sulphur content Range: (3,0 – 60,0) mg/kg Ultraviolet fluorescence method | PN-EN ISO 20846:2020-03 |
| Liquid fuels: diesel oil, light | Flash point | PN-EN ISO 2719:2016-08 |
| heating fuel, heavy heating fuel, marine fuel | Range: (40,0 – 140,0) °C Pensky-Martens closed cup method | +A1:2021-06 |
| Liquid fuels: diesel oil, light heating fuels | Cold filter plugging point (CFPP) Range: (-41 – 0) °C Optical method | PN-EN 116:2015-09 |
| Liquid fuels: diesel oils, fatty acid methyl esters (FAME) | Oxidation stability Range: (1,0 – 40,0) h Conductometric method | PN-EN 15751:2014-05 |
| Liquid fuels: diesel oil, light heating fuel, marine fuel | Carbon residue Range: (0,01 – 15,00) % (m/m) Gravimetric method | PN-EN ISO 10370:2014-12 |
| | Oxidation stability Range: (2 – 25) g/m³ Gravimetric method | PN-EN ISO 12205:2011+Ap1:2013-09 |
| Liquid fuels: diesel oil, light heating fuel, heavy heating fuel | Gross calorific value Range: (30000 – 45000) kJ/kg Calorimetric method Net calorific value (calculated) | PN-C-04062:2018-05 |
| Liquid fuels: heavy heating fuel | Water content Range: (0,05 – 25) % (m/m) Distillation method | PN-EN ISO 9029:2005 |
| Liquid fuels: diesel oil, unleaded petrol, light heating fuel, marine fuel | Distillation characteristics Range: (10,0 – 400,0) °C Distillation method | PN-EN ISO 3405:2019-05 |
| | Density at temperature 15°C, 20°C Range: (720,0 – 900,0) kg/m³ Oscillating method | PN-EN ISO 12185:2024-08 |
| Liquid fuels: heavy heating fuel | Density at temperature 15°C Range: (890,0 – 990) kg/m³ Oscillating method | PN-EN ISO 12185:2024-08 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|---|---|
| Gaseous fuels: Liquefied hydrocarbon gases, LPG | Detection of hydrogen sulphide Visual method | PN-EN ISO 8819:2000 |
| | Sulphur content Range: (1,0 – 196) mg/kg Ultraviolet fluorescence method | ASTM D 6667-21 |
| | Copper strip test Range: corrosion class (1 – 4) Visual method | PN-EN ISO 6251:2001 |
| | Detection of water Visual method | PN-EN 15469:2009 |
| | Net calorific value (calculated) | PN-C-96008:1998 |
| | Hydrocarbons composition Range: (0,1 – 100) % (m/m) Gas chromatography method with flame ionization detection (GC-FID) | PN-EN 27941:2015-12 |
| | Total dienes content Range: (0,1 – 1,0) % (mol/mol) | PN-EN 27941:2015-12 |
| | Motor octane number MON (calculated) | PN-EN 589:2024-08 app. B |
| | Density at temperature 15 °C (calculated) | PN-EN ISO 8973:2000+A1:2020-10 |
| | Density at temperature 15,6 °C (calculated) | PN-C-96008:1998 |
| | Vapour pressure at temperature -15 °C (calculated) | PN-C-96008:1998 |
| | Vapour pressure, estimated in temperatures: -10 °C, -5 °C, 0 °C, 10 °C, 20 °C, 37,8 °C, 40 °C, 50 °C, 70 °C (calculated) | PN-EN ISO 8973:2000+A1:2020-10 PN-EN 589:2024-08 app. C |
| | Temperature, at which it is estimated the relative vapour pressure is not less than 150 kPa (calculated) | PN-EN ISO 8973:2000+A1:2020-10 PN-EN 589+A1:2022-07 app. C |
| | Odour Organoleptic method | PN-EN 589:2024-08 app. A |
| | Mineral oil residue Range: (0,0002 – 0,0100) % (m/m) Gravimetric method | PN-C-96008:1998 |
| | Dissolved residues Range: (20 – 100) mg/kg Gravimetric method | PN-EN 15471:2017-08 |
| | Hydrocarbons composition Range: (0,10 – 100,0) % (m/m) Gas chromatography method with flame ionization detection (GC-FID) | DIN 51619:2004-02 |
| | 1,3 butadiene content Range: (0,01 – 1,00) % (m/m) Gas chromatography method with flame ionization detection (GC-FID) | DIN 51619:2004-02 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|--|---------------------------------------|
| Gaseous fuels: Liquefied hydrocarbon gases, LPG | Total dienes content Range: (0,10 – 1,00) % (m/m) Gas chromatography method with flame ionization detection (GC-FID) | DIN 51619:2004-02 |
| Liquid fuels: fatty acids methyl esters (FAME) | Density at temperature 15 °C, 20 °C Range: (860,0 – 900,0) kg/m ³ Oscillating method | PN-EN ISO 12185:2024-08 |
| | Kinematic viscosity at temperature 40 °C Range: (3,500 – 5,000) mm²/s | PN-EN ISO 3104:2024-01 Procedure A |
| | Capillary method Flash point Range: (90,0–180,0) °C Pensky-Martens closed cup method | PN-EN ISO 2719:2016-08 +A1:2021-06 |
| | Copper strip test Range: corrosion class (1 – 4) Visual method | PN-EN ISO 2160:2004 |
| | Water content Range: (0,010 – 0,100) % (m/m) Coulometric titration method | PN-EN 12937:2005+Ap1:2021-11 |
| Liquid fuels: fatty acids methyl esters (FAME) | Contamination content Range: (6,0 – 30,0) mg/kg Gravimetric method | PN-EN 12662:2014-05 |
| | Sulphur content Range: (3,0 – 15,0) mg/kg Ultraviolet fluorescence method | PN-EN ISO 20846:2020-03 |
| Animal and vegetable fats and oils | Water content Range: (0,05 – 2,0) % (m/m) Potentiometric titration method | PN-EN ISO 8534:2017-03 |
| Liquid fuels: diesel oil | Aromatic hydrocarbons groups content Range: -mono-aromatic hydrocarbons (MAH) | PN-EN 12916:2024-08 except method B |
| Liquid fuels: unleaded petrol Liquid petroleum products | Organic oxygenate compounds content Range: (0,17 – 15) % (m/m) % (v/v) Gas chromatography method with flame ionization detection (GC-FID) Total content of organically bound | PN-EN 13132:2005 |
| | oxygen (calculated) | Page version: A |

| Fuel Laboratory Małaszewicze Kolejarzy 6, 21-540 Małaszewicze | | |
|--|---|--|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Liquid fuels: diesel oil | Sulphur content Range: (3,0 – 50,0) mg/kg Ultraviolet fluorescence method | PN-EN ISO 20846:2020-03 |
| | Density at temperature 15 °C Range: (820,0 – 840,0) kg/m³ Areometric method | PN-EN ISO 3675:2004 |
| | Distillation characteristics at atmospheric pressure Range: (150,0 – 400,0) °C Distillation method | PN-EN ISO 3405:2019-05 |
| Other petroleum products: petroleum paraffins, petroleum waxes, petrolatum | Kinematic viscosity at 100 °C Range: (3,000 – 15,00) mm²/s Capillary method | PN-EN ISO 3104:2024-01, Procedure A |
| | Oil content Range: (0,4 – 30) % (m/m) Gravimetric method | ASTM D 721-17 |
| | Oil content Range: (0,4 – 15) % (m/m) Gravimetric method | ISO 2908:1974 |
| | Colour Range: 0,5 – 5 Visual method | ASTM D 1500-12 (2017) |
| | Congealing point Range: (30 – 70) °C Visual method | ASTM D 938-12 (2017) |
| Gaseous fuels: Liquefied hydrocarbon gases, | Detection of hydrogen sulphide Visual method | PN-EN ISO 8819:2000 |
| LPG | Sulphur content Range: (1,0 – 100) mg/kg Ultraviolet fluorescence method | ASTM D 6667-21 |
| | Copper strip test Range: corrosion class (1 – 4) Visual method | PN-EN ISO 6251:2001 |
| | Detection of water Visual method | PN-EN 15469:2009 |
| | Dissolved residue Range: (20 – 100) mg/kg Gravimetric method | PN-EN 15471:2017-08 |
| | Hydrocarbons composition Range: (0,1 – 100,0) % (m/m) Gas chromatography method with flame ionization detection (GC-FID) | PN-EN 27941:2015-12 |
| | Total dienes content (as 1,3-butadiene) Range: (0,1 – 1,0) % (mol/mol) (0,1 – 1,0) % (m/m) Gas chromatography method with flame ionization detection (GC-FID) | PN-EN 27941:2015-12 |
| | Hydrocarbons composition Range: (0,1 – 100,0) % (m/m) Gas chromatography method with flame ionization detection (GC-FID) | DIN 51619:2004-02 |
| | 1,3 butadiene content Range: (0,01 – 1,00) % (m/m) Gas chromatography method with flame ionization detection (GC-FID) | DIN 51619:2004-02 Page version: A |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|--|---|
| Gaseous fuels: Liquefied hydrocarbon gases, LPG | Total dienes content Range: (0,10 – 1,00) % (m/m) Gas chromatography method with flame ionization detection (GC-FID) | DIN 51619:2004-02 |
| | Motor octane number MON (calculated) | PN-EN 589:2024-08 app. B |
| | Density at temperature 15 °C (calculated) | PN-EN ISO 8973:2000+A1:2020-10 |
| | Density at temperature 15,6 °C (calculated) | PN-C-96008:1998 |
| | Vapour pressure at temperature -15 °C (calculated) | PN-C-96008:1998 |
| | Temperature, at which it is estimated the relative vapour pressure is not less than 150 kPa (calculated) | PN-EN ISO 8973:2000+A1:2020-10 PN-EN 589+A1:2022-07 app. C |
| | Vapour pressure, estimated in temperatures: -10 °C, -5 °C, 0 °C, 10 °C, 20 °C, 37,8 °C, 40 °C, 50 °C, 70 °C (calculated) | PN-EN ISO 8973:2000+A1:2020-10 PN-EN 589:2024-08 app. C |
| | Net calorific value (calculated) | PN-C-96008:1998 |
| | Odour Organoleptic method | PN-EN 589:2024-08 app. A |
| | Mineral oil residue Range: (0,0002 – 0,0100) % (m/m) Gravimetric method | PN-C-96008:1998 |
| Liquid fuels: diesel oil | Fatty acid methyl esters content (FAME) Range: (0,05 – 10,0) % (v/v) IR spectrometry method (IR) | PN-EN 14078:2014-06 |
| | Flash point Range: (40,0 – 80,0) °C Pensky-Martens closed cup method | PN-EN ISO 2719:2016-08 +A1:2021-06 |
| | Cold filter plugging point (CFPP) Range: (-35 – 0) °C Optical method | PN-EN 116:2015-09 |
| | Cetane index (calculated) | PN-EN ISO 4264:2018-08 |
| | Density at temperature 15 °C, 20 °C Range: (800,0 – 850,0) kg/m ³ Oscillating method | PN-EN ISO 12185:2024-08 |

| Fuel Laboratory Tychy Goździków 1, 43-100 Tychy | | |
|--|--|---|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Gaseous fuels: Liquefied hydrocarbon gases, | Detection of hydrogen sulphide Visual method | PN-EN ISO 8819:2000 |
| LPG | Sulphur content Range: (1,0 – 200) mg/kg Ultraviolet fluorescence method | ASTM D 6667-21 |
| | Copper strip test Range: corrosion class (1 – 4) Visual method | PN-EN ISO 6251:2001 |
| | Detection of water Visual method | PN-EN 15469:2009 |
| | Hydrocarbons composition Range: (0,1 – 100) % (m/m) Gas chromatography method with flame ionization detection (GC-FID) | PN-EN 27941:2015-12 |
| | Total dienes content (as 1,3-butadiene) Range: (0,1- 1,0) % (mol/mol) | PN-EN 27941:2015-12 |
| | Hydrocarbons composition Range: (0,1 – 100) % (m/m) Gas chromatography method with flame ionization detection (GC-FID) | DIN 51619:2004-02 |
| | 1,3- butadiene content Range: (0,01 – 1,00) % (m/m) Gas chromatography method with flame ionization detection (GC-FID) | DIN 51619:2004-02 |
| | Total dienes content Range: (0,10 – 1,00) % (m/m) Gas chromatography method with flame ionization detection (GC-FID) | DIN 51619:2004-02 |
| | Motor octane number MON (calculated) | PN-EN 589:2024-08 app. B |
| | Density at temperature 15 °C (calculated) | PN-EN ISO 8973:2000+A1:2020-10 |
| | Density at temperature 15,6 °C (calculated) | PN-C-96008:1998 |
| | Vapour pressure at temperatures: -15°C, 40 °C and 70 °C (calculated) | PN-C-96008:1998 |
| | Vapour pressure, estimated in temperatures: -10 °C, -5 °C, 0 °C, 10 °C, 20 °C, 37,8 °C, 40 °C, 50 °C, 70 °C (calculated) | PN-EN ISO 8973:2000+A1:2020-10 PN-EN 589:2024-08 app. C |
| | Temperature, at which it is estimated the relative vapour pressure is not less than 150 kPa (calculated) | PN-EN ISO 8973:2000+A1:2020-10 PN-EN 589+A1:2022-07 app. C |
| | Net calorific value (calculated) | PN-C-96008:1998 |
| | Odour Organoleptic method | PN-EN 589:2024-08 app. A |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|---|--|
| Gaseous fuels: Liquefied hydrocarbon gases, LPG | Dissolved residues Range: (20 – 100) mg/kg Gravimetric method | PN-EN 15471:2017-08 |
| Solid fuels: coal | Volatile matters content Range: (1,50 – 44,00) % Gravimetric method | PN-G-04516:1998 |
| | Total moisture content Range: (1,0– 25,0) % Gravimetric method | PN-ISO 589:2006 method B1 |
| | CO ₂ emission factor (calculated) | PB-258 ed. 2 of. 26.08.2024 |
| | Oxidation factor (calculated - on basis of total carbon content in fuel and solid products of combustion) | PB-259 ed. 2 of. 26.08.2024 |
| | Sintering ability Range: 0 – 80 Gravimetric method | PN-81/G-04518 |
| | Fixed carbon factor (calculated) | PN-G-04516:1998 |
| Solid fuels: coke derived from coal | Total moisture content Range: (1,0 – 60,0) % Gravimetric method | PN-ISO 579:2002 |
| | Moisture content in test sample Range:(0,1 – 6,0) % (m/m) Gravimetric method | PN-ISO 687:2005 |
| Solid fuels: coal and coke | Total moisture content Range: Hard coal (1,0 – 30,0) % Coke (0,1 – 10,0) % Gravimetric method | PN-80/G-04511 p. 2.3.2, p. 2.3.4 |
| | Moisture content in test sample Range: (0,10 – 10,00) % Thermogravimetric method | PN-G-04560:1998 |
| | Moisture content in test sample Range: (0,1 – 10,0) % Gravimetric method | PN-ISO 11722:2009 |
| | Ash content Range: (0,10 – 55,00) % Thermogravimetric method | PN-G-04560:1998 |
| | Ash content Range: (1,0 – 55,0) % Gravimetric method | PN-ISO 1171:2002 |
| | Gross calorific value Range: (14000 – 35000) kJ/kg Calorimetric method Net calorific value (calculated) | PN-81/G-04513 PN-ISO 1928:2020-05 |
| | Volatile matters content Range: Hard coal (2,0 – 40,0)% Coke (1,0 – 20,0) % Gravimetric method | ISO 562:2010 |
| | Total sulphur content Range: (0,10 – 2,50) % (m/m) High-temperature combustion method with IR detection | PN-G-04584:2001 ASTM D 4239-18 ^{£1} (method A) Page version: A |

| Total sulphur content Range: (0,20 – 2,50) % (m/m) High-temperature combustion method with IR detection Total carbon content Range: (40,0 – 100,0) % High-temperature combustion method | ISO 19579:2006 PN-G-04571:1998 |
|---|---|
| with IR detection Total carbon content Range: (40,0 – 100,0) % | PN-G-04571:1998 |
| Range: (40,0 - 100,0) % | I PN-G-04571:1998 |
| | PKN-ISO/TS 12902:2007 |
| Hydrogen content Range: (0,10 – 5,60) % High-temperature combustion method with IR detection | PN-G-04571:1998 PKN-ISO/TS 12902:2007 |
| Chlorine content Range:(0,03 – 0,50) % Titrimetric method | PN-ISO 587:2000 p. 7.2.1 |
| Moisture content in test sample Range: (0,10 – 10,00) % Thermogravimetric method | PB-72 ed. 2 of 26.08.2024 |
| Ash content Range:(40,00 – 99,90) % (m/m) | PB-347 ed. 2 of 26.08.2024 |
| Total carbon content Range: (0,3 – 40,0) % High-temperature combustion | PB-73 ed. 2 of 15.03.2024 |
| Total moisture content Range: (0,1 – 40,0) % Gravimetric method | PB-90 ed. 2 of 26.08.2024 |
| Moisture content in test sample Range: (1,00 – 20,00) % Thermogravimetric method | PB-98 ed. III of 21.05.2013 |
| Total moisture content Range: (3,0 – 85,0) % Gravimetric method | PN-EN ISO 18134-2:2017-03 |
| Hydrogen content Range: (3,0 – 8,0) % High-temperature combustion method with IR detection | PN-EN ISO 16948:2015-07 |
| Ash content Range: (0,1 – 45,0) % Gravimetric method | PN-EN ISO 18122:2023-05 |
| Sulphur content Range: (0,02 – 0,20) % High-temperature combustion method with IR detection | PN-EN ISO 16994:2016-10 p. 4.4 |
| Carbon content Range: (30,0 – 50,0) % High-temperature combustion method with IR detection | PN-EN ISO 16948:2015-07 |
| Gross calorific value Range: (5000 – 22000) kJ/kg Calorimetric method Net calorific value (calculated) | PN-EN ISO 18125:2017-07 |
| | High-temperature combustion method with IR detection Hydrogen content Range: (0,10 – 5,60) % High-temperature combustion method with IR detection Chlorine content Range: (0,03 – 0,50) % Titrimetric method Moisture content in test sample Range: (0,10 – 10,00) % Thermogravimetric method Ash content Range: (40,00 – 99,90) % (m/m) Thermogravimetric method Total carbon content Range: (0,3 – 40,0) % High-temperature combustion method with IR detection Total moisture content Range: (0,1 – 40,0) % Gravimetric method Moisture content in test sample Range: (1,00 – 20,00) % Thermogravimetric method Total moisture content Range: (3,0 – 85,0) % Gravimetric method Hydrogen content Range: (3,0 – 8,0) % High-temperature combustion method with IR detection Ash content Range: (0,1 – 45,0) % Gravimetric method Sulphur content Range: (0,02 – 0,20) % High-temperature combustion method with IR detection Carbon content Range: (30,0 – 50,0) % High-temperature combustion method with IR detection Carbon content Range: (30,0 – 50,0) % High-temperature combustion method with IR detection Carbon content Range: (30,0 – 50,0) % High-temperature combustion method with IR detection Carbon content Range: (30,0 – 50,0) % High-temperature combustion method with IR detection Carbon content Range: (30,0 – 50,0) % High-temperature combustion method with IR detection |

O) Waste codes given according to Minister of Climate Regulation on the waste catalogue.

| | Microbiology Laboratory Gdynia Chwaszczyńska 180, 81-571 Gdynia | |
|---|--|---|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Meat Fish Eggs | Detection of antibiotics residues Diffusion method | PB-216 ed. II of 23.10.2015 based on the manufacturer's instructions Premi Test |
| Milk Milk powder Cream | Detection of antibiotics and other inhibitors Diffusion method | PN-91/A-86033 Delvotest SP NT |
| Fruit, vegetable and vegetable with meat products | Shelf life of canned food Thermostatic test | PN-90/A-75052/03 |
| Meat and meat products | Shelf life of canned food Thermostatic test | PN-A-82055-5:1994 |
| Fish and fishery products | Shelf life of canned food Thermostatic test | PN-A-86732:1992 |
| Drinking water, raw water, spring water, mineral water, table water, ice | Flavour Qualitative method | PB-201 ed. I of 01.02.2013 |
| Drinking water, raw water, spring water, mineral water, table water, industrial water, technological water | Odour Qualitative method | |
| Environmental samples from food and cosmetics production areas as well as food and cosmetics trade: - swabs from the surface limited with template - swabs from surface unlimited with template | Enumeration of Legionella Membrane filtration method | PB-404 ed. I of 30.10.2019 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|--|--|---|
| Food 1) Feed Environmental samples from food and cosmetics production areas as well as food trade - swabs from the surface limited with template - swabs from surface unlimited with template | Number of microorganisms ²⁾ Colony count technique (spread plate method) | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ |
| Food ¹⁾ Feed Environmental samples from areas of cosmetics production: | Number of microorganisms ²⁾ Colony count technique (pour plate method) | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ |
| - swabs from the surface limited with template - swabs from surface unlimited with template | | |
| Drinking water, surface water, water, pool water | | |
| Environmental samples from areas of food production and food trade ¹⁾ Paper, cardboard, paper and cardboard products Plastic products and rubber products Metal, glass and ceramics products Wood and wood products | Number of microorganisms ²⁾ Colony count technique (pour plate method) | Standardized methods ⁵⁾ |
| Environmental samples from food and cosmetics production areas as well as food and cosmetics trade: - contact plates (surfaces) - agar plates (air) | Enumeration of microorganisms ²⁾ Colony count technique | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ |
| Food ¹⁾ Feed Environmental samples from food and cosmetics production areas as well as food trade | Presence of microorganisms ²⁾ The tube culturing method | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ |
| - swabs from the surface limited with template - swabs from surface unlimited with template | Presence of microorganisms ²⁾ The tube culturing method with biochemical confirmation | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ |

| Flexible scope of accreditation 1), 2), 3), 4), 5) | | |
|--|--|------------------------------------|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Food 1) | Presence of microorganisms 2) | Standardized methods 5) |
| Feed | Culturing method with biochemical confirmation | In-house test procedures 4) |
| Environmental samples from food and cosmetics production areas as well as food trade | | |
| - swabs from the surface limited with template | | |
| - swabs from surface unlimited with template | | |
| Food 1) | Presence of microorganisms 2) | Standardized methods 5) |
| Feed | Culturing method with biochemical | In-house test procedures 4) |
| Drinking water, surface water, pool water | and serological confirmation | |
| Environmental samples from | Presence of microorganisms 2) | Standardized methods 5) |
| areas of food production and | Culturing method with biochemical | |
| food trade 1) | and serological confirmation | |
| Food 1) | Presence of microorganisms 2) | Standardized methods 5) |
| Environmental samples from areas of food production and | Culturing method with biochemical and microscopic confirmation | |
| food trade | and microscopic committation | |
| - swabs from the surface limited with template | | |
| - swabs from surface unlimited with template | | |
| Food 1) | Most probable number of | Standardized methods ⁵⁾ |
| Feed | microorganisms 2) | In-house test procedures 4) |
| Environmental samples from food and cosmetics production areas as well as food trade | Tube fermentation technique MPN | |
| - swabs from the surface limited with template | | |
| - swabs from surface unlimited with template | | |
| Food 1) | Number of microorganisms 2) | Standardized methods 5) |
| Drinking water, surface water, | Membrane filtration method | |
| pool water, sewage, water Diesel | | |

| Flexible scope of accreditation 1), 2), 3), 4), 5), 6) | | |
|---|---|--|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Paper, cardboard, paper and cardboard products Plastic products and rubber | Presence of microorganisms ²⁾ The tube culturing method with biochemical confirmation | Standardized methods 5) |
| products Metal, glass and ceramics products Wood and wood products | Presence of microorganisms ²⁾ Culturing method with biochemical confirmation | Standardized methods 5) |
| | Presence of microorganisms ²⁾ Culturing method with biochemical and serological confirmation | Standardized methods ⁵⁾ |
| Microorganisms strains | Taxonomic identification of microorganisms ²⁾ Biochemical, immunochemical, PCR, microscopic method | PB-251 ³⁾ |
| Food 1) | Presence of specific DNA of Escherichia coli and detection of Shiga toxin-producing Escherichia coli (STEC) 2) PCR method, Bax System | ISO/TS 13136 ⁶⁾ PB-402 ³⁾ |
| Food 1) Feed Environmental samples from food and cosmetics production areas as well as food trade - swabs from the surface limited with template - swabs from surface unlimited with template | Presence of specific DNA of microorganisms ²⁾ PCR method, Bax System | In-house test procedures 4) |

- 1) Adding the subject of research within the group of subjects
- 2) Adding the examined feature within the subject / group of subjects and methods (research technique)
- 3) Applying updated methods described in-house test procedures
- 4) Applying updated and implemented new methods described in-house test procedures
- 5) Applying updated and implemented new methods described in the standardized methods.
- 6) Applying updated methods described in the standardized methods.

The current "List of testing carried out in the framework of flexible scope" is made available to the public by the accredited body.

| Molecular Biology Laboratory Tychy Goździków 1, 43-100 Tychy | | |
|--|--|----------------------|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Flexible scope of accreditation 1) | , 2), 3), 4) | |
| Food ¹⁾ Feed | Detection of a specific GMO sequence (screening) ²⁾ Real-time PCR method | PB-397 ⁴⁾ |
| Environmental samples from areas of food production and food trade | Detection of a specific genetic modification DNA ²⁾ | PB-391 ⁴⁾ |
| | Real-time PCR method | |
| | Detection of a specific allergen DNA ²⁾ | PB-393 ⁴⁾ |
| | Real-time PCR method | PB-399 ⁴⁾ |
| | Detection of a specific animal species DNA ²⁾ | PB-399 ⁴⁾ |
| | Real-time PCR method | |
| | Quantitative determination of | PB-394 ⁴⁾ |
| | allergen ^{2),3)} | |
| | Immunoenzymatic method - ELISA | |
| Fruits, vegetables and fruit and vegetable preserves | Detection of viral genetic material ²⁾ Real-Time RT-PCR method | PB-202 ⁴⁾ |
| Food ¹⁾ Feed | Quantification of a specific genetic modification DNA ^{2), 3)} Real-time PCR method | PB-392 ⁴⁾ |
| | Quantification of a specific animal species DNA ^{2), 3)} Real-time PCR method | PB-399 ⁴⁾ |
| | Quantification of a specific allergen DNA ^{2), 3)} Real-time PCR method | |

- 1) Adding the subject of research within the group of subjects
- 2) Adding the examined feature within the subject / group of subjects and methods (research technique)
- 3) Change in the measuring range of the test method
- 4) Applying updated methods described in-house test procedures

The current "List of testing carried out in the framework of flexible scope" is made available to the public by the accredited body.

| | Microbiology Laboratory Przeźmierow Rzemieślnicza 9, 62-081 Przeźmierowo | |
|--|--|--|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Environmental samples from areas of cosmetics production and cosmetics trade: | Enumeration of microorganisms Colony count technique (pour plate method) | PN-EN ISO 4833-1:2013-12 |
| swab from the surface limited with template swab from surface unlimited with template | Enumeration of Enterobacteriaceae Colony count technique (pour plate method) | PN-EN ISO 21528-2:2017-08 |
| Environmental samples from areas of cosmetic production and | Enumeration of microorganisms Colony count technique | PN-EN ISO 4833-2:2013-12 |
| cosmetic trade - contact plates (surfaces) | Enumeration of Enterobacteriaceae Colony count technique | PN-EN ISO 21528-2:2017-08 |
| Flexible scope of accreditation ¹ |), 2), 3), 4) | |
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Food ¹⁾ Feed Environmental samples from areas | Enumeration of microorganisms ²⁾ Colony count technique (spread plate method) | Standardized methods ⁴⁾ In-house test procedures ³⁾ |
| of food production and food trade: - swab from the surface limited with template | Detection of microorganisms ²⁾ Culturing method test-tube | Standardized methods ⁴⁾ In-house test procedures ³⁾ |
| - swab from surface unlimited with template | Detection of microorganisms ²⁾ Culturing method test-tube with biochemical confirmation | Standardized methods ⁴⁾ |
| | Detection of microorganisms ²⁾ Culturing method with biochemical confirmation | Standardized methods ⁴⁾ In-house test procedures ³⁾ |
| | Detection of microorganisms ²⁾ Culturing method with biochemical and microscopic confirmation | Standardized methods ⁴⁾ |
| Food ¹⁾ Feed Environmental samples from areas of food production and food trade ¹⁾ | Detection of microorganisms ²⁾ Culturing method with biochemical and serological confirmation | Standardized methods ⁴⁾ |
| Food ¹⁾ Feed Environmental samples from areas of food production and food trade | Enumeration of microorganisms ²⁾ Colony count technique (pour plate method) | Standardized methods ⁴⁾ In-house test procedures ³⁾ |
| Drinking water, surface water, pool water, water | | |
| Food 1) Feed | Most probable number of microorganisms ²⁾ Tube fermentation technique MPN | Standardized methods ⁴⁾ |

| Flexible scope of accreditation 1), 2), 3), 4) | | |
|---|--|---|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Drinking water, surface water, pool water, water | Detection and enumeration of microorganisms ²⁾ | Standardized methods 4) |
| | Membrane filtration method | |
| Environmental samples from areas of food production and food trade: - contact plates (surfaces) - agar plates (air) | Enumeration of microorganisms ²⁾ Plate method | Standardized methods ⁴⁾ In-house test procedures ³⁾ |
| Food ¹⁾ Feed and pet food Environmental samples (food and feed production) ¹⁾ | Presence of specific DNA for tested microorganism ²⁾ MDS System, isoPCR method (isothermal polymerase chain reaction) | In-house test procedures 3) |

Within the scope of the flexible scope of accreditation, it is allowed:

- 1) Adding the subject of research within a group of subjects
- 2) Adding the examined feature within the subject / groups of subjects and methods (research technique)
- 3) Applying updated and implemented new methods described in-house test procedures
- 4) Applying updated and implemented new methods described in the standardized methods

The current "List of testing carried out in the framework of flexible scope" is made available to the public by the accredited body.

| Microbiology Laboratory Tychy Goździków 1, 43-100 Tychy | | |
|--|--|------------------------------------|
| Flexible scope of accreditation 1), 2), 3), 4) | | |
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Food 1) | Enumeration of microorganisms 2) | Standardized methods 4) |
| Feed | Colony count technique (spread plate | In-house test procedures 3) |
| Environmental samples from areas of food production and food trade 1) | method) | |
| Food 1) | Enumeration of microorganisms ²⁾ | Standardized methods ⁴⁾ |
| Feed | Colony count technique (pour plate | In-house test procedures 3) |
| Environmental samples from areas of food production and food trade ¹⁾ | method) | |
| Drinking water, surface water, pool water | | |
| Food 1) | Detection of microorganisms 2) | Standardized methods 4) |
| Feed | Culturing method test-tube | In-house test procedures 3) |
| Environmental samples from areas | Detection of microorganism 2) | Standardized methods 4) |
| of food production and food trade 1) | Culturing method test-tube with biochemical confirmation | In-house test procedures 3) |
| | Detection of microorganisms 2) | Standardized methods 4) |
| | Culturing method with biochemical confirmation | In-house test procedures 3) |
| | Detection of microorganisms 2) | Standardized methods 4) |
| | Culturing method with biochemical and serological confirmation | In-house test procedures 3) |
| Food 1) | Detection of microorganisms ²⁾ | Standardized methods 4) |
| Feed | Culturing method with biochemical | |
| Environmental samples from areas | and microscopic confirmation | |
| of food production and food trade 1) | | |
| Food ¹⁾ Feed | Most probable number of microorganisms ²⁾ | Standardized methods ⁴⁾ |
| | Tube fermentation technique MPN | |
| Drinking water, surface water, pool water, water | Detection and enumeration of microorganisms ²⁾ | Standardized methods 4) |
| | Membrane filtration method | |

| Flexible scope of accreditation 1), 2), 3), 4), 5) | | |
|---|---|---|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Environmental samples from areas of food production and food trade: - contact plates (surfaces) - agar plates (air) | Enumeration of microorganisms ²⁾ Colony count technique | Standardized methods ⁴⁾ In-house test procedures ³⁾ |
| Paper, cardboard, paper and cardboard products Plastic and rubber products Metal, glass and ceramics | Enumeration of microorganisms ²⁾ Colony count technique (pour plate method) | Standardized methods ⁴⁾ |
| products Wood and wood products, - swab from the surface limited | Enumeration of microorganisms ²⁾ Colony count technique (spread plate method) | PN-EN ISO 6888-1 ⁵⁾ |
| with template - swab from surface unlimited with | Detection of microorganisms ²⁾ Culturing method test-tube | PN-ISO 4831 ⁵⁾ |
| template | Detection of microorganisms ²⁾ Culturing method test-tube with biochemical confirmation | PN-ISO 7251 ⁵⁾ |
| | Detection of microorganisms ²⁾ Culturing method with biochemical confirmation | PN-EN ISO 11290-1 ⁵⁾ |
| | Detection of microorganisms ²⁾ Culturing method with biochemical and serological confirmation | PN-EN ISO 6579-1 ⁵⁾ |
| Environmental samples from areas of food production and food | Most probable number of microorganisms ²⁾ | Standardized methods ⁴⁾ |
| Food ¹⁾ Feed and pet food Environmental samples (food and feed production) ¹⁾ | Tube fermentation technique MPN Presence of specific DNA for tested microorganism ²⁾ MDS System, isoPCR method (isothermal polymerase chain reaction) | In-house test procedures 3) |

- 1) Adding the subject of research within the group of subjects.
- 2) Adding the examined feature within the subject/ groups of subjects and methods (research technique).
- 3) Applying updated and implemented new methods described in-house test procedures.
- 4) Applying updated and implemented new methods described in the standardized methods.
- 5) Applying updated methods described in the standardized methods

The current "List of testing carried out in the framework of flexible scope" is made available to the public by the accredited body.

| Cosmetics Microbiology Laboratory Tychy Goździków 1, 43-100 Tychy | | |
|---|---|--------------------|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Paper, cardboard, paper and cardboard products | Permeability of the antimicrobial components Culturing, diffusion method | PN-EN 1104:2019-02 |
| Chemical disinfectants and antiseptics | Effectiveness of disinfectants and antiseptics Hygienic hand washing method | PN-EN 1499:2013-07 |
| | Effectiveness of disinfectants and antiseptics Rub method | PN-EN 1500:2013-07 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|--|---|
| Environmental samples from areas of cosmetics production and cosmetics trade 1) Cosmetics | Enumeration of microorganisms ²⁾ Colony count technique (pour plate method) | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ |
| Cosmetics | Detection of microorganisms ²⁾ Culturing method test-tube | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ |
| | Detection of microorganisms ²⁾ Culturing method test-tube with biochemical confirmation | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ |
| | Effectiveness of antimicrobial protection of a cosmetic product Colony count technique (pour plate method) | PN-EN ISO 11930 ⁶⁾ |
| Chemical products ¹⁾ | Enumeration of microorganisms ^{2), 3)} Colony count technique (pour plate method) | Standardized methods 5) |
| | Detection of microorganisms ²⁾ Culturing method test-tube with biochemical confirmation | Standardized methods 5) |
| Environmental samples from areas of cosmetics production and cosmetics trade: - contact plates (surfaces) - agar plates (air) | Enumeration of microorganisms ²⁾ Colony count technique | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ |
| Chemical disinfectants and antiseptics | Effectiveness of disinfectants and antiseptics ²⁾ Quantitative suspension method | Standardized methods 5) |
| | Effectiveness of chemical disinfectant and antiseptics Test method on non-porous surfaces | PN-EN 13697 ⁶⁾ |

- 1) Adding the subject of research within the group of subjects.
- 2) Adding the examined feature within the subject / groups of subjects and methods (research technique).
- 3) Change in the measuring range of the test method.
- 4) Applying updated and implemented new methods described in-house test procedures.
- 5) Applying updated and implemented new methods described in the standardized methods.
- 6) Applying updated methods described in the standardized methods

The current "List of testing carried out in the framework of flexible scope" is made available to the public by the accredited body.

| Microbiology Laboratory Maków Mazowiecki ul. Przemysłowa 5, 06-200 Maków Mazowiecki | | |
|--|---|---|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Fruit and vegetable products and vegetable with meat products | Cans durability Thermostat test method | PN-90/A-75052/03 |
| Meat and meat products | Cans durability Thermostat test method | PN-A-82055-5:1994 |
| Raw milk and non-cooked dairy products Heat-processed milk and dairy products | Number of aerobic mesophilic at 30°C for 72h Petrifilm method Number of Enterobacteriaceae at 37°C for 24h Petrifilm method | PB-421 ed. 1 of 07.02.2023 based on the manufacturer's instruction for 3M Petrifilm plates PB-422 ed. 2 of 05.12.2024 based on the manufacturer's instruction for 3M Petrifilm plates |
| Food: - Raw meat and raw meat products ready to be prepared (except poultry) - Ready-to-eat or ready-to-reheat meat products - Raw poultry and raw poultry products ready to be prepared - Ready-to-eat or ready-to-heat poultry products - Eggs and egg products (derivates) - Ready-to-eat or ready-to-reheat fish products - Fresh vegetables and fruits - Processed fruits and vegetables - Dried cereals, fruits, nuts, seeds | Number of aerobic mesophilic at 30°C for 48h Petrifilm method | PB-421 ed. 1 of 07.02.2023 based on the manufacturer's instruction for 3M Petrifilm plates |
| and vegetables - Infant formula and infant cereals - Chocolate, confectionery and bread - Multi-component foods or meal components Feed and pet food Environmental samples (food and feed production): - environmental samples of defined surfaces - environmental samples of undefined surfaces, including the hands - washings | Number of Enterobacteriaceae at 37°C for 24h Petrifilm method | PB-422 ed. 2 of 05.12.2024 based on the manufacturer's instruction for 3M Petrifilm plates |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|---|---|
| Environmental samples from food production areas as well as food trade: - contact plates (surfaces) - agar plates (air) | Number of microorganism ²⁾ Colony count technique | Standardized methods ³⁾ In-house test procedure ⁴⁾ |
| Food ¹⁾ Feed | Number of microorganism ²⁾ Colony count technique (spread plate method) | Standardized methods 3) |
| Environmental samples from food production areas as well as food and cosmetics trade: - Environmental samples of defined surfaces | | |
| - Environmental samples of undefined surfaces, including the hands | | |
| Food ¹⁾ Feed | Number of microorganism ²⁾ Colony count technique (pour plate method) | Standardized methods ³⁾ In-house test procedure ⁴⁾ |
| Environmental samples from cosmetics trade: - Environmental samples of defined surfaces | Thousay | |
| - Environmental samples of undefined surfaces, including the hands | | |
| Water 1) | | |
| Environmental samples from food production areas as well as food trade ¹⁾ | Number of microorganism ²⁾ Colony count technique (pour plate method) | Standardized methods ³⁾ In-house test procedure ⁴⁾ |
| Food ¹⁾ Feed | Presence of microorganisms ²⁾ Culturing method with biochemical confirmation | Standardized methods ³⁾ In-house test procedure ⁴⁾ |
| Environmental samples from food production areas as well as food and cosmetics trade: - Environmental samples of defined surfaces | Presence of microorganisms ²⁾ Culturing method with biochemical confirmation | Standardized methods ³⁾ In-house test procedure ⁴⁾ |
| - Environmental samples of undefined surfaces, including the hands | | |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|--|--|---|
| Food ¹⁾ Feed | Presence of microorganism ²⁾ Culturing method with biochemical and serological confirmation | Standardized methods ³⁾ In-house test procedure ⁴⁾ |
| Environmental samples from cosmetics trade: - Environmental samples of defined surfaces - Environmental samples of undefined surfaces, including the hands | and sorological committation | |
| Samples taken at the primary production stage: - animal stool samples - plantar swabs Environmental samples from areas of food production and food trade 1) | | |
| Food 1) | Presence of microorganism ²⁾ Culturing method with biochemical and microscopic confirmation | Standardized methods ³⁾ In-house test procedure ⁴⁾ |
| Environmental samples from food production areas as well as food and cosmetics trade: - Environmental samples of defined surfaces - Environmental samples of | Presence of microorganism ²⁾ Culturing method with biochemical and microscopic confirmation | Standardized methods ³⁾ In-house test procedure ⁴⁾ |
| undefined surfaces, including the hands | | |
| Food 1) Feed | Presence of microorganism ²⁾ Culturing method test-tube with biochemical confirmation | Standardized methods ³⁾ In-house test procedure ⁴⁾ |
| Environmental samples from food production areas as well as food and cosmetics trade: - Environmental samples of defined surfaces | Presence of microorganism ²⁾ Culturing method test-tube with biochemical confirmation | Standardized methods ³⁾ In-house test procedure ⁴⁾ |
| - Environmental samples of undefined surfaces, including the hands | | |
| Food 1) | Presence of microorganism ²⁾ Culturing method | In-house test procedure 4) |
| | Most probable number of pathogenic staphylococci (coagulase positive) Tube fermentation technique MPN | PN-EN ISO 6888-3 ⁶⁾ |
| | Most probable number Escherichia coli Tube fermentation technique MPN | PN-ISO 7251 ⁶⁾ |
| | Most probable number of coliforms Tube fermentation technique MPN | PN-ISO 4831 ⁶⁾ |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|--|-------------------------|
| Flexible scope of accreditation | 1), 2), 3), 4), 5), 6) | |
| Fruit and vegetable juices and concentrates | Number of Alicyclobacillus spp probably spoilage Membrane filtration method with biochemical confirmation | IFU Method No. 12 6) |
| Food 1) | Presence of pathogenic bacteria ²⁾ Fluorescence immunoenzymatic method (ELFA) | PB-420 ⁵⁾ |
| Environmental samples 1) | Detection of pathogenic bacteria ²⁾ Fluorescence immunoenzymatic method (ELFA) | PB-420 ⁵⁾ |
| Water 1) | Number of microorganism ²⁾ Membrane filtration method | Standardized methods 3) |

- Adding the subject of research within a group of subjects

 Adding the examined feature within the subject / groups of subjects and methods (research techniques)
- 3) Applying updated and implemented new methods described in the standardized methods
- 4) Applying updated and implemented new methods described in-house test procedures
- Applying updated methods described in-house test procedures
- Applying updated methods described in the standardized methods

The current "List of testing carried out in the framework of flexible scope" is made available to the public by the accredited body.

| Sensory Analysis Laboratory Chwaszczyńska 180, 81-571 Gdynia | | |
|---|--|------------------------|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Tea and coffee, | Determining perceptible sensory | PN-EN ISO 4120:2021-08 |
| Food concentrates, | difference between samples | |
| Meat and meat products, | Organoleptic attributes: appearance, | |
| Milk and dairy products, | colour, texture, consistency, odour, | |
| Non-alcoholic beverages | flavour | |
| (carbonated and non-carbonated | Triangle test | |
| soft drinks, juices, syrups), | | |
| Spirits and alcoholic beverages, | | |
| Fruits, vegetables, fruit and | | |
| vegetable products and vegetable | | |
| with meat products, | | |
| Fish and fishery products and | | |
| seafood, | | |
| Sweets and sugar confectionery, | | |
| Herbal raw materials and products, | | |
| spices, | | |
| Foodstuffs for particular nutritional | | |
| uses, | | |
| Animal and vegetable fats and oils, | | |
| Cereals and cereal products, | | |
| Frozen products, | | |
| Ready-made culinary products, | | |
| Poultry and poultry products, | | |
| Dietary supplements and | | |
| nutritional foods, | | |
| Drinking water, | | |
| Food additives | | |
| Electrical products intended to come | Odour and taste transferred in direct | DIN 10955:2024-01 |
| into contact with food, Ceramic | contact | |
| materials and products intended to | Range: 0 – 4 | |
| come into contact with food, | Multicomparison test | |
| Glass materials and products, | | |
| Paper, cardboard, Packaging materials and | | |
| components intended to come into | | |
| contact with food, | | |
| Plastics and rubber products | | |
| intended to come into contact with | | |
| food, | | |
| Materials for the production of | | |
| packaging, | | |
| Food storage products, | | |
| Non-woven fabric, wooden products | | |
| and components intended to come | | |
| into contact with food | | |
| Paper, cardboard | Odour and taste transferred in direct | PN-EN 1230-1:2009 |
| | contact | PN-EN 1230-2:2009 |
| | Range: 0 – 4 | |
| | Multicomparison test | |

| Flexible scope of accreditation 1), 2), 3), 4), 5) | | |
|--|---|--|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Food and agricultural products 1) | Sensory attributes 2) | Standardized methods 4) |
| Cosmetics and chemical products 1) | Simple descriptive test | In-house test procedures ³⁾ Methods described by a reputable organization ⁵⁾ |
| Food 1) | Sensory attributes ²⁾ Scoring method | Standardized methods ⁴⁾ In-house test procedures ³⁾ |

- 1) Adding the subject of research within the group of subjects.
- 2) Adding the examined feature within the subject / groups of subjects and methods (research techniques).
- 3) Applying updated and implemented new methods described in the in-house test procedures.
- 4) Applying updated and implemented new methods described in the standardized methods.
- 5) Applying updated methods described by a reputable organization.

The current "List of testing carried out in the framework of flexible scope" is made available to the public by the accredited body.

| Vitamin Analysis Laboratory Chwaszczyńska 180, 81-571 Gdynia | | |
|---|--|---------------------------------|
| Subject of testing/product | Type of activity/ tested qualities/method | Reference document |
| Agriculture products, including animal feedstuffs, Food concentrates, Non-alcoholic beverages, Milk and dairy products, Foodstuffs for particular nutritional uses, Dietary supplements and nutritional foods, Food additives | Taurine content Range: (0,002 – 0,5) % High performance liquid chromatography method with spectrophotometric detection (HPLC-UV/Vis) and diode array detection (HPLC-DAD) | PB-52/HPLC ed. II of 30.12.2008 |
| Agriculture products, including animal feedstuffs, Food concentrates, Non-alcoholic beverages, Milk and dairy products, Fruits, vegetables, fruit and vegetable products and vegetable with meat products, Fish and fishery products and seafood, Herbal raw materials and products, spices, Foodstuffs for particular nutritional uses, Cereals and cereal products, Dietary supplements and nutritional foods, Food additives | Tryptophan content Range: (0,001 – 3,0) % High performance liquid chromatography method with fluorescence detection (HPLC-FLD) | PB-136/HPLC ed. I of 06.02.2012 |
| Agriculture products, including animal feedstuffs, Food concentrates, Meat and meat products, Milk and dairy products, Non-alcoholic beverages, Fruits, vegetables, fruit and vegetable products and vegetable with meat products, Fish and fishery products and seafood, Sweets and sugar confectionery, Herbal raw materials and products, spices, Foodstuffs for particular nutritional uses, Cereals and cereal products, Frozen products, Ready-made culinary products, Poultry and poultry products, Eggs and egg products, Dietary supplements and nutritional foods, Food additives | Amino acids profile Range: Aspartic acid (0,005 – 10) % Glutamic acid (0,005 – 10) % Serine (0,005 – 10) % Glycine (0,005 – 10) % Histidine (0,005 – 10) % Arginine (0,005 – 10) % Threonine (0,005 – 10) % Alanine (0,005 – 10) % Proline (0,005 – 10) % Tyrosine (0,005 – 10) % Valine (0,005 – 10) % Methionine (0,005 – 10) % Cysteine (0,005 – 10) % Isoleucine (0,005 – 10) % Leucine (0,005 – 10) % Phenylalanine (0,005 – 10) % Lysine (0,005 – 10) % High performance liquid chromatography method with spectrophotometric detection (HPLC-UV/Vis) and diode array detection (HPLC-DAD) | PB-53/HPLC ed. II of 30.12.2008 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|----------------------------|--|-----------------------------|
| Agricultural products 1) | Vitamins content ^{2), 3)} | Standardized methods 4) |
| Food 1) | High performance liquid chromatography method with | In-house test procedures 5) |
| | spectrophotometric detection (HPLCUV/Vis), diode array detection | |
| | (HPLC-DAD) and fluorescence | |
| | detection (HPLC-FLD) | |
| Food 1) | Vitamins content ^{2), 3)} | In-house test procedures 5) |
| Feed | Microbiological method with | |
| | microorganism as a test organism | |

- 1) Adding the subject of research within the group of subjects.
- 2) Adding the examined feature within the subject / groups of subjects and methods (research technique).
- 3) Change in the measuring range of the test method.
- 4) Applying updated and implemented new methods described in the standardized methods
- 5) Applying updated methods described in-house test procedures.

The current "List of testing carried out in the framework of flexible scope" is made available to the public by the accredited body.

| Liquid Chromatography Laboratory Chwaszczyńska 180, 81-571 Gdynia | | |
|--|--|--------------------------------|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Coffee | Caffeine content Range: (0,05 – 10) % High performance liquid chromatography method with spectrophotometric detection (HPLC-UV/Vis) and diode array detection (HPLC-DAD) | PN-ISO 10095:1997 |
| Coffee and products containing coffee | Caffeine content Range: (0,05 – 10) % High performance liquid chromatography method with spectrophotometric detection (HPLC-UV/Vis) and diode array detection (HPLC-DAD) | ISO 20481:2008 |
| Non-alcoholic beverages | Caffeine concentration Range: (1 – 1000) mg/l High performance liquid chromatography method with spectrophotometric detection (HPLC-UV/Vis) and diode array detection (HPLC-DAD) | PB-80/HPLC ed. I of 12.01.2009 |
| Water, drinking water | Polycyclic aromatic hydrocarbons (PAH) concentration Range: Benzo(b)fluoranthene (0,0020 - 0,020)µg/l Benzo(k)fluoranthene (0,0020 - 0,020) µg/l Benzo(a)pyrene (0,0025 - 0,020)µg/l Benzo(ghi)perylene (0,0040 - 0,020)µg/l Indeno(1,2,3-cd)pyrene (0,0040 - 0,020) µg/l High performance liquid chromatography method with fluorescence detection (HPLC-FLD) | PN-EN ISO 17993:2005 |

| Particular Par | Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|--|----------------------------|--|----------------------------|
| Range: atropine (0.50 – 100) µg/kg scopolamine (0.50 – 100) µg/kg High-performance liquid chromatography method coupled with tandem mass spectrometry (LC-MS/MS) Sum (calculated) Pyrrolizational alkaloids content: - echimidine Poxide - echimidine Noxide - echimidine Noxide - europine - europine Noxide - europine - europine Noxide - heliosupine Noxide - heliosupine Noxide - heliotrine Noxide intermedine Noxide intermedine Noxide as intermedine Noxide is intermedine Noxide as intermedine Noxide is associated in intermedine in indicine and actinatine as lycopsamine (sum of lycopsamine (sum of lycopsamine) indicine and actinatine as lycopsamine (sum of loxide in intermedine Noxide is senecionine Noxide is senecionine Noxide in seneciphylline in Noxide is seneciphylline in Noxide is seneciphylline in Noxide is seneciphylline in Noxide in seneciphylline in Seneciphylli | Spices Tea | Tropane alkaloids content Range: atropine (5,0 – 1000) µg/kg scopolamine (5,0 – 1000) µg/kg High-performance liquid chromatography method coupled with tandem mass spectrometry (LC-MS/MS) | PB-498 ed. I of 23.05.2022 |
| Spices Tea Dietary supplements - echimidine N-oxide - echimidine N-oxide - echimidine N-oxide - erucifoline N-oxide - erucifoline N-oxide - europine - europine N-oxide - heliosupine - heliosupine N-oxide - heliotrine N-oxide - heliotrine N-oxide - heliotrine N-oxide - heliotrine N-oxide (sum of intermedine N-oxide and indicine N-oxide as intermedine N-oxide) - jacobine - jacobine N-oxide - lasiocarpine - lasiocarpine - lasiocarpine - lasiocarpine N-oxide - lycopsamine (sum of lycopsamine, indicine and echinatine as lycopsamine) - lycopsamine) - lycopsamine N-oxide - monocrotaline - monocrotaline N-oxide - retrorsine (sum of retrorsine and usaramine as retrorsine) - retrorsine (sum of retrorsine) - retrorsine N-oxide - rinderine - rinderine N-oxide - rinderine - rinderine N-oxide - senecionine - senecionine N-oxide (sum of senecionylline N-oxide as senecionylline N-oxide) - senecionine N-oxide (sum of senecionylline) - seneciophylline N-oxide (sum of seneciphylline) - seneciphylline N-oxide (sum of seneciphylline) | Honey | Tropane alkaloids content Range: atropine (0,50 – 100) µg/kg scopolamine (0,50 – 100) µg/kg High-performance liquid chromatography method coupled with tandem mass spectrometry (LC-MS/MS) | PB-498 ed. I of 23.05.2022 |
| N-oxide as seneciphylline N-oxide) - senkirkine Range: (5,0 – 1000) µg/kg High-performance liquid chromatography method coupled with tandem mass spectrometry (LC-MS/MS) | Spices Tea | echimidine echimidine N-oxide echimatine N-oxide erucifoline erucifoline N-oxide europine europine N-oxide heliosupine N-oxide heliosupine N-oxide heliotrine heliotrine N-oxide intermedine intermedine N-oxide (sum of intermedine N-oxide and indicine N-oxide as intermedine N-oxide) jacobine jacobine jacobine N-oxide lasiocarpine N-oxide lycopsamine (sum of lycopsamine, indicine and echinatine as lycopsamine) lycopsamine N-oxide monocrotaline monocrotaline N-oxide retrorsine (sum of retrorsine and usaramine as retrorsine) retrorsine N-oxide rinderine rinderine N-oxide (sum of senecionine N-oxide as senecionine N-oxide and integerrimine N-oxide as senecionine N-oxide (sum of seneciphylline (sum of seneciphylline and spartioidine as seneciphylline N-oxide (sum of seneciphylline N-oxide and spartioidine N-oxide as seneciphylline N-oxide and spartioidine N-oxide as seneciphylline N-oxide and spartioidine N-oxide as seneciphylline N-oxide (sum of seneciphylline N-oxide and spartioidine N-oxide as seneciphylline N-oxide) senkirkine Range: (5,0 – 1000) μg/kg High-performance liquid chromatography method coupled with tandem mass spectrometry | PB-498 ed. I of 23.05.2022 |

| Herbal raw materials and products Spices Tea Dietary supplements | qualities/method Pyrrolizidine alkaloids content: - senecivernine (sum of senecivernine and integerrimine as senecivernine) - senecivernine N-oxide - trichodesmine - usaramine N-oxide Range (5,0 – 1000) μg/kg High-performance liquid chromatography method coupled with tandem mass spectrometry (LC-MS/MS) | PB-498 ed. I of 23.05.2022 |
|---|--|----------------------------|
| | Sum (calculated) | |
| Honey | Pyrrolizidine alkaloids content: - echimidine - echimidine N-oxide - echinatine N-oxide - erucifoline N-oxide - europine - europine N-oxide - heliosupine - heliosupine N-oxide - heliotrine - heliotrine N-oxide - intermedine N-oxide (sum of intermedine N-oxide and indicine N-oxide as intermedine N-oxide) - jacobine - jacobine - jacobine N-oxide - lasiocarpine - lasiocarpine N-oxide - lycopsamine (sum of lycopsamine, indicine and echinatine as lycopsamine) - lycopsamine N-oxide - monocrotaline - monocrotaline - monocrotaline N-oxide - retrorsine (sum of retrorsine and usaramine as retrorsine) - retrorsine N-oxide - rinderine - rinderine N-oxide - rinderine N-oxide - senecionine - senecionine N-oxide (sum of senecionine N-oxide) - senecionine N-oxide as senecionine N-oxide) - seneciphylline (sum of seneciphylline) - seneciphylline N-oxide as seneciphylline N-oxide a | PB-498 ed. I of 23.05.2022 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|--|---|--|
| Food ¹⁾ | Food additives content ^{2), 3)} High-performance liquid chromatography method with spectrophotometric detection (HPLC-UV/Vis) and diode array detection (HPLC-DAD) | PN-EN 12856 ⁴⁾ |
| | Polycyclic aromatic hydrocarbons (PAHs) content ^{2), 3)} High-performance liquid chromatography method with fluorescence detection (HPLC-FLD) | PB-117/HPLC ⁵⁾ |
| | Nitrates and/or nitrites content ²⁾³⁾ High-performance liquid chromatography method with spectrophotometric detection (HPLC-UV/Vis) and diode array detection (HPLC-DAD) | Standardized methods ⁶⁾ |
| Agricultural products ¹⁾ Food ¹⁾ | Mycotoxins content ^{2), 3)} High-performance liquid chromatography method with fluorescence detection (HPLC-FLD) spectrophotometric detection (HPLC-UV/Vis) and diode array detection (HPLC-DAD) | Standardized methods ⁶⁾ In-house test procedures ⁷⁾ |
| Food ¹⁾ Agriculture products, including animal feedstuffs | Mycotoxins content ^{2), 3)} High-performance liquid chromatography method coupled with tandem mass spectrometry (LC-MS/MS) | In-house test procedures 7) |
| Agriculture products, including animal feedstuffs ¹⁾ Food ¹⁾ | Melamine and its analogues content ^{2),} 3) High-performance liquid chromatography method coupled with tandem mass spectrometry (LC-MS/MS) | In-house test procedures 7) |
| Feed Food ¹⁾ | Biogenic amins content ^{2), 3)} High-performance liquid chromatography method with spectrophotometric detection (HPLC-UV/Vis) and diode array detection (HPLC-DAD) | Standardized methods ⁶⁾ In-house test procedures ⁷⁾ |

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- 2) Adding the examined feature within the subject / groups of subjects and methods (research technique).
- 3) Change in the measuring range of the test method.
- 4) Applying updated methods described in the standardized methods.
- 5) Applying updated methods described in the in-house test procedures.
- 6) Applying updated and implemented new methods described in the standardized methods
- 7) Applying updated and implemented new methods described in in-house test procedures.

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| Gas Chromatography Laboratory Chwaszczyńska 180, 81-571 Gdynia | | |
|--|--|---|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Agriculture products, including animal feedstuffs, Foodstuffs for particular nutritional uses, Animal and vegetable fats and oils Cereals and cereal products, Food additives, Products used in animal nutrition | Antioxidants BHA, BHT content Range: (10 – 500) mg/kg Gas chromatography method with flame ionization detection (GC-FID) | ISO 6463:1982 PB-277/GC ed. I of 01.07.2014 |
| Milk fat and dairy products | Foreign fats content Range: (2,0 – 100) % Gas chromatography method with flame ionization detection (GC-FID) | PN-EN ISO 17678:2019-07 |
| Milk and dairy products Meat products Sauces Chocolate goods Pastry goods Food concentrates | Lactose content Range: (0,01 – 1,0) g/100g Gas chromatography method with flame ionization detection (GC-FID) | PB-371 ed. II of 04.03.2019 |
| Agriculture products, including animal feedstuffs, Animal and vegetable fats and oils, oilseeds | Residual technical hexane content. Range: (0,5 – 1400) mg/kg Gas chromatography method with headspace analysis and flame ionization detection (HS-GC-FID) | PN-EN ISO 9832:2004 PN-EN ISO 8892:1999 |
| Cocoa butter Chocolate couverture Chocolate | Cocoa butter equivalents (CBE) and milk fat (MF) content based on triacylglycerols composition Range: CBE: (2 – 100) g/100 g of fat MF: (1 – 100) g/100 g of fat Gas chromatography method with flame ionization detection (GC-FID) | PN-EN ISO 23275-1:2009 PN-EN ISO 23275-2:2010 EUR 20831:2003, EUR 22666:2007 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|--|---------------------------------|
| Animal and vegetable fats and oils | Free and bound 2-MCPD, free and bound 3-MCPD and glycidyl esters content Range: 2-monochloropropano-1,3-diol (2-MCPD) (0,15 – 2,5) mg/kg 3-monochloropropano-1,2-diol (3-MCPD) (0,15 – 2,5) mg/kg 3-monochloropropano-1,2-diol (3-MCPD) including glycidol (0,15 – 2,5) mg/kg Gas chromatography method with mass spectrometry (GC-MS) Glycidol content (calculated) | DGF C-VI 18 (10) Part A, Part B |
| Pastry goods and confectionery, Cereal and potato snacks | Free and bound 2-MCPD, free and bound 3-MCPD and glycidyl esters in extracted fat content Range: 2-monochloropropano-1,3-diol (2-MCPD) | DGF C-VI 18 (10) Part A, Part B |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|---|--|
| Products containing ethyl alcohol and other solvents ¹⁾ Agriculture products ¹⁾ including | Organic compounds concentration ^{2),3)} Gas chromatography method with | Standardized methods ⁶⁾ In-house test procedures ⁵⁾ |
| | flame ionization detection (GC-FID) Sterols content ^{2), 3)} | Standardized methods ⁶⁾ |
| eed | Gas chromatography method with | In-house test procedures 5) |
| eed Food ¹⁾ | flame ionization detection (GC-FID) | in-nouse test procedures |
| Food " | Fatty acids content ^{2), 3)} | Standardized methods ⁶⁾ |
| | Gas chromatography method with | In-house test procedures 5) |
| | flame ionization detection (GC-FID) | |
| | Sum | |
| | (calculated) | |
| Agriculture products, | Pesticides residues content ^{2), 3)} | Standardized methods 6) |
| ncluding animal feedstuffs 1) | Gas chromatography method with | In-house test procedures 5) |
| Food ¹⁾ | mass spectrometry (GC-MS), tandem | |
| | mass spectrometry detection | |
| | (GC-MS-MS) | |
| | Pesticides residues content ^{2), 3)} | Standardized methods 6) |
| | High-performance liquid | In-house test procedures 5) |
| | chromatography method coupled with | |
| | tandem mass spectrometry (LC-MS-MS) | |
| | Antibiotics and chemotherapeutics | Standardized methods ⁶⁾ |
| | residues content ^{2), 3)} | In-house test procedures 5) |
| | Gas chromatography method with | in nedec test procedures |
| | mass spectrometry (GC-MS) | |
| Food ¹⁾ | Acrylamide content 3) | In-house test procedures 5) |
| | Gas chromatography method with | |
| | mass spectrometry (GC-MS) | |
| | Concentration of polycyclic aromatic | PB-506 ⁴⁾ |
| | hydrocarbons (PAH) ^{2), 3)} | |
| | Gas chromatography method with | |
| | tandem mass spectrometry detection | |
| | (GC-MS-MS) Polyols content ^{2), 3)} | PB-429 ⁵⁾ |
| | High-performance anion exchange | PB-429 % |
| | chromatography method with pulsed | |
| | amperometry detection (HPIC-PAD) | |
| gricultural products 1) | Sugars and polyols content ^{2), 3)} | PB-79/HPLC ⁵⁾ |
| Food 1) | High-performance liquid | |
| | chromatography method with | |
| | refractometric detection (HPLC-RID) | |
| Food ¹⁾ | Polyols content ^{2), 3)} | PB-429 ⁵⁾ |
| Objects from food production area | High-performance anion exchange | |
| 1) | chromatography method with pulsed | |
| | amperometry detection (HPIC-PAD) | |

- 1) Adding the subject of research within the group of subjects.
- 2) Adding the examined feature within the subject / groups of subjects and methods (research technique).
- 3) Change in the measuring range of the test method.
- 4) Applying updated methods described in-house test procedures.
- 5) Applying updated and implemented new methods described in-house test procedures.
- 6) Applying updated and implemented new methods described in the standardized methods

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| Spectroscopy Laboratory | | |
|--|--|---------------------------------|
| Chwaszczyńska 180, 81-571 Gdynia | | |
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Tea and coffee Food concentrates Meat and meat products Milk and dairy products Non-alcoholic beverages Spirits and alcoholic beverages Fruits, vegetables, fruit and vegetable products and vegetable with meat products Fish and fishery products and seafood Sweets and sugar confectionery Herbal raw materials and products, spices, Foodstuffs for particular nutritional uses, Animal and vegetable fats and oils Cereals and cereal products Ready-made culinary products Eggs and egg products Dietary supplements and nutritional foods Animal feedstuffs Oilseeds | Elements content Range: Pb (0,01 – 5,0) mg/kg Cr (0,01 – 5,0) mg/kg Cu (0,01 – 10,0) mg/kg Fe (0,01 – 50,0) mg/kg Cd (0,002 – 1,00) mg/kg Zn (0,05 – 50,0) mg/kg Atomic emission spectrometry method with inductively coupled plasma (ICP-OES) | PB-68/ICP ed. III of 18.09.2012 |
| Tea and coffee Food concentrates Meat and meat products Milk and dairy products Non-alcoholic beverages Spirits and alcoholic beverages Fruits, vegetables, fruit and vegetable products and vegetable with meat products Fish and fishery products and seafood Sweets and sugar confectionery Herbal raw materials and products, spices, Foodstuffs for particular nutritional uses, Animal and vegetable fats and oils Cereals and cereal products Frozen products Ready-made culinary products Eggs and egg products Dietary supplements and nutritional foods Animal feedstuffs Oilseeds | Mercury content Range: (0,0006 – 10) mg/kg Atomic absorption spectrometry method with cold-vapor generation (CVAAS) | PB-30/PICP ed. 6 of 09.06.2023 |
| Fatty acids methyl esters (FAME) | Phosphorus content Range: (1,00 – 221) mg/kg Atomic emission spectrometry method with inductively coupled plasma (ICP- OES) | PB-69 ed. 4 of 11.10.2024 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|--|---------------------------------|
| Meat and meat products | Phosphorus content Range: (0,1 – 10) g/kg Atomic emission spectrometry method with inductively coupled plasma (ICP-OES) Added phosphorus content expressed as P ₂ O ₅ | PN-A-82060:1999 |
| | (calculated) | |
| Fish and seafood | Phosphorus content Range: (300 – 10000) mg/kg Atomic emission spectrometry method with inductively coupled plasma (ICP-OES) Added phosphorus content expressed as P ₂ O ₅ | PB-317/ICP ed. II of 18.12.2019 |
| Animal and vegetable fats and oils | (calculated) Phosphorus content Range: (1,00 – 221) mg/kg Atomic emission spectrometry method with inductively coupled plasma (ICP-OES) | PB-69 ed. 4 of 11.10.2024 |
| Fish and fishery products and seafood Oilseeds Cereals and cereal products Premixes | Inorganic arsenic content (sum of As (III) and As (V)) Range: (0,050 – 10,0) mg/kg High performance liquid chromatography method with inductively coupled plasma mass spectrometry (HPLC-ICP-MS) | PN-EN 16802:2016-05 |
| Non-alcoholic beverages basen on rice Juices, nectars, fruit concentrates Baby food | Inorganic arsenic content (sum of As (III) and As (V)) Range: (0,020 – 10,0) mg/kg High performance liquid chromatography method with inductively coupled plasma mass spectrometry (HPLC-ICP-MS) | PN-EN 16802:2016-05 |
| Baby food in liquid form | Inorganic arsenic content (sum of As (III) and As (V)) Range: (0,010 – 10,0) mg/kg High performance liquid chromatography method with inductively coupled plasma mass spectrometry (HPLC-ICP-MS) | PN-EN 16802:2016-05 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|--|---|--|
| 2015, item 1277) | omy of 16 July 2015 on the acceptance | of waste to landfills (Journal of Laws of very outside the installations and devices |
| Waste DAB-11: | Elements content | PB-488/ICP ed. 2 of 07.02.2022 |
| Mineral deposits and waste | Range: | |
| (I); | As (10,0 – 500) mg/kg | |
| Construction waste (III); | Ba (100 – 3000) mg/kg | |
| Slag, ash and furnace dust | Cd (2,00 - 250) mg/kg | |
| (XI) | Co (10,0 - 500) mg/kg | |
| | Cr (100 - 1000) mg/kg | |
| | Cu (100 - 1000) mg/kg | |
| | Mo (10,0 - 500) mg/kg | |
| | Ni (100 - 500) mg/kg | |
| | Pb (100 - 1000) mg/kg | |
| | Zn (100 - 3000) mg/kg | |
| | Sn (10,0 - 500) mg/kg | |
| | Atomic emission spectrometry | |
| | method with inductively coupled | |
| | plasma (ICP-OES) | |
| | Mercury content | PB-488/ICP ed. 2 of. 07.02.2022 |
| | Range: (0,010 – 50,0) mg/kg | |
| | Atomic absorption spectrometry | |
| | method with cold-vapor generation (CVAAS) | |

^{DAB-11)} Waste codes according to Minister of Climate Regulation on the waste catalogue for the validation group are given in Annex No. 1 to DAB-11.

| Flexible scope of accreditation 1), 2), | Type of activity/tested | | |
|--|---|--|--|
| Subject of testing/product | qualities/method | Reference document | |
| Water, drinking water, sewage, soil, sediments Plant growth substances ¹⁾ Waste ⁰⁾ group code: 17 03 80 | Concentration/ content of elements 2), 3) Atomic emission spectrometry method with inductively coupled plasma (ICP-OES) | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ | |
| Aqueous extract prepared from waste in Environmental Analysis Laboratory Małaszewicze DAB-11 and aqueous extract from waste O group code: 17 03 80 | Concentration of elements ^{2), 3)} Atomic emission spectrometry method with inductively coupled plasma (ICPOES) Elements content (calculated) | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ | |
| Water, drinking water, sewage, soil, sediments Plant growth substances ¹⁾ Waste ⁰⁾ group code: 17 03 80 | Concentration/ content of mercury ³⁾ Atomic absorption spectrometry method with cold-vapor generation (CVAAS) | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ | |
| Aqueous extract prepared from waste in Environmental Analysis Laboratory Małaszewicze DAB-11 and aqueous extract from waste O group code: 17 03 80 | Concentration of mercury 3) Atomic absorption spectrometry method with cold-vapor generation (CVAAS) Mercury content (calculated) | | |
| Food ¹⁾ Water, drinking water, sewage, soil, sediments Agriculture products, including animal feedstuffs | Concentration/ content of elements ^{2), 3)} Mass spectrometry method by ionizing with inductively coupled plasma (ICP-MS) | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ | |
| Food 1) | Concentration/ content of elements 2), 3) Flame atomic absorption spectroscopy method (FAAS) | In-house test procedures 4) | |
| | Concentration / content of elements ^{2),} 3) Atomic emission spectrometry method with inductively coupled plasma (ICPOES) NaCl content (calculated) P ₂ O ₅ content (calculated) | In-house test procedures 4) | |

O) Waste codes given according to Minister of Climate Regulation on the waste catalogue.

Within the flexible scope of accreditation, it is allowed:

- 1) Adding the subject of research within the group of subjects.
- 2) Adding the tested feature within the subject / groups of subjects and method (research technique).
- 3) Change in the measuring range of the test method.
- 4) Applying updated and implemented new methods described in-house test procedures.
- 5) Applying updated and implemented new methods described in the standardized methods.

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| | Dioxin Analysis Laboratory Chwaszczyńska 180, 81-571 Gdynia | |
|--|--|----------------------|
| Flexible scope of accreditation | 1), 2), 3), 4) | |
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Food ¹⁾ Agriculture products including feed ¹⁾ | Determination of dioxin and dioxin-like PCB and indicator PCBs ^{2),3)} Gas chromatography method with high resolution mass spectrometry (GC-HRMS) | PB-408 ⁴⁾ |

Within the flexible scope of accreditation, it is allowed:

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 Adding the examined feature within the subject / groups of subjects and method (research technique).
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| Classical Analysis Laboratory Chwaszczyńska 180, 81-571 Gdynia | | |
|--|--|------------------------------|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Tea and coffee | Vitamin C content | PN-A-04019:1998 p. 2 |
| Food concentrates, | Range: (10,0 – 100,0) mg/100 g | |
| Meat and meat products, | Titrimetric method | |
| Non-alcoholic beverages | | |
| carbonated and non-carbonated | | |
| soft drinks, juices, syrups), | | |
| Fruits, vegetables, fruit and | | |
| egetable products and vegetable | | |
| with meat products, | | |
| Sweets and sugar confectionery | | |
| Foodstuffs for particular | | |
| nutritional uses, | | |
| Frozen products, | | |
| Dietary supplements and nutritional | | |
| oods | 177 | 4 |
| Milk and dairy products, | Vitamin C content | |
| Ready-made culinary products | Range: (10,0 – 30,0) mg/100 g | |
| | Titrimetric method | |
| Food concentrates | Water activity | PN-ISO 21807:2005 |
| Weat and meat products | Range: (0,100 – 1,000) | |
| Fish and fishery products and | Vapour pressure method | |
| seafoods | | |
| Ready-made culinary products, | | |
| Poultry and poultry products | | |
| Milk and dairy products | | |
| Cereals and cereal products | | |
| Fruits, vegetables, fruit and | | |
| vegetable products and vegetable | | |
| with meat products | | |
| Foodstuffs for particular nutritional uses | | |
| Sweets and sugar confectionery | | |
| Herbal raw materials and products, | | |
| spices | | |
| Animal and vegetable fats and oils | | |
| Dietary supplements and | | |
| nutritional foods | | |
| Animal feedstuffs | | |
| Bioethanol | Ethanol content (proof) | PN-A-79528-3:2007 p. 5.1 |
| Spirits | Range: (60 – 99,9) % | 1 14 74-7 3020-0.2007 p. 0.1 |
| Op. 10 | Gravimetric method | |
| | Dry residue after evaporation | PN-A-79528-12-2000 |
| | | FIN-M-1 9020-12-2000 |
| | Range: (0,001 – 0,050) g/l | |
| | Gravimetric method | DD 444 11 (40.40.0000 |
| Herbal raw materials and products, | Essential oils content | PB-414 ed. I of 18.12.2020 |
| spices | Range: (0,5 – 4,5) ml/100g on dry | |
| | matter | |
| | Volumetric-distillation method | |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|--|---|
| Caseinates | Insolubility index (solubility) Range: (0,1 – 3,0) ml Centrifuge method | ISO 8156:2005 IDF-FIL 129:2005 |
| Casein and caseinates | Scorched particles Range: A – D Filtration method | ISO 5739:2003 IDF-FIL 107:2003 PN-ISO 5739:2010 |
| Alcoholic beverages: beer | Alcohol content Range: (0,2 – 10,0) % (v/v) Gravimetric method | PN-A-79093-2:2000+Ap1:2002 |
| Milk | Peroxidase activity (qualitative test) | PB-22 ed. III of 04.02.2009 |
| Fish and fishery products and seafood | Total volatile bases nitrogen (TVB-N) content Range: (4,0 – 150,0) mg N/100 g Titrimetric method | PN-A-86791:1995 |
| Milk products: buttermilk powder | Insolubility index (solubility) Range: (0,1 – 3,0) ml Centrifuge method | ISO 8156:2005 IDF-FIL 129:2005 |
| Dried milk | Phosphatase activity (qualitative test) | IDF-FIL/RM 82:2004 ISO/TS 6090:2004 |
| | Insolubility index (solubility) Range: (0,1 - 3,0) ml Centrifuge method | ISO 8156:2005 IDF-FIL 129:2005 ADPI , Section 1, 2016 |
| | Purity index (scorched particles) Range: A – D Filtration method | ADPI, Section 1, 2016 |
| | WPN (assessment of heat treatment) Range: (1,0 – 7,3) mg/g N Spectrophotometric method | ADPI, Section 1, 2016 |
| | Lactic acid and lactates content Range: (20 – 300) mg/100g Spectrophotometric method | PN-EN ISO 8069:2008 ISO 8069:2005 IDF 69:2005 |
| Bee honey | Presence of starch Range: from 0,05% (Qualitative test) | Ministry of Agriculture and Rural Development Regulation of 14 January 2009, Annex p.XII 4.3, (Journal of Laws No. 17, item 94) |
| Animal and vegetable fats and oils | Insoluble impurities content Range: (0,01 – 0,5) % Gravimetric method | PN-EN ISO 663:2017-03 ISO 663:2017-03 |
| | Anisidine value Range: 0,5 – 11,0 Spectrophotometric method | PN-EN ISO 6885:2016-04 |
| Fruits and vegetables, Fruit and vegetable preserves | Sulphur dioxide content Range: (10 – 3000) mg/kg Titrimetric method | PN-90/A-75101/23+Az2:2002 PN-EN 13196:2002 |
| Meat and meat products | Collagen content Range: (0,8 – 10) % Connective tissue content (ratio of collagen to protein content in meat) Range: (3 – 30) % (calculated) | Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 |
| | Hydroxyproline content Range: (0,1 – 1,25) % Spectrophotometric method | PN-ISO 3496:2000 ISO 3496:1994 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|---|---|
| Animal and vegetable fats and oils | Peroxide value Range: (0,1 – 30) meq/kg Titrimetric method | PN-EN ISO 3960:2017-03 ISO 3960:2017-03 |
| | lodine value Range: (5 – 180) g/100 g Titrimetric method | PN-EN ISO 3961:2018-09 |
| | Lovibond colour Range: Red units $(0,1-20)$ Yellow units $(0,1-70)$ Blue units $(0,1-0,9)$ Neutral units $(0,1-3)$ Colorimetric method | PN-ISO 15305:2001 ISO 15305:1998 AOCS Cc 13e-92:2002 |
| | Conventional mass per volume (litre "weight" in air) Range: (0,7000 – 1,0000) g/ml Gravimetric method | PN-EN ISO 6883:2017-03 |
| | Free fatty acids content (acid value) Range: (0,01 – 8,0) % Acid value Range: (0,02 – 16,0) mg KOH/g Titrimetric method | PN-EN ISO 660:2021-03 ISO 660:2020 |
| | Water content Range: (0,05 – 2,0) % (m/m) Potentiometric titration method | PN-EN ISO 8534:2017-03 |
| Feed, Sharps | Crude fibre content (fibre) Range: (0,2 – 25) % Gravimetric method | PN-EN ISO 6865:2002 PN-ISO 5498:1996 |
| | Starch content Range: (1,0 – 80) % Polarimetric method | ISO 6493:2000 PN-R-64785:1994 |
| Milk products: Dry whey | Phosphatase activity (qualitative test) Insolubility index (solubility) Range: (0,1 – 3,0) ml Centrifuge method | IDF-FIL/RM 82:2004 ISO/TS 6090:2004 PB-26 ed. III of 04.02.2009 |
| | Scorched particles Range: A – D Filtration method | PB-31 ed. III of 04.02.2009 |
| Milk products: Dry cream | Insolubility index (solubility) Range: (0,1 – 3,0) ml Centrifuge method | ISO 8156:2005 IDF-FIL 129:2005 |
| Cereals - wheat | Sedimentation index Range: (10 – 70) ml Zeleny test | PN-EN ISO 5529:2010 |
| Cereals and cereal products | Falling number Range: (60 – 480) s Viscosimetric method | PN-EN ISO 3093:2010 ISO 3093:2009 |
| Milk and milk products, Alcoholic beverages, Wine, Beer, Non-alcoholic beverages, Liquid food concentrates, | Density Range: (0,8000 – 1,3200) g/cm ³ Oscillating method | PB-381 ed. 2 of 01.12.2021 |
| Liquid dietary supplements, Oils | | Page version: A |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|--|--|--|
| Spirits beverages (spirit, spirits drinks) | Ethanol content (proof) Range: (30 – 99,9) % Oscillating method | PN-A-79529-4:2005 p. 7.2 |
| | Density Range: (0,8000 – 1,1000) g/cm ³ Oscillating method | PN-A-79529-4:2005 p. 6.2 |
| Fruit and vegetable products | Total extract content Range: (4,0 – 40,0) % (m/m) Refractometric method | PN-A-75101-02:1990+Az1:2002 p. 2 |
| Non-alcoholic beverages | Total extract content Range: (0,2 – 12,0) % (m/m) Refractometric method | PN-A-79033:1985 p.3.6.1 |
| Sugar confectionery | Alcohol content Range: (0,05 – 5,5) g / 100g Pycnometric method | PN-A-88026:1981 |
| Vegetable and fruits juices, nectars | Soluble substances content Range: (5,0 – 70,0)% (m/m) Refractometric method | PN-EN 12143:2000 |
| | Relative density 20°C/20°C Range: (1,0000 – 1,1000) Gravimetric method | PN-EN 1131:1999 |
| | Density Range: (1,0000 – 1,1000) g/cm ³ Gravimetric method | PN-EN 1131:1999 PB-276 ed. I of 10.07.2014 p. 7 |
| Bioethanol Spirits | Acidity (as acetic acid) Range: (0,003 – 0,030) g/l ethanol 100 % Titrimetric method | PN-A-79528-7:2001 |
| Cold meat Ready-made culinary products, Vinegar Fruit juices (including concentrates) Non-carbonated soft drinks Carbonated soft drinks Syrups | Ethanol content Range: (0,010 – 1,0) g/100g Spectrophotometric method | PB-564 ed. 1 of 28.10.2024 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|--|---|---|
| Flexible scope of accreditation | 1), 2), 3), 4), 5), 6), 7), 8) | |
| Food 1) | pH ²⁾ Potentiometric method | Standardized methods ⁴⁾ In-house test procedures ³⁾ |
| | Nitrites and nitrates content ²⁾ Spectrophotometric method | Standardized methods ⁴⁾ In-house test procedures ³⁾ |
| | Total sugars after inversion content ²⁾ Titrimetric method | Standardized methods ⁴⁾ In-house test procedures ³⁾ |
| | Carbohydrates content ^{2), 8)} Spectrophotometric method | ISO 5765 ⁷⁾ PB-265 ⁶⁾ |
| Food ¹⁾ Agriculture products, including animal feedstuffs | Water and volatile matter content (dry matter) ²⁾ Gravimetric method | Standardized methods ⁴⁾ In-house test procedures ³⁾ Legislation ⁵⁾ |
| | Ash content ²⁾ Gravimetric method | Standardized methods ⁴⁾ In-house test procedures ³⁾ Legislation ⁵⁾ |

Within the flexible scope of accreditation, it is allowed:

- 1) Adding the subject of research within the group of subjects.
- 2) Change in the measuring range of the test method.
- 3) Applying updated and implemented new methods described in-house test procedures.
- 4) Applying updated and implemented new methods described in the standardized methods.
- 5) Applying updated and implemented new methods described in the legislation.
- 6) Applying updated methods described in-house test procedures
- 7) Applying updated methods described in the standardized methods.
- 8) Adding the tested feature within the subject/group of subjects and methods (research technique).

The current "List of testing carried out in the framework of flexible scope" is made available to the public by the accredited body.

| Nutrtion Analysis Laboratory Chwaszczyńska 180, 81-571 Gdynia | | |
|---|--|----------------------------|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Foodstuffs for particular nutritional uses Sweets and sugar confectionery Non-alcoholic beverages (carbonated and non-carbonated soft drinks, juices, syrups), Spirits and alcoholic beverages, Tea and coffee Animal and vegetable fats and oils Milk and dairy products, Dietary supplements and nutritional foods Food additives Meat and meat products, Fish and fishery products and seafood, Ready-made culinary products, Eggs and egg products Food concentrates Fruits, vegetables, fruit and vegetable products and vegetable with meat products Herbal raw materials and products, spices Frozen products Oilseeds Cereals and cereal products | Kjeldahl nitrogen content Range: (0,05– 14,50) % Protein content Range: (0,3 – 93,0) % Titrimetric method | PB-116 ed. 4 of 30.12.2024 |
| Animal feedstuffs Milk and dairy products | Kjeldahl nitrogen content Range: (0,300 – 14,500) % Protein content Range: (2,00 – 93,00) % Titrimetric method | PN-EN ISO 8968-3:2008 |
| Cereals and cereal products | Kjeldahl nitrogen content Range: (1,30 – 12,00) % Protein content Range: (8,0 – 75,0) % Titrimetric method | PN-EN ISO 20483:2014-02 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|--|--|---|
| Non-alcoholic beverages Spirits and alcoholic beverages Milk and dairy products Meat and meat products Fish and fishery products and seafood Eggs and egg products Food concentrates Animal and vegetable fats and oils Ready-made culinary products Fruits, vegetables, fruit and vegetable products and vegetable with meat products Sugar confectionery Cereals and cereal products Bread and bakery products Dietary supplements and nutritional foods Herbal raw materials and products, spices, Oilseeds Feed | Dietary fibre content Range: (0,5 – 50) % Gravimetric method | AOAC 991.43:1994 |
| Tea and coffee Food concentrates, Meat and meat products, Milk and dairy products, Non-alcoholic beverages (carbonated and non-carbonated soft drinks, juices, syrups), Spirits and alcoholic beverages, Oilseeds, Fruits, vegetables, fruit and vegetable products and vegetable with meat products, Fish and fishery products and seafood, Sweets and sugar confectionery, Herbal raw materials and products, spices, Foodstuffs for particular nutritional uses, Animal and vegetable fats and oils, Cereals and cereal products, Frozen products, Ready-made culinary products, Poultry and poultry products, Eggs and egg products, Carcases, clippings from carcasses, Dietary supplements and nutritional foods, Food additives | Energy Carbohydrates content (calculated) | Regulation (EU) No 1169/2011 of the Parliament and of the Council of 25 October 2011 FDA Nutrition Labelling Manual Guide to Food Labelling and Advertising (Canadian Food Inspection Agency) |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|---|---|
| Casein | Free acidity Range: (0,01 – 0,70) 0,1 mol/l NaOH/1 g Titrimetric method | ISO 5547:2008 IDF-FIL 91:2008 PN-ISO 5547:2010 |
| Food concentrates Cereal crisps | Chlorides content Range: (0,1 – 40,0) % Titrimetric method | PN-A-79011-7:1998 |
| Butter, milk products intended to spread | Chlorides content Range: (0,1 – 5,0) % Titrimetric method (Mohr) Fat acidity Range: (0,1 – 2,0) mmol/100g | ISO 1738:2004 IDF-FIL 12:2004 ISO 1740:2004 IDF-FIL 6:2004 |
| Milk products: buttermilk powder | Titrimetric method Acidity Range: (0,01 – 0,2) % Titrimetric method | ADPI, Section 1, 2016 |
| Dried milk | Acidity Range: (0,08 – 0,2) % Titrimetric method | ADPI, Section 1, 2016 |
| | Acidity Range: from 8,0 ml 0,1 mol/l NaOH/10 g non- fat dry matter to 20 ml 0,1 mol/l NaOH/10 g non-fat dry matter Titrimetric method | PN-ISO 6091:2012 |
| Fruits and vegetables, Fruit and vegetable preserves | Total acidity as particular acid content Range: (0,1 – 2,5) % (m/m) Titrimetric method | PN-90/A-75101/04+Az1:2002 |
| Meat and meat products | Meat content (calculated) | PB-282 ed. 3 of 21.01.2025 |
| | Salt content Range: (0,10 – 10,00) % Titrimetric method | PN-73/A-82112+Az1:2002 |
| Fish and fishery products | Salt content Range: (0,1 – 8,0) % Titrimetric method Total acidity Range: (0,5 – 4,0) % Titrimetric method | PN-74/A-86739 PN-85/A-82100 PN-74/A-86746 PN-85/A-82100 |
| Milk products: Dry whey | Acidity Range: (0,05 – 2,0) % Titrimetric method | PB-25 ed. III of 04.02.2009 |
| Milk products: Cheese | Chlorides content Range: (0,20 – 6,00) % Potentiometric method | PN-EN ISO 5943:2007 ISO 5943:2006 IDF-FIL 88:2006 |
| Milk products: Cream and sour cream | Acidity Range: (0,2 – 30,0) °SH Titrimetric method | PN-78/A-86028+Az2:2002 |
| Ready-made culinary products Frozen culinary products | Sodium chloride content Range: (0,5 – 5,0) % Titrimetric method | PN-85/A-82100 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|--|--|--|
| Flexible scope of accreditation 1), 2), 3), 4), 5) | | |
| Food 1) | Fat content 2) | Standardized methods ⁴⁾ |
| Animal feedstuffs | Gravimetric method | In-house test procedures ³⁾ Legislation ⁵⁾ |

Within the flexible scope of accreditation, it is allowed:

- 1) Adding the subject of research within the group of subjects.
- 2) Change in the measuring range of the test method.
- 3) Applying updated and implemented new methods described in-house test procedures.
- 4) Applying updated and implemented new methods described in the standardized methods.
- 5) Applying updated and implemented new methods described in the legislation.

The current "List of testing carried out in the framework of flexible scope" is made available to the public by the accredited body.

| Non-Food and Packaging Laboratory Chwaszczyńska 180, 81-571 Gdynia | | |
|---|--|--|
| Type of activity/tested qualities/method | Reference document | |
| Dry residue Range: (0,10 – 60,0) % (m/m) Gravimetric method | PB-107 ed. I of 01.09.2010 | |
| Dry organic residue Range: (0,10 – 60,0) % (m/m) (calculated) | | |
| Chloride content as NaCl Range: (0,1 – 10,0) % (m/m) Titrimetric method | PB-108 ed. I of 01.09.2010 | |
| pH Range: 1,0 – 12,0 Potentiometric method | PB-109 ed. I of 01.09.2010 | |
| pH of 1% water solution Range: 2,0 – 12,0 Potentiometric method | | |
| Anionic-active matter content Range: (0,50 – 30,00) % (m/m) Titrimetric method | PN-ISO 2271:2000 | |
| Density Range: (0,850 – 1,350) g/cm ³ Oscillating method | PB-489 ed. I of 15.10.2021 | |
| Colour fastness Range: (1 – 5) Visual method | PN-EN 648:2019-03 | |
| Grammage Range: (25,0 – 1000) g/m² Gravimetric method | PN-EN ISO 536:2020-08 | |
| Determination of moisture content Range: (0,05 – 60,0) % Gravimetric method | PN-EN ISO 287:2018-02 | |
| Colour fastness Range: (1 – 5) Visual method | PN-EN 646:2019-03 | |
| Determination of benzophenone, 4-methylobenzophenone, 2- hyroxybenzophenone, 4- hyroxybenzophenone Range: (0,02 – 10) mg/dm² Gas chromatography method with | PB-247/GC ed. I of 03.02.2014 | |
| | Type of activity/tested qualities/method Dry residue Range: (0,10 – 60,0) % (m/m) Gravimetric method Dry organic residue Range: (0,10 – 60,0) % (m/m) (calculated) Chloride content as NaCl Range: (0,1 – 10,0) % (m/m) Titrimetric method pH Range: 1,0 – 12,0 Potentiometric method pH of 1% water solution Range: 2,0 – 12,0 Potentiometric method Anionic-active matter content Range: (0,50 – 30,00) % (m/m) Titrimetric method Density Range: (0,850 – 1,350) g/cm³ Oscillating method Colour fastness Range: (1 – 5) Visual method Determination of moisture content Range: (0,05 – 60,0) % Gravimetric method Colour fastness Range: (1 – 5) Visual method Determination of benzophenone, 4-methylobenzophenone, 4-hyroxybenzophenone Range: (0,02 – 10) mg/dm² | |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|--|--|--|
| Paper and cardboard materials and articles | Determination of 4,4'-bis(dimethyloamino)benzophenone and 4,4'-bis(diethyloamino)benzophenone Range: (0,0016 – 0,0048) mg/dm² Gas chromatography method with mass spectrometry (GC-MS) | PB-252/GC ed. I of 03.02.2014 |
| Paper and cardboard materials and articles and water extracts | Determination of formaldehyde Range: (1,0 – 30) mg/kg | PN-EN 1541:2003 |
| Paper, fibre and cardboard materials and articles | Determination of diisopropylnaphthalene Range: (0,6 – 10) mg/kg Gas chromatography method with mass spectrometry (GC-MS) | PN-EN 14719: 2006 |
| Paper, fibre and cardboard materials and articles and water extracts | Determination of pentachlorophenol Range: (0,05 – 0,5) mg/kg Gas chromatography method with mass spectrometry (GC-MS) | PN-EN ISO 15320: 2011 |
| Tissue paper and tissue products | Grammage Range: (15,0 – 85,0) g/m ² Gravimetric method | PN-EN ISO 12625-6:2017-03 |
| Paper and cardboard materials and articles and water extracts | Concentration of bisphenol A Range: (0,010 – 5,0) µg/ml High performance liquid chromatography method with fluorescence detection (HPLC-FLD) Bisphenol A content (calculated) | CEN/TS 13130-13:2005 IW-28/PNF ed. I of 21.09.2015 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|---|----------------------|
| Plastic materials and articles intended to come into contact with food Food simulants after migration | Determination of formaldehyde Range: (1,5 – 30) mg/kg of food simulant Spectrophotometric method with 2,4–pentanodione Specific migration of formaldehyde | CEN/TS 13130-23:2005 |
| | (calculated) Determination of hexamethylenetetramine expressed as formaldehyde Range: (1,5 – 30) mg/kg of food simulant Spectrophotometric method with 2,4–pentanodione | |
| | Specific migration of hexamethylenetetramine expressed as formaldehyde (calculated) | |
| Plastic materials and articles intended to come into contact with food Food simulants after migration | Determination of vinyl acetate Range: (1,2 – 24,0) mg/kg of food simulant Headspace gas chromatography method with flame ionization detection (HS-GC-FID) | CEN/TS 13130-9:2005 |
| | Specific migration of vinyl acetate (calculated) | |
| | Determination of maleic anhydride (as maleic acid) Range: (3,0 – 60,0) mg/kg of food simulant High performance liquid chromatography method with spectrophotometric detection (HPLC-UV/Vis) | CEN/TS 13130-24:2005 |
| | Specific migration of maleic anhydride (as maleic acid) (calculated) | |

| Subject of testing/product | Type of activity/ tested qualities/method | Reference document |
|---|---|----------------------------------|
| Plastic materials and articles intended to come into contact with food Rubber materials and articles intended to come into contact with food Food simulants after migration | Determination of N,N-bis(2-hydroxyethyl) alkil(C8-C18)amine Range: (0,4 - 5) mg/kg of food simulant High performance liquid chromatography method with tandem mass spectrometry (HPLC-MS-MS) Specific migration of N,N-bis(2- hydroxyethyl) alkil(C8-C18)amine (calculated) | PB-341/LC ed. I of 12.09.2016 |
| Plastic materials and articles Fabric materials and articles | Determination of benzene Range: (1,5-25) mg/kg Headspace gas chromatography method with mass spectrometry detection (HS-GC-MS) | PB-380 ed. I of 06.07.2018 |
| Plastic materials and articles intended to come into contact with food Food simulants after migration | Determination of 2,6-di-tert-butyl-p-cresol (BHT) Range: (1-25) mg/kg of food simulant Gas chromatography method with mass spectrometry (GC-MS) Specific migration of 2,6-di-tert-butyl-p-cresol (BHT) (calculated) | PB-385 ed. I of 26.10.2018 |
| Plastic materials and articles intended to come into contact with food Food simulants after migration | Determination of 9,9-bis[methoxymethyl]- 9H-fluorene Range: (0,05 – 5,0) mg/kg of food simulant Gas chromatography method with mass spectrometry (GC-MS) Specific migration of 9,9- bis[methoxymethyl]- 9H-fluorene (calculated) | PB-367 ed. II of 21.02.2018 |
| | Determination of acetaldehyde Range: (0,5-20) mg/kg of food simulant Headspace gas chromatography method with flame ionization detection (HS-GC-FID) Specific migration of acetaldehyde (calculated) | PB-395 ed. I of 15.05.2019 |

| Subject of testing/product | Type of activity/ tested qualities/method | Reference document |
|---|--|--|
| Plastic materials and articles intended to come into contact with food Food simulants after migration | Determination of 1,3,5-tris (3,5-di-tertbutyl-4-hydroxybenzyl)-1,3,5-triazine-2,4,6(1H, 3H, 5H)-trione Range: (0,5-15) mg/kg of food simulant High performance liquid chromatography method with spectrophotometric detection (HPLC-UV/Vis) Specific migration of 1,3,5-tris (3,5-di- tertbutyl-4-hydroxybenzyl)-1,3,5-triazine- 2,4,6(1H, 3H, 5H)-trione (calculated) | PB-300 ed. I of 10.08.2019 |
| Plastic materials and articles intended to come into contact with food Food simulants after migration | Overall migration into vegetable oils Range: (2,0 – 100,0) mg/dm² Gravimetric method | PN-EN 1186-2:2022-12 |
| Plastic materials and articles Rubber materials and articles | Determination of short-chain chlorinated paraffins (SCCP) Range: (50-2000) mg/kg Gas chromatography method with mass spectrometry (GC-MS) | PB-401/GC ed. I of 15.07.2019 |
| Toys, materials for toys, plastics | Determination of formaldehyde in extract Range: (0,5 – 5,0) mg/kg Spectrophotometric method | PN-EN-71-11:2007 |
| Toys, materials for toys made of plastics | Migration of monomers Range: acrylamide (0,01-0,5) mg/l phenol (1,0 -50,0) mg/l bisphenol A (0,01-0,5) mg/l Liquid chromatography method with tandem mass spectrometry and photodiode detection (LC-MS-MS/DAD/UV) | PN-EN 71-11:2007 IW-34/PNF ed. I of 24.04.2017 |
| Toys, materials for toys made of textiles, textiles | Determination of formaldehyde Range: (16 – 3500) mg/kg Spectrophotometric method | PN-EN ISO 14184-1:2011 |

| Subject of testing/product | Type of activity/ tested qualities/method | Reference document |
|----------------------------------|--|-----------------------|
| Electrical and electronic | Determination of elements | PN-EN 62321-4:2014-08 |
| equipment and its polymer, | Range: | +A1:2017-12 |
| textile, paper and electronic | Al (50 – 3000) mg/kg | PN-EN 62321-5:2014-08 |
| components, the materials used | Sb (5,0 – 3000) mg/kg | |
| in the manufacture of electrical | As (5,0 – 3000) mg/kg | |
| and electronic equipment and | Ba (50 – 3000) mg/kg | |
| packaging | B (50 – 3000) mg/kg | |
| | Cd (5,0 – 3000) mg/kg | |
| | Cr total (5,0 – 3000) mg/kg | |
| | Co (5,0 – 3000) mg/kg | |
| | Cu (50 – 3000) mg/kg | |
| | Pb (5,0 – 3000) mg/kg | |
| | Mn (50 – 3000) mg/kg | |
| | Hg (5,0 – 3000) mg/kg | |
| | Ni (5,0 – 3000) mg/kg | |
| | Se (5,0 – 3000) mg/kg | |
| | Sr (50 – 3000) mg/kg | |
| | Sn total (50 – 3000) mg/kg | |
| | Zn (50 – 3000) mg/kg | |
| | Mass spectrometry method by ionizing with | |
| | inductively coupled plasma (ICP-MS) | |
| | Determination of polybrominated | PN-EN 62321-6:2015-10 |
| | biphenyls | |
| | (PBB) and polybrominated diphenyl ethers | |
| | (PBDE) in the solvent extract from material | |
| | of an object | |
| | Range: | |
| | PBB (0,03 – 1,5)% | |
| | PDBE (0,03 – 1,5)% | |
| | Gas chromatography method with mass spectrometry (GC-MS) | |
| | Polybrominated biphenyls (PBB) and | |
| | polybrominated diphenyl ethers (PBDE) | |
| | content | |
| | (calculated) | |
| | (// | Dogo version: A |

| Determination of elements | Subject of testing/product | Type of activity/ tested qualities/method | Reference document |
|--|-------------------------------------|---|-----------------------------|
| Al | Plastic materials and articles | • | PB-233/ICP ed. II of |
| Sb | | | |
| As | | | 15.11.2017 |
| Ba | and articles | | |
| B | | | |
| Cd | | | |
| Cr (total) | | | |
| Co | | , , , , | |
| Cu | | | |
| Pb | | , , , , | |
| Mn | | | |
| Hg | | | |
| Ni | | | |
| Se | | - | |
| Sr (50 – 500) mg/kg Sn (total) (50 – 500) mg/kg Amass spectrometry method by ionizing with inductively coupled plasma (ICP-MS) Plastic materials and products, multi-layer materials, viscose films Range: (0,005 – 2000) cm³/(m²-24/h) Coulometric sensor method Oxygen permeability Range: (0,005 – 2000) cm³/(m²-24/h) Coulometric sensor method Water vapour permeability Range: (0,005 – 2000) cm³/(m²-24/h) Coulometric sensor method Water vapour permeability Range: (0,005 – 1000) cm³/(m²-24/h) Infrared sensor method Plastic: single layer, multi-layer, printed single layer, printed multi-layer materials and articles Paper and board materials and articles Paper and cardboard materials Sisphenol B | | | |
| Sn (total) (50 – 500) mg/kg | | | |
| Plastic materials and products, multi-layer materials, viscose films, printed single layer, multi-layer materials and products articles Plastic: single layer, multi-layer materials and articles Paper and board materials and articles Paper and cardboard materials Asymmetry (LC-QTOF-MS) Determination of bisphenols Bisphenol B Bisphenol S Range: (0.05 - 30) mg/kg Liquid chromatography method with tandem mass spectrometry (LC-MS-MS) Paper and cardboard materials And articles and water extracts Paper and cardboard materials Asymmetry (LC-MS-MS) DIN 54603:2008-08 PB-572 ed 1 z of 29.08.2023 PB-573 ed 1 z of 29.08.2023 PB-574 ed 1 z of 29.08.2023 PB-575 ed 1 z of 29.08.2023 | | ` , , , | |
| Plastic materials, viscose films Range: (0,005 – 2000) cm³/(m²-24/h) Coulometric sensor method Oxygen permeability Range: (0,005 – 2000) cm³/(m²-24/h) Coulometric sensor method Oxygen permeability Range: (0,005 – 2000) cm³/(m²-24/h) Coulometric sensor method Plastic: single layer, multi-layer, ange: (0,005 – 1000) cm³/(m²-24/h) Plastic: single layer, multi-layer, printed single layer, printed multi-layer anterials and articles Paper and board materials and articles Paper and cardboard materials Bisphenol B Bisphenol B Bisphenol B Bisphenol B Bisphenol B Bisphenol F Bisphenol B Bisphenol B Bisphenol F Bisphenol B Bisphenol F Bisphenol B Bisphenol F Bisphenol B Bisphenol B Bisphenol B Bisphenol F Bisphenol B Bisphenol | | | |
| Inductively coupled plasma (ICP-MS) | | | |
| Plastic materials and products, multi-layer materials, viscose films Range: (0.005 – 2000) cm³/(m²-24/h) Coulometric sensor method Oxygen permeability Range: (0.005 – 2000) cm³/(m²-24/h) Coulometric sensor method Water vapour permeability Range: (0.005 – 1000) cm³/(m²-24/h) Infrared sensor method Plastic: single layer, multi-layer, printed single layer, printed multi-layer materials and articles Paper and board materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials As and articles Paper and cardboard materials As and articles and water extracts Paper and cardboard materials As and articles and water extracts Paper and cardboard materials As and articles and water extracts Paper and cardboard materials As and articles and water extracts Paper and cardboard materials As and articles and water extracts Paper and cardboard materials As and articles and water extracts Paper and cardboard materials As and articles and water extracts Paper and cardboard materials As and articles and water extracts Paper and cardboard materials As and articles and water extracts Paper and cardboard materials As and articles As TM P 224/h) As TM F 1249-20 ASTM F 124-8-30 ASTM | | | |
| multi-layer materials, viscose films | Plactic materials and products | | ACTM D 2005 24 |
| Coulometric sensor method Oxygen permeability Range: (0,005 – 2000) cm³/(m²-24/h) Coulometric sensor method Water vapour permeability Range: (0,005 – 1000) cm³/(m²-24/h) Infrared sensor method Plastic: single layer, multi-layer, printed single layer, printed multi-layer materials and articles Paper and board materials and articles Range: (0,01 – 60) mg/kg Liquid chromatography method with Ouadrupole Time-of-Flight Mass Spectrometry (LC-OTOF-MS) Plastic materials and articles Paper and cardboard materials and articles Range: (0,05 - 30) mg/kg Liquid chromatography method with tandem mass spectrometry (LC-MS-MS) Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Range: (12 – 190) mg/kg (0,0019 – 1,9) mg/dm² Spectrophotometric method Epichlorohydrin hydrolysis products content Range: 1,3-dichloro-2-propanol (1,3-DCP) (1,0 - 25) μg/l 3-monochloro-propane-1,2-diol (3-MCPD) (5,0 - 70) μg/l Gas chromatography method with mass | | | M3 1 IVI D 3303-24 |
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| Water vapour permeability Range: (0,005 – 1000) cm³/(m²-24/h) Infrared sensor method Plastic: single layer, multi-layer, printed substances (NIAS), determination in food single layer, printed multi-layer materials and articles Paper and board materials and articles Toys Plastic materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials Bisphenol B Bi | | , , , , | |
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| Plastic: single layer, multi-layer, printed substances (NIAS), determination in food simulants: MPPO (Tenax), 95 % ethanol, 50 % ethanol, 20 % ethanol, 10 % ethanol, 3 % acetic acid acid Range: (0,01 – 60) mg/kg Liquid chromatography method with Quadrupole Time-of-Flight Mass Spectrometry (LC-QTOF-MS) Toys Plastic materials and articles Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles Paper and cardboard materials Paper and cardboard mat | | Water vapour permeability | ASTM F 1249-20 |
| Plastic: single layer, multi-layer, printed substances (NIAS), determination in food simulants: MPPO (Tenax), 95 % ethanol, 50 % ethanol, 20 % ethanol, 10 % ethanol, 3 % acetic acid acid Range: (0,01 – 60) mg/kg Liquid chromatography method with Quadrupole Time-of-Flight Mass Spectrometry (LC-QTOF-MS) Toys Plastic materials and articles Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles Paper and cardboard materials Paper and cardboard mat | | Range: (0,005 – 1000) cm ³ /(m ² ·24/h) | |
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| Paper and board materials and articles Range: (0,01 – 60) mg/kg Liquid chromatography method with Quadrupole Time-of-Flight Mass Spectrometry (LC-QTOF-MS) Determination of bisphenols Bisphenol A Bisphenol B Bisphenol F Bisphenol S Range: (0,05 - 30) mg/kg Liquid chromatography method with tandem mass spectrometry (LC-MS-MS) Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Determination of glyoxal Range: (12 - 190) mg/kg (0,0019 - 1,9) mg/dm² Spectrophotometric method Epichlorohydrin hydrolysis products content Range: 1,3-dichloro-2-propanol (1,3-DCP) (1,0 - 25) µg/l 3-monochloro-propane-1,2-diol (3-MCPD) (5,0 - 70) µg/l Gas chromatography method with mass | materials and | | |
| articlesLiquid chromatography method with Quadrupole Time-of-Flight Mass Spectrometry (LC-QTOF-MS)ToysDetermination of bisphenolsPB-374 ed. 3 of 16.01.2023Plastic materials and articlesBisphenol A Bisphenol B Bisphenol B Bisphenol F Bisphenol S Range: (0,05 - 30) mg/kg Liquid chromatography method with tandem mass spectrometry (LC-MS-MS)Paper and cardboard materials and articles and water extractsDetermination of glyoxal Range: (12 – 190) mg/kg (0,0019 – 1,9) mg/dm² Spectrophotometric methodDIN 54603:2008-08Paper and cardboard materials and articles and water extractsPaper indicate the properties of the prope | articles | acetic acid | |
| Quadrupole Time-of-Flight Mass Spectrometry (LC-QTOF-MS) | Paper and board materials and | Range: (0,01 – 60) mg/kg | |
| Spectrometry (LC-QTOF-MS) Toys Plastic materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles and water extracts Paper and cardboard materials and articles articles and articles and articles and articles articles and articles and articles and articles articles articles and articles articles articles and articles | articles | | |
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| Bisphenol F Bisphenol S Range: (0,05 - 30) mg/kg Liquid chromatography method with tandem mass spectrometry (LC-MS-MS) Paper and cardboard materials and articles and water extracts Range: (12 - 190) mg/kg (0,0019 - 1,9) mg/dm² Spectrophotometric method Epichlorohydrin hydrolysis products content Range: 1,3-dichloro-2-propanol (1,3-DCP) (1,0 - 25) μg/l 3-monochloro-propane-1,2-diol (3-MCPD) (5,0 - 70) μg/l Gas chromatography method with mass | | | |
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| Range: (0,05 - 30) mg/kg Liquid chromatography method with tandem mass spectrometry (LC-MS-MS) Paper and cardboard materials and articles and water extracts Range: (12 - 190) mg/kg (0,0019 - 1,9) mg/dm² Spectrophotometric method Epichlorohydrin hydrolysis products content Range: 1,3-dichloro-2-propanol (1,3-DCP) (1,0 - 25) μg/l 3-monochloro-propane-1,2-diol (3-MCPD) (5,0 - 70) μg/l Gas chromatography method with mass | and articles | | |
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| mass spectrometry (LC-MS-MS) Paper and cardboard materials and articles and water extracts Range: (12 – 190) mg/kg (0,0019 – 1,9) mg/dm² Spectrophotometric method Epichlorohydrin hydrolysis products content Range: 1,3-dichloro-2-propanol (1,3-DCP) (1,0 - 25) μg/l 3-monochloro-propane-1,2-diol (3-MCPD) (5,0 - 70) μg/l Gas chromatography method with mass | | | |
| Paper and cardboard materials and articles and water extracts Determination of glyoxal Range: (12 – 190) mg/kg (0,0019 – 1,9) mg/dm² Spectrophotometric method Epichlorohydrin hydrolysis products content Range: 1,3-dichloro-2-propanol (1,3-DCP) (1,0 - 25) µg/l 3-monochloro-propane-1,2-diol (3-MCPD) (5,0 - 70) µg/l Gas chromatography method with mass | | | |
| Range: (12 – 190) mg/kg (0,0019 – 1,9) mg/dm² Spectrophotometric method Epichlorohydrin hydrolysis products content Range: 1,3-dichloro-2-propanol (1,3-DCP) (1,0 - 25) µg/l 3-monochloro-propane-1,2-diol (3-MCPD) (5,0 - 70) µg/l Gas chromatography method with mass | | . , , , | |
| (0,0019 – 1,9) mg/dm² Spectrophotometric method Epichlorohydrin hydrolysis products content Range: 1,3-dichloro-2-propanol (1,3-DCP) (1,0 - 25) µg/l 3-monochloro-propane-1,2-diol (3-MCPD) (5,0 - 70) µg/l Gas chromatography method with mass | - | | DIN 54603:2008-08 |
| Spectrophotometric method Epichlorohydrin hydrolysis products content Range: 1,3-dichloro-2-propanol (1,3-DCP) (1,0 - 25) µg/l 3-monochloro-propane-1,2-diol (3-MCPD) (5,0 - 70) µg/l Gas chromatography method with mass | and articles and water extracts | | |
| Epichlorohydrin hydrolysis products content Range: 1,3-dichloro-2-propanol (1,3-DCP) (1,0 - 25) μg/l 3-monochloro-propane-1,2-diol (3-MCPD) (5,0 - 70) μg/l Gas chromatography method with mass | | | |
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| μg/l 3-monochloro-propane-1,2-diol (3-MCPD) (5,0 - 70) μg/l Gas chromatography method with mass | | | |
| 3-monochloro-propane-1,2-diol (3-MCPD) (5,0 - 70) µg/l Gas chromatography method with mass | | | |
| (5,0 - 70) μg/l Gas chromatography method with mass | | | |
| Gas chromatography method with mass | | | |
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| spectrometry (GC-MS) | | I | |
| | | spectrometry (GC-MS) | |

| Subject of testing/product | Type of activity/ tested qualities/method | Reference document |
|------------------------------|---|----------------------------|
| Metal materials and articles | Release of elements to food simulant – citric | PB-298 ed. 2 of 07.08.2023 |
| | acid 0,5% | |
| | Range: | |
| | Mg (0,050 – 1000) mg/kg | |
| | Al (0,050 – 200) mg/kg Sb (0,005 – 10) mg/kg | |
| | Co (0,005 – 10) mg/kg | |
| | Mo (0,005 – 10) mg/kg | |
| | Cr (0,050 – 10) mg/kg | |
| | Mn (0,050 – 100) mg/kg | |
| | Fe (0,050 – 500) mg/kg | |
| | Ni (0,005 – 10) mg/kg | |
| | Cu (0,005 – 10) mg/kg | |
| | Zn (0,050 – 100) mg/kg | |
| | Ag (0,005 – 10) mg/kg | |
| | Sn (0,050 – 1000) mg/kg | |
| | Ti (0,005 – 10) mg/kg V (0,001 – 10) mg/kg | |
| | V (0,001 – 10) mg/kg Ba (0,050 – 100) mg/kg | |
| | Be (0,001 – 100) mg/kg | |
| | Pb (0,005 – 10) mg/kg | |
| | Li (0,005 – 10) mg/kg | |
| | Hg (0,001 – 0,005) mg/kg | |
| | TI (0,001 – 1,0) mg/kg | |
| | As (0,001 – 10) mg/kg | |
| | Cd (0,001 – 10) mg/kg | |
| | Zr (0,050 – 100) mg/kg | |
| | Mass spectrometry method by ionizing with inductively coupled plasma (ICP-MS) | |
| Metal materials and articles | Release of elements to food simulant – water | PB-298 ed. 2 of 07.08.2023 |
| | (EN 16889) | |
| | Range: | |
| | Al (0,050 – 200) mg/kg | |
| | Sb (0,005 – 10) mg/kg | |
| | Co (0,005 – 10) mg/kg | |
| | Mo (0,005 – 10) mg/kg Cr (0,050 – 100) mg/kg | |
| | Mn (0,050 – 100) mg/kg | |
| | Fe (0,050 – 500) mg/kg | |
| | Ni (0,005 – 10) mg/kg | |
| | Cu (0,005 – 10) mg/kg | |
| | Zn (0,050 – 100) mg/kg | |
| | Ag (0,005 – 10) mg/kg | |
| | Sn (0,050 – 1000) mg/kg | |
| | Ti (0,005 – 10) mg/kg | |
| | V (0,001 – 10) mg/kg | |
| | Ba (0,050 – 100) mg/kg | |
| | Be (0,001 – 10) mg/kg | |
| | Pb (0,005 – 10) mg/kg Li (0,005 – 10) mg/kg | |
| | Hg (0,005 – 10) mg/kg Hg (0,001 – 0,005) mg/kg | |
| | TI (0,001 – 0,003) mg/kg | |
| | As (0,001 – 10) mg/kg | |
| | Cd (0,001 – 10) mg/kg | |
| | Zr (0,050 – 100) mg/kg | |
| | Mass spectrometry method by ionizing with | |
| | inductively coupled plasma (ICP-MS) | |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|--|---|--|
| Materials and articles in contact with food and other packaging materials and articles ¹⁾ Food simulants after migration ¹⁾ | Determination of alkylphenols ^{2), 3)} High performance liquid chromatography method with fluorescence detection (HPLC-FLD) | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ |
| | Specific migration (calculated) | |
| Materials and articles in contact with food and other packaging materials and articles 1) Food simulants after migration 1) | Overall migration into food simulants ^{2), 3)} Gravimetric method | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ |
| Materials and articles in contact | Determination of monomers, additives, | Standardized methods 5) |
| with food and other packaging materials and articles ¹⁾ Food simulants after migration ¹⁾ | impurities and polimer production aids ^{2),3)} High performance liquid chromatography method with spectrophotometric detection (HPLC-UV/Vis) and diode array detection (HPLC-DAD) Specific migration (calculated) | In-house test procedures ⁴⁾ |
| Materials and articles in contact | Determination of volatile and semivolatile | Standardized methods 5) |
| with food and other packaging materials and articles ¹⁾ Food simulants after migration ¹⁾ | monomers, additives, impurities and polimer production aids ^{2), 3)} Headspace gas chromatography method | In-house test procedures ⁴⁾ |
| | with flame ionization detection (HS-GC-FID), Gas chromatography method with flame ionization detection (GC-FID) Specific migration (calculated) | |
| Plastic and rubber materials and | Determination of polycyclic aromatic | Standardized methods 5) |
| Paper and cardboard materials | hydrocarbons (PAH) and polychlorinated biphenyls (PCB) ^{2), 3)} | In-house test procedures ⁴⁾ |
| and articles | Gas chromatography method with mass spectrometry (GC-MS) | |
| Plastic and rubber materials and articles ¹⁾ Paper and cardboard materials and articles ¹⁾ | Determination of monomers, additives, impurities and polimer production aids ^{2), 3)} Gas chromatography method with tandem mass spectrometry (GC-MS/MS) | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ |
| Toys 1) | | 0: 1 1: 1 1: 5 |
| Plastic and rubber materials and products ¹⁾ Paper and cardboard materials | Determination of volatile organic compounds and organic solvents ^{2), 3)} Headspace gas chromatography method | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ |
| and products ¹⁾ Candles, paraffin, waxes | with flame ionization detection (HS-GC-FID), headspace gas chromatography method with mass spectrometry detection (HS-GC-MS) | |
| Materials and articles in contact | Determination of elements ^{2), 3)} | Standardized methods 5) |
| vith food and other packaging naterials and articles 1) | Mass spectrometry method by ionizing with inductively coupled plasma (ICP-MS) | In-house test procedures ⁴⁾ |
| Food simulants after migration 1) | Specific migration (calculated) | |
| 「oys ¹) | Elements migration ^{2), 3)} Mass spectrometry method by ionizing | Standardized methods 5) |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|--|---|
| Electrical and electronic equipment and its polymer, textile, paper and electronic | Determination of chromium (VI) ³⁾ High-performance liquid chromatography with ionizing with inductively coupled | Standardized methods ⁵⁾ |
| components, the materials used in the manufacture of electrical and electronic equipment and packaging Toys 1) | plasma mass spectrometry method (HPLC-ICP-MS) | |
| Toys 1) Materials and articles in contact with food and other packaging materials and articles and water | Determination of additives, impurities and polimer production aids ^{2), 3)} Liquid chromatography method coupled with tandem mass spectrometry (LC-MS- | Standardized methods ⁵⁾ In-house test procedures ⁴⁾ |
| extracts ¹⁾ Textiles and leather materials and articles ¹⁾ | MS) Determination of amines ^{2), 3)} High-performance liquid chromatography method coupled with tandem mass spectrometry (LC-MS-MS) | In-house test procedures 4) |
| Materials and articles in contact with food and other packaging materials and articles ¹⁾ Food simulants after migration ¹⁾ | Determination of additives, impurities and polimer production aids ^{2), 3)} High-performance liquid chromatography method coupled with tandem mass spectrometry (LC-MS-MS) Specific migration (calculated) | In-house test procedures 4) |
| Materials and articles in contact with food and other packaging materials and articles 1) Food simulants after migration 1) | Determination of additives, impurities and polimer production aids ^{2), 3)} Gas chromatography method with tandem mass spectrometry detection (GC-MS-MS) Specific migration (calculated) | In-house test procedures 4) |
| Materials and articles in contact with food and other packaging materials and articles 1) Food simulants after migration 1) | Determination of mineral oils (MOSH, MOAH) ^{2),3)} Gas chromatography method with flame ionization detection coupled with high performance liquid chromatography method (HPLC-GC-FID) Specific migration (calculated) | PB-396/GC ⁶⁾ |
| Materials and articles in contact with food and other packaging materials and articles ¹⁾ Food simulants after migration ¹⁾ | Screening of non-intentionally added substances (NIAS), determination ^{2), 3)} Gas chromatography method with mass spectrometry detection and flame ionization detector (GC-MS-FID) Specific migration (calculated) | In-house test procedures 4) |
| Materials and articles in contact with food and other packaging materials and articles 1) Food simulants after migration 1) | Determination of additives, impurities and polimer production aids ^{2), 3)} Liquid chromatography method with Quadrupole Time-of-Flight Mass Spectrometry (LC-QTOF-MS) Specific migration (calculated) | In-house test procedures 4) |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|--|--|-----------------------------|
| Plastic materials and articles ¹⁾ Paper and cardboard materials | Determination of mineral oils (MOSH/POSH, MOAH) ^{2),3)} | In-house test procedures 4) |
| and articles ¹⁾ | Gas chromatography method with flame ionization detection coupled with high performance liquid chromatography method (HPLC-GC-FID) | |

Within the flexible scope of accreditation, it is allowed:

- 1) Adding the subject of research within the group of subjects.
- 2) Adding the examined feature within the subject / groups of subjects and methods (research techniques).
- 3) Change in the measuring range of the test method.
- 4) Applying updated and implemented new methods described in-house test procedures.
- 5) Applying updated and implemented new methods described in the standardized methods.
- 6) Applying updated methods described in-house test procedures.

The current "List of testing carried out in the framework of flexible scope" is made available to the public by the accredited body.

Page version: A

| Environmental Analysis Laboratory Gdynia Chwaszczyńska 180, 81-571 Gdynia | | |
|---|---|---|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Water, sewage | Phenol index Range: (0,010 – 5,0) mg/l Spectrophotometric method | PN-ISO 6439:1994 |
| | Kjeldahl nitrogen concentration Range: (0,50 – 1000) mg/l Titrimetric method | PN-EN 25663:2001 |
| | Ammonium nitrogen concentration Range: (0,50 – 1000) mg/l Titrimetric method | PN-ISO 5664:2002 |
| | Total nitrogen concentration (calculated) | PB-102 ed. IV of 09.02.2022 |
| | Chromium (VI) content Range: (0,01 – 5,0) mg/kg Spectrophotometric method | NANOCOLOR no. 91825 test Instruction ed. of 03.2021 |
| Water, drinking water, sewage | pH Range: 3,0 – 10,0 Potentiometric method | PN-EN ISO 10523:2012 |
| | Electrical conductivity Range: (10 – 3000) µS/cm Conductometric method | PN-EN 27888:1999 |
| | Nitrates concentration Range: (0,20 – 70) mg/lNO ₃ - Nitrate nitrogen concentration Range: (0,045 – 15,8) mg/l N-NO ₃ Spectrophotometric method | PN-82/C-04576/08 |
| | Nitrites concentration Range: (0,01 – 1,6) mg/l NO ₂ Nitrite nitrogen concentration Range: (0,003 – 0,48) mg/l N-NO ₂ Spectrophotometric method | PN-EN 26777:1999 |
| | Total Suspended solids Range: (2,0–4000) mg/l Gravimetric method | PN-EN 872:2007+Ap1:2007 |
| | Biochemical oxygen demand (BOD ₅) Range: (1 – 6000) mg/l O ₂ Optical method | PN-EN ISO 5815-1:2019-12 |
| | Total dissolved solids Range: (10 – 10000) mg/l Gravimetric method | PN-EN 15216:2022-03 |
| | Content of petroleum ether extractable substances Range: (5 – 1000) mg/l Gravimetric method | PB-196 ed. II of 10.05.2018 |
| | Chloride concentration Range: (5,0 – 10000) mg/l Titrimetric method | PN-ISO 9297:1994 |
| | Phosphate concentration Range: (0,03 – 15,3) mg/l Total phosphorus concentration Range: (0,05 – 5,0) mg/l Spectrophotometric method | PB-127 ed. I of 15.06.2011 based on MERCK 1.14848.0001 test |
| | Sulphate concentration Range: (5,0 – 250) mg/l Spectrophotometric method | PB-128 ed. I of 15.06.2011 based on the MERCK 1.14548.0001 test |
| | Free and bound cyanide concentration Range: (0,005 – 0,500) mg/l Spectrophotometric method | PB-129 ed. I of 15.06.2011 based on MERCK 1.09701.0001 test |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|-------------------------------|--|---|
| Water, drinking water, sewage | Total organic carbon (TOC) Range: (1,50 – 1000) mg/l Infrared spectrometry method | PN-EN 1484:1999 |
| | Anionic detergents concentration (anionic surface acting agents) Range: (0,05 – 50,0) mg/l Spectrophotometric method | PN-EN 903:2002 |
| | Hydrocarbon oil index Range: (0,1-100) mg/l Gas chromatography method with mass spectrometry (GC-MS) | PN-EN ISO 9377-2:2003 |
| | Chemical oxygen demand- Cr Range: (5,00 – 10000) mg/l O ₂ Spectrophotometric method | PN-ISO 15705:2005 |
| | Organochlorine pesticides concentration Range: HCB $(0,010 - 0,2) \mu g/l \alpha - HCH (0,010 - 0,2) \mu g/l \beta - HCH (0,010 - 0,2) \mu g/l \gamma - HCH (0,010 - 0,2) \mu g/l \delta - HCH (0,010 - 0,2) \mu g/l \delta - HCH (0,010 - 0,2) \mu g/l heptachlor (0,010 - 0,2) \mu g/l heptachlor epoxide (0,010 - 0,2) \mu g/l aldrin (0,010 - 0,2) \mu g/l dieldrin (0,010 - 0,2) \mu g/l endrin (0,010 - 0,2) \mu g/l isodrin (0,010 - 0,2) \mu g/l cis-chlordane (0,010 - 0,2) \mu g/l cis-chlordane (0,010 - 0,2) \mu g/l trans-chlordane (0,010 - 0,2) \mu g/l op'-DDE (0,010 - 0,2) \mu g/l pp'-DDE (0,010 - 0,2) \mu g/l pp'-DDD (0,010 - 0,2) \mu g/l pp'-DDD (0,010 - 0,2) \mu g/l pp'-DDT (0,010 - 0,2) \mu g/l pp'-DDT (0,010 - 0,2) \mu g/l Gas chromatography method with mass spectrometry (GC-MS) Sum of organochlorine pesticides (calculated)$ | PN-EN ISO 6468:2002 |
| | Anionic detergents concentration (anionic surface acting agents) Range: (0,10 – 20) mg/l Spectrophotometric method | PB-379 ed. I of 10.05.2018 based on MERCK 1.02552.0001 cuvette test |
| | Non-ionic detergents concentration (non-ionic surface acting agents, non-ionic surfactants) Range: (0,3 – 50) mg/l Spectrophotometric method | PB-477 ed. I of 01.04.2021 based on NANOCOLOR 985047 test |
| | Sulphides concentration Range: (0,05 – 1,5) mg/l Spectrophotometric method Formaldehyde concentration | PB-476 ed. I of 01.04.2021 based on MERCK 1.14779.0001 test PB-478 ed. I of 23.06.2021 |
| | Range: (0,1 – 80) mg/l Spectrophotometric method | based on NANOCOLOR 985041 test |

| Subject of testing/product | Type of activity/ tested qualities/method | Reference document |
|----------------------------|---|---|
| Water, drinking water | Permanganate index Range: (0,50 – 10) mg/l O ₂ Titrimetric method | PN-EN ISO 8467:2001 |
| | Ammonium ion concentration Range: (0,06 – 3,86) mg/l Spectrophotometric method | PB-124 ed. I of 15.06.2011 based on MERCK 1.14752.0001 test |
| | Colour Range: (5 – 70) mg/l Pt Spectrophotometric method | PN-EN ISO 7887:2012 method C +Ap1:2015-06 |
| | Turbidity Range: (0,20 - 100) NTU Nephelometric method | PN-EN ISO 7027-1:2016-09 |
| | Summary content of calcium and magnesium Total hardness Range: (5,0 - 500) mg/l CaCO ₃ Titrimetric method | PN-ISO 6059:1999 |
| | Total alkalinity Range: (0,40 – 20) mmol/l Bicarbonates Range: (24,4 – 1220) mg/l HCO ₃ - Titrimetric method | PN-EN ISO 99631:2001 +Ap1:2004 |
| | Bromate concentration Range: (3 - 20) µg/l Ion chromatography method with spectrophotometric detection (IC-UV/Vis) | PN-EN ISO 11206:2013-07 |
| | Acrylamide concentration Range: (0,05 – 5,0) μg/l High-performance liquid chromatography method coupled with tandem mass spectrometry (LC-MS/MS) | PB-403 ed. I of 25.06.2020 |
| | Organophosphorus pesticides concentration: Azinphos-ethyl, Chlorfenvinphos, Bromophos-ethyl, Bifenthrin, Azinphos-methyl, Chlorpyrifos-ethyl, Chlorpyrifos-methyl, Cyfluthrin, Cypermethrin, Deltamethrin, Demeton-S-methyl, Diazinon, Diflufenican, Dimethoate, Ethion, Ethoprophos, Fenitrothion I, Fenpropathrin, Fensulfothion, Fenthion, Fenvalerate, Fluopicolide, Phorate, Phosalone, Phosmet, Captan, Carbophenothion, lambdaCyhalothrin, | PN-EN 12918:2004 |
| | Malaoxon, Malathion, Mefenpyr-diethyl, Mecarbam, Methidathion, Metribuzin, Mevinphos, Oxyfluorfen, Parathionethyl, Parathion-methyl, Permethrin, Pirimiphos-ethyl, Pirimiphos-methyl, Procymidone, Propetamphos, Prothiofos, Pyrazophos, Triadimefon, Triadimenol, Triazophos, Trifloxystrobin Range: (0,05–0,5) μg/l | |
| | Gas chromatography method with mass spectrometry (GC-MS) Sum of organophosphorus pesticides (calculated) | |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|---|---|
| Sewage | Suspended matters suspension Range: (1,0 -100) ml/l Volumetric method | PN-72/C-04559/03 |
| Waste ⁹ group code: 02 02 04, 02 03 05, 03 01 82, 04 02 09, 04 02 21, 10 01 01, 10 12 08, 10 12 13, 17 01 01, 17 01 06*, 17 01 07, 17 01 80, 17 02 03, 17 03 80, 17 05 03*, 17 05 05*, 17 05 06, 17 05 07*,17 05 08, 17 08 02, 17 09 04, 19 01 11*, 19 01 12, 19 08 01, 19 08 02, 19 09 02, 19 12 09 | Concentration and content of total organic carbon (TOC) / dissolved organic carbon (DOC) Range: (1,50 – 1000) mg/l (15,0 – 10000) mg/kg Infrared spectrometry method IR | PN-EN 12457-4:2006 PN-EN 1484:1999 |
| Waste ^{O)} group code: 02 02 04, 02 03 05, 03 01 82, 04 02 09, 04 02 21, 10 01 01, 10 12 08, 10 12 13, 17 01 01, 17 01 06*, 17 01 07, 17 01 80, 17 02 03, 17 03 80, 17 05 03*, 17 05 05*, 17 05 06, 17 05 07*,17 05 08, 17 08 02, 17 09 04, 19 01 11*, 19 01 12, 19 08 01, 19 08 02, 19 09 02, 19 12 09 | pH Range: 3,0 – 10,0 Potentiometric method | PN-EN 12457-4:2006 PN-EN ISO 10523:2012 |
| Waste ^{O)} group code: 02 02 04, 02 03 05, 03 01 82, 04 02 09, 04 02 21, 10 01 01, 10 12 08, 10 12 13, 17 01 01, 17 01 06*, 17 01 07, 17 01 80, 17 02 03, 17 03 80, 17 05 03*, 17 05 05*, 17 05 06, 17 05 07*,17 05 08, 17 08 02, 17 09 04, 19 01 11*, 19 01 12, | General dissolved substances concentration Range: (10,0 – 10000) mg/l Total dissolved solid– TDS content Range: (100 – 100000) mg/kg Gravimetric method | PN-EN 12457-4:2006 PN-EN 15216:2022-03 |
| 19 08 01, 19 08 02, 19 09 02, 19 12 09 | Electrical conductivity Range: (10 – 10000) µS/cm Conductometric method | PN-EN 12457-4:2006 PN-EN 27888:1999 |
| | Sulphate concentration and content Range: (5,0 – 250) mg/l | PN-EN 12457-4:2006 PB-128 ed. I of 15.06.2011 PN-EN 12457-4:2006 |
| | Range: (5,0 – 10000) mg/l (50,0 – 100000) mg/kg Titrimetric method | PN-ISO 9297:1994 |

o) Waste codes given according to Minister of Climate Regulation on the waste catalogue.

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|---|----------------------------|
| Aqueous extract from waste prepared in Environmental Analysis Laboratory Małaszewicze DAB-11 And aqueous extract 19 08 01, 19 | Concentration of total organic carbon (TOC) / dissolved organic carbon (DOC) Range: (1,50 – 1000) mg/l Infrared spectrometry method IR | PN-EN 1484:1999 |
| 08 02, 19 08 05, 17 01 82, 17 03 80 | Content of total organic carbon (TOC) / dissolved organic carbon (DOC) (calculated) | |
| | pH Range: 3,0 – 10,0 Potentiometric method | PN-EN ISO 10523:2012 |
| | General dissolved substances concentration Range: (10,0 – 10000) mg/l Gravimetric method Total dissolved solid– TDS content (calculated) | PN-EN 15216:2022-03 |
| | Electrical conductivity Range: (10 – 10000) µS/cm Conductometric method | PN-EN 27888:1999 |
| | Sulphate concentration Range: (5,0 – 250) mg/l Spectrophotometric method Sulphate content (calculated) | PB-128 ed. I of 15.06.2011 |
| | Chloride concentration Range: (5,0 – 10000) mg/l Titrimetric method Chloride content (calculated) | PN-ISO 9297:1994 |
| Sewage sludge ^{o)} group code: 19 08 05 | pH - in H₂O Range: 3,0 – 10,0 Potentiometric method | PN-EN ISO 10390:2022-09 |
| Mineral soil | Assimilated phosphorus as P ₂ O ₅ content Range: (1,0 – 50) mg/100 g Spectrophotometric method | PN-R-04023:1996 |
| Soil, ground | pH - in H₂O pH - in KCl Range: 3,0 – 10,0 Potentiometric method | PN-EN ISO 10390:2022-09 |

O) Waste codes given according to Minister of Climate Regulation on the waste catalogue.

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|----------------------------|---|--------------------------------|
| Soil, ground | Granulometric composition in particle size range (0,063 – 20) mm by fraction Range: (0,5 – 99,5) % Sieve method | PK-EN ISO 17892-4:2017-01 |
| | Granulometric composition in particle size range (0,002 – 0,063) mm by fraction Range: (0,5 – 99,5) % Areometric method | PK-EN ISO 17892-4:2017-01 |
| | Granulometric composition in particle size range (0,0002 - 2,000) mm by fraction range: (0,5 – 99,5) % Laser diffraction method | PN-Z-19012:2020-02 |
| | Filtration factor – water permeable Range: (0,01 d20 < 2 mm) (calculated based on the grading curve - the USBCS formula) | PB-483 ed. II of 23.05.2022 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|--|--|
| Soil, ground Sewage sludge ⁰⁾ group code: 19 08 05 | Dry mass content / water content Range: (1,0 – 99,0) % Gravimetric method | PN-EN 15934:2013-02 method A |
| Soil, Sewage sludge ⁰⁾ group code: 19 08 05 Waste ⁰⁾ group code: 02 02 04, 02 03 05, 03 01 82, 04 02 09, 04 02 21, 10 01 01, 10 12 08, 10 12 13, 17 01 01, 17 01 06*, 17 01 07, 17 01 80, 17 02 03, 17 03 80, 17 05 03*,17 05 05*, 17 05 06, 17 05 07*, 17 05 08, 17 08 02, 17 09 04, 19 01 11*, 19 01 12, 19 08 01, 19 08 02, 19 09 02, 19 12 09 | Dry mass content / water content Range: (0,5 – 99,5) % Gravimetric method | PN-EN 12880:2004 |
| Soil, Sewage sludge ^{o)} group code: 19 08 05 | Ammonium nitrogen content Range: (0,05 – 2,00) % Titrimetric method Kjeldahl nitrogen content Range: (0,05 – 8,00) % Titrimetric method | PB -178 ed. I of 14.08.2012 PN-EN 13342:2002 |
| Soil, ground Sewage sludge ⁰⁾ group code:19 08 05 | Loss on ignition of dry mass (LOI) / | PN-EN 15935:2022-01 |
| Waste ^{o)} group code: 19 05 02, 19 05 03, 19 06 03, 19 06 04, 19 06 05, 19 06 06, 19 06 99 | Loss on ignition of dry mass (LOI) / Organic compounds Range: (0,5 – 99,5) % Gravimetric method | PN-EN 12879:2004 |
| Soil | Hydrocarbon oil index, including sum of C12-C35 hydrocarbons Range: (30-3000) mg/kg of dry matter Gas chromatography method with mass spectrometry (GC-MS) | PN-EN ISO 16703:2011 |
| Plant cultivation aids: - soil improvement agents (soil amendments) | Dry mass content Range: (1,0 – 99,0) % Gravimetric method Water content (calculated) | PN-EN 15934:2013-02 method A |
| | Loss on ignition of dry mass (LOI) / Organic compounds content Range: (1,0 – 99,0) % Gravimetric method | PN-EN 15935:2022-01 |
| | pH Range: (4,0 – 10,0) Potentiometric method | PN-EN 12176:2004 |
| | Kjeldahl nitrogen content Range: (0,5 – 8,00) % Titrimetric method | PN-EN 13342:2002 |
| | | |

o) Waste codes given according to Minister of Climate Regulation on the waste catalogue.

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|-------------------------------|---|---|
| Water, drinking water, sewage | Concentration of halogenated organic compounds 1), 2) | Standardized methods ⁴⁾ In-house test procedures ³⁾ |
| | Purge&Trap gas chromatography method with mass spectrometry detection (P&T-GC-MS) | in-nouse test procedures |
| | Anions concentration 1), 2) | Standardized methods 4) |
| | Ion chromatography with conductometric detection (IC-CD) method Sum | |
| Water, drinking water | (calculated) Cations concentration 1), 2) | Standardized methods ⁴⁾ |
| rator, armiting trator | lon chromatography with conductometric detection (IC-CD) method Sum (calculated) | Standardized methods |
| Soil, ground | Content: - volatile aromatic hydrocarbons (BTEX) ^{1), 2)} - aliphatic and aromatic hydrocarbons C ₆ -C ₁₂ ²⁾ - chlorinated aliphatic hydrocarbons ²⁾ Headspace gas chromatography method with mass spectrometry detection (HS-GC-MS) | Standardized methods ⁴⁾ |
| | Polycyclic aromatic hydrocarbons content (WWA) 1), 2) Gas chromatography method with mass spectrometry (GC-MS) | |

O) Waste codes given according to Minister of Climate Regulation on the waste catalogue.

Within the flexible scope of accreditation, it is allowed:

- 1) Adding the examined feature within the subject / groups of subjects and methods (research techniques).
- 2) Changing in the measuring range of the test method.
- 3) Applying updated and implemented new methods described in-house test procedures.
- 4) Applying updated and implemented new methods described in the standardized methods.

The current "List of testing carried out in the framework of flexible scope" is made available to the public by the accredited body.

| Environmental Analysis Laboratory Małaszewicze Kolejarzy 6, 21-540 Małaszewicze | | |
|--|---|--------------------------------------|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Sewage sludge | Dry mass content / water content Range: (1,0 – 99,0) % Gravimetric method | PN-EN 15934:2013-02 method A |
| | Loss on ignition of dry mass (LOI) / residue on ignition Range: (1,0 – 99,0) % Gravimetric method | PN-EN 15935:2022-01 |
| Soil | Dry mass content / water content Range: (1,0 – 99,0) % Gravimetric method | PN-ISO 11465:1999 |
| | Loss on ignition of dry mass (LOI) / residue on ignition Range: (1,0 – 99,0) % Gravimetric method | PN-EN 15935:2022-01 |
| | Total organic carbon (TOC) content Range: (0,50 – 60) % High-temperature combustion method with IR detection | PN-EN 10694:2002 |
| Solid fuels: Solid recovered fuel (SRF) | Moisture content in the analytical sample Range: (0,5 – 15,0) % Gravimetric method | PN-EN ISO 21660-3:2021-08 |
| | Total moisture content Range: (1,0 – 80,0) % Gravimetric method | CEN/TS 15414-1:2014 |
| | Ash content Range: (1,0 – 40,0) % Gravimetric method | PN-EN ISO 21656:2021-08 method A |
| | Sulphur content Range: (0,10 – 1,00) % High temperature combustion method with IR detection | PN-EN ISO 21663:2021-06 |
| | Carbon content Range: (20,0 – 60,0) % High temperature combustion method with IR detection | PN-EN ISO 21663:2021-06 |
| | Gross calorific value Range: (7000 – 40000) kJ/kg Calorimetric method Net calorific value (calculated) | PN-EN ISO 21654:2021-12 |
| | Chlorine content Range: (0,10 – 1,00) % Titration method | PN-EN 15408:2011 PN-ISO 9297:1994 |
| Solid fuels: solid biomass – solid biofuels | Moisture content in analytical sample Range: (0,50 – 20,0) % Gravimetric method | PN-EN ISO 18134-3:2023-12 |
| | Total moisture content Range: (1,0 – 80,0) % Gravimetric method | PN-EN ISO 18134-2:2024-10 |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|---|---|
| Solid fuels: solid biomass – solid | Ash content | PN-EN ISO 18122:2023-05 |
| biofuels | Range: (0,5 – 45,0) % | |
| | Gravimetric method | |
| | Sulphur content | PN-EN ISO 16994:2016-10 p. 4.4 |
| | Range: (0,02 – 0,50) % | · |
| | High-temperature combustion | |
| | method with IR detection | |
| | Carbon content | PN-EN ISO 16948:2015-07 |
| | Range: (20,0 - 60,0) % | |
| | High-temperature combustion | |
| | method with IR detection | |
| | Gross calorific value | PN-EN ISO 18125:2017-07 |
| | Range: (5000 - 25000) kJ/kg | |
| | Calorimetric method | |
| | Net calorific value | |
| | (calculated) | |
| Flexible scope of accreditation 1, Subject of testing/product | Type of activity/tested qualities/method | Reference document |
| Waste ^{1) O)} group code: | Loss on ignition of dry mass (LOI) / | PN-EN 15935 ²⁾ |
| 5 . | residue on ignition | 1 N-LN 13933 |
| | | |
| | | |
| 09, 19 01, 19 05, 19 06, 19 08, 19 09, | Range: (1,0 – 99,0) % | |
| 09, 19 01, 19 05, 19 06, 19 08, 19 09, | Range: (1,0 – 99,0) % Gravimetric method | DN EN ISO 24664 2) |
| 09, 19 01, 19 05, 19 06, 19 08, 19 09, | Range: (1,0 – 99,0) % Gravimetric method Gross calorific value | PN-EN ISO 21654 ²⁾ |
| 09, 19 01, 19 05, 19 06, 19 08, 19 09, | Range: (1,0 – 99,0) % Gravimetric method Gross calorific value Range: (4000 - 30000) kJ/kg | PN-EN ISO 21654 ²⁾ |
| 09, 19 01, 19 05, 19 06, 19 08, 19 09, 19 12, 20 01, 20 02, 20 03 | Range: (1,0 – 99,0) % Gravimetric method Gross calorific value Range: (4000 - 30000) kJ/kg Calorimetric method | |
| 09, 19 01, 19 05, 19 06, 19 08, 19 09, 19 12, 20 01, 20 02, 20 03 Waste ^{1) O)} group code: | Range: (1,0 – 99,0) % Gravimetric method Gross calorific value Range: (4000 - 30000) kJ/kg Calorimetric method Total organic carbon (TOC) content | PN-EN ISO 21654 ²⁾ PN-EN 15936 ²⁾ |
| 09, 19 01, 19 05, 19 06, 19 08, 19 09, 19 12, 20 01, 20 02, 20 03 Waste ^{1) O)} group code: 03 03, 10 01, 10 12, 17 05, 17 06, 17 | Range: (1,0 – 99,0) % Gravimetric method Gross calorific value Range: (4000 - 30000) kJ/kg Calorimetric method Total organic carbon (TOC) content Range: (0,50 – 60) % | |
| 09, 19 01, 19 05, 19 06, 19 08, 19 09, 19 12, 20 01, 20 02, 20 03 Waste ^{1) O)} group code: 03 03, 10 01, 10 12, 17 05, 17 06, 17 09, 19 01, 19 05, 19 06, 19 08, 19 09, | Range: (1,0 – 99,0) % Gravimetric method Gross calorific value Range: (4000 - 30000) kJ/kg Calorimetric method Total organic carbon (TOC) content Range: (0,50 – 60) % High-temperature combustion method | |
| 03 03, 10 01, 10 12, 17 05, 17 06, 17 09, 19 01, 19 05, 19 06, 19 08, 19 09, 19 12, 20 01, 20 02, 20 03 Waste ^{1) O)} group code: 03 03, 10 01, 10 12, 17 05, 17 06, 17 09, 19 01, 19 05, 19 06, 19 08, 19 09, 19 12, 20 01, 20 02, 20 03 | Range: (1,0 – 99,0) % Gravimetric method Gross calorific value Range: (4000 - 30000) kJ/kg Calorimetric method Total organic carbon (TOC) content Range: (0,50 – 60) % | |

o) Waste codes given according to Minister of Climate Regulation on the waste catalogue.

Within the flexible scope of accreditation, it is allowed:

- Adding the subject of research within the group of subjects.
 Applying updated methods described in the standardized methods

The current "List of testing carried out in the framework of flexible scope" is made available to the public by the accredited body.

| Subject of testing/product | Type of activity/tested qualities/method | Reference document | | |
|--|--|--|--|--|
| Testing carried out for the purposes of the regulated area: | | | | |
| - Regulation of the Minister of Economy of 16 July 2015 on the acceptance of waste at landfills (Journal of Laws 2015 item 1277) | | | | |
| Waste ^{O)} group code: 17 03 80 Waste DAB-11: | Sulphate concentration and content Range: (10 – 5000) mg/l (100 – 50000) mg/kg Gravimetric method | PN-EN 12457-4:2006 PN-ISO 9280:2002 | | |
| -Sediments and mineral wastes (I); -Construction waste (III); -Waste from waste treatment (VI); - Sediments from industrial processes (VII); -Sewage sludge (IX); | Fluoride concentration and content Range: (0,10 – 10) mg/l (1,0 – 100) mg/kg Potentiometric method | PN-EN 12457-4:2006 PN-78/C-04588/03 | | |
| -Slags, ashes and furnace dust (XI); -Plastics (XXV); -Wood (XXVI); | Chloride concentration and content Range: (5 – 10000) mg/l (50 – 100000) mg/kg Titrimetric method | PN-EN 12457-4:2006 PN-ISO 9297:1994 | | |
| -Leather and textiles (XXVII); -Other municipal waste, including mixed waste (XXVIII) - Other municipal waste and waste derived from municipal waste, including mixed waste, and other | General dissolved substances concentration Range: (100 – 10000) mg/l Total dissolved solid – TDS Range: (1000 – 100000) mg/kg Gravimetric method | PN-EN 12457-4:2006 PN-EN 15216:2022-03 | | |
| waste from sewage treatment and water treatment (XXVIII) | Electrical conductivity Range: (10 – 10000) µS/cm Conductometric method | PN-EN 12457-4:2006 PN-EN 27888:1999 | | |
| | pH Range: 3,0 – 12,0 Potentiometric method | PN-EN 12457-4:2006 PN-EN ISO 10523:2012 | | |
| | Dry residue/water content Range: (1,0 – 99,0) % Gravimetric method | PN-EN 15934:2013-02 method A | | |

o) Waste codes given according to Minister of Climate Regulation on the waste catalogue.

^{DAB-11)} Waste codes according to Minister of Climate Regulation on the waste catalogue for the validation group are given in Annex No. 1 to DAB-11.

| | ul. Aleksandrowska 61A, 95-100 Zgierz | 1 | |
|----------------------------|---|-----------------------------------|--|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document | |
| W ater | pH | PN-EN ISO 10523:2012 | |
| Drinking water | Range: 2,0 – 10,0 | | |
| Sewage | Potentiometric method | | |
| | Electrical conductivity | PN-EN 27888:1999 | |
| | Range: (10 – 3000) µS/cm | | |
| | Conductometric method | | |
| | Nitrates concentration | PB-433 ed. I of. 01.06.2021 based | |
| | Range: (0,3 – 60) mg/l | on HACH 8039 method | |
| | Nitrate nitrogen concentration | | |
| | Range: (0,068 – 13,5) mg/l | | |
| | Spectrophotometric method | | |
| | Nitrites concentration | PB-461 ed. I of 01.06.2021 based | |
| | Range: (0,050 – 1,00) mg/l | on HACH 8507 method | |
| | Nitrite nitrogen concentration | | |
| | Range: (0,02 - 0,300) mg/l | | |
| | Spectrophotometric method | | |
| | Sulphate (VI) concentration | PB-432 ed. I of 01.06.2021 based | |
| | Range: (2 – 300) mg/l | on HACH 8051 method | |
| | Spectrophotometric method | | |
| | Fluoride concentration | PN-78/C-04588/03 | |
| | Range: (0,10 – 10) mg/l | | |
| | Potentiometric method | | |
| | Total nitrogen concentration | PB-463 ed. II of 23.07.2021 | |
| | (calculated) | | |
| | Total alkalinity | PN-EN ISO 9963-1:2001+Ap1:200 | |
| | Range: (0,40 – 20) mmol/l | | |
| | Titrimetric method | | |
| | Bicarbonate concentration | | |
| | (calculated) | | |
| | Chloride concentration | PN-ISO 9297:1994 | |
| | Range: (5,00 – 10000) mg/l | | |
| | Titrimetric method | | |
| | Volatile organic compounds | PN-EN ISO 15680:2008 | |
| | concentration | | |
| | Range: | | |
| | chloroform $(1,0-200) \mu g/l$ | | |
| | bromodichloromethane (1,0 – 200) µg/l | | |
| | dibromochloromethane (1,0 – 200) µg/l | | |
| | bromoform (1,0 – 200) µg/l tetrachloromethane (carbon | | |
| | tetrachloride) $(0,5-25) \mu g/l$ | | |
| | 1,2-dichloroethane $(1,0-200) \mu g/l$ | | |
| | trichloroethylene $(1,0-200) \mu g/l$ | | |
| | tetrachloroethylene (1,0 – 200) µg/l | | |
| | hexachlorobutadiene $(0,1-12,5) \mu g/l$ | | |
| | vinyl chloride $(0,1-12,5) \mu g/l$ | | |
| | benzene (0,5 – 100) µg/l | | |
| | toluene (0,5 – 100) μg/l | | |
| | ethylbenzene (1,0 – 200) µg/l | | |
| | $(m + p)$ -xylene $(0,5 - 200) \mu g/l$ | | |
| | o-xylene (0,5 – 200) μg/l | | |
| | Purge & Trap gas chromatography | | |
| | method with mass spectrometry | | |
| | detection (P&T-GC-MS) | | |
| | Sum of volatile organic compounds | | |
| | (calculated) | | |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|----------------------------|---|----------------------------------|
| Water | Colour | PN-EN ISO 7887:2012 method C; |
| Drinking water | Range: (5 – 70) mg/l Pt | PN-EN ISO 7887:2012/Ap1:2015-06 |
| | Spectrophotometric method | |
| | Turbidity | PN-EN ISO 7027-1:2016-09 |
| | Range: (0,20 – 800) NTU | |
| | Nephelometric method | |
| | Iron concentration | PB-464 ed. I of 01.06.2021 based |
| | Range: (0,02 – 3,00) mg/l | on HACH 8008 method |
| | Spectrophotometric method | |
| | Manganese concentration | PB-465 ed. I of 01.06.2021 based |
| | Range: (0,006 – 0,70) mg/l | on HACH 8149 method |
| | Spectrophotometric method | |
| | Aluminium concentration | PB-466 ed. I of 01.06.2021 based |
| | Range: (0,02 – 0,50) mg/l | on HACH LCK 301 method |
| | Spectrophotometric method | |
| | Sum of calcium and magnesium | PN-ISO 6059:1999 |
| | content | |
| | Total hardness | |
| | Range: (0,05 – 5,0) mmol/l | |
| | (5 – 500) mg/l CaCO3 | |
| | Titrimetric method | |
| | Ammonium ion concentration | PB-462 ed. I of 01.06.2021 based |
| | Range: (0,05 –1,0) mg/l | on HACH 8155 method |
| | Spectrophotometric method | |
| | Permanganate index | PN-EN ISO 8467:2001 |
| | Range: (0,50 – 10) mg/l O ₂ | 1 14 EN 100 0407.2001 |
| | Titrimetric method | |
| Vater | Kjeldahl nitrogen concentration | PN-EN 25663:2001 |
| Sewage | Range: (0,50 – 1000) mg/l | 1 N-LN 23003.2001 |
| zon ago | Titrimetric method | |
| | Ammonium nitrogen concentration | PN-ISO 5664:2002 |
| | Range: (0,50 – 1000) mg/l | 114 100 000 1.2002 |
| | Titrimetric method | |
| | Total phosphorus concentration | PN-EN ISO 6878:2006 p.7 |
| | Range: (0,020 – 50,0) mg/l | + Ap1:2010+Ap2:2010 |
| | Spectrophotometric method | 7,61.201017,62.2010 |
| | Total Suspended solids | PN-EN 872:2007+Ap1:2007 |
| | Range: (2,0 – 4000) mg/l | 114 214 072.2007 17(p1.2007 |
| | Gravimetric method | |
| | Chemical oxygen demand-Cr | DN ISO 15705:2005 |
| | , 0 | PN-ISO 15705:2005 |
| | Range: (5,00 – 10000) mg/l O ₂ | |
| | Spectrophotometric method | DN 5N 100 5045 4:0040 40 |
| | Biochemical oxygen demand (BOD ₅) | PN-EN ISO 5815-1:2019-12 |
| | Range: (1 – 6000) mg/l O ₂ | |
| | Optical method | DN 5N 45040 0000 00 |
| | Total dissolved solids | PN-EN 15216:2022-03 |
| | Range: (10 – 10000) mg/l | |
| | Gravimetric method | |
| | Dry residue | PN-78/C-04541 |
| | Residue on ignition | |
| | Range: (10 – 10000) mg/l | |
| | Gravimetric method | |
| | Ignition loss | |
| | (calculated) | |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|----------------------------|--|--------------------|
| Sewage | Sulphate (VI) concentration | PN-ISO 9280:2002 |
| | Range: (10 – 5000) mg/l | |
| | Gravimetric method | |
| | Suspended matters suspension | PN-72/C-04559/03 |
| | Range: (5 -100) ml/l | |
| | Volumetric method | |

| | Sampling Section Chwaszczyńska 180, 81-571 Gdynia | | |
|--|---|---|--|
| | Chwaszczyńska 180, 81-571 Gdynia Type of activity/tested | | |
| Subject of testing/product | qualities/method | PN-EN ISO 19458:2007 | |
| Water Surface waters | Sampling for microbiological analysis | | |
| Air | Air sampling for microbiological analysis Sedimentation and collision (impact) method PB-250 ed. III of 30.03. | | |
| Drinking water | Water sampling for chemical and physical analysis Temperature of sampled water Range: (4,0-50,0) °C | PN-ISO 5667-5:2017-10 PN-77/C-04584 | |
| Underground water | Sampling for chemical and physical analysis Temperature of sampled water Range: (4,0-50,0) °C | PN-ISO 5667-11:2017-10 PN-77/C-04584 | |
| Surface water | Sampling for chemical and physical analysis | PN-ISO 5667-6:2016-12 except p.7.5;7.6 | |
| Sewage | Temperature Range: (4,0-50,0) °C Sampling for chemical and physical | PN-77/C-04584 PN-ISO 5667-10:2021-11 | |
| | analysis Manual method Automatic method Temperature of taken sewage sample Range: (4,0-50,0) °C | PN-77/C-04584 | |
| | Total chlorine concentration Range: (0,05 – 2,0) mg/l Spectrophotometric method | PB-480 ed. I of 24.06.2021 based on HACH 8167 method | |
| | Free chlorine concentration Range: (0,05 – 2,0) mg/l Spectrophotometric method | PB-480 ed. I of 24.06.2021 based on HACH 8021 method | |
| Waste ^{O)} group code: 19 08 01, 19 08 02, 19 08 05, | Sampling for chemical and physical analysis | PB-206 ed. II of 11.04.2019 | |
| Sewage sludge Waste ^{O)} group code: 19 08 05 | Sampling for chemical and physical analysis | PN-ISO 5667-13:2011 | |
| Sewage sludge | Sampling for microbiological and biological analysis | PB-471 ed. 1 of 26.11.2021 | |
| Soil | Sampling for chemical and physical analysis | PN-R-04031:1997 PN-ISO 10381-4:2007 PN-ISO 10381-5:2009 | |
| Ground | Sampling for chemical and physical analysis | PN-ISO 10381-4:2007 PN-ISO 10381-5:2009 | |
| Agricultural proudcts | Sampling for testing on presence of plant protection products | Ministry of Agriculture and Rural Development Regulation of 3 September 2020 (Journal of Laws No. 2020, item 1589) | |
| Environmental samples from food and cosmetics production areas as well as food and cosmetics trade | Sampling from the surface using contact plates and swabs for microbiological analysis | PN-EN ISO 18593:2018-08 | |
| Water on the swimming pools | Sampling for microbiological, chemical and physical analysis Temperature Range: (4,0 - 50,0) °C | PB-378 ed. II of 08.01.2021 PN-77/C-04584 | |

O) Waste codes given according to Minister of Climate Regulation on the waste catalogue.

| Subject of testing/product | Type of activity/tested qualities/method | Reference document | |
|---|--|---|--|
| Water (including water on the swimming pools) | Oxidant-reducing potential (Redox) vs. Ag/AgCl 3,5 mol KCl Range: (200 - 1000) mV Potentiometric method | PB-377 ed. II of 30.03.2020 | |
| | Chloramines concentration Range: (0,05 – 4,0) mg/l Spectrophotometric method | PB-469 ed. I of 08.01.2021 based on HACH no. 10200 method | |
| | Chloramines concentration Range: (0,05 – 4,0) mg/l Spectrophotometric method | PB-358 ed. III of 30.03.2020 based on Palintest method PB-566 ed. 1 of 18.11.2024 | |
| | Total chlorine concentration Range (0,05-5,0) mg/l Colorimetric method | | |
| | Combined chlorine concentration (calculated) | | |
| | Ozone concentration Range: (0,03 – 0,75) mg/l Spectrophotometric method | PB-468 ed. I of 03.06.2021 based on HACH no. 8311 method | |
| Water, sewage | pH Range: 4,0-10,0 Potentiometric method | PN-EN ISO 10523:2012 | |
| Water Drinking water Sewage | Dissolved oxygen concentration Range: (0,2 – 15) mg/l O ₂ Optical method | ISO 17289:2014 | |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document | |
|---|--|------------------------------|--|
| Sampling carried out for the purposes of the regulated area: | | | |
| 2015, item 1277) - Regulation of the Minister of the Envir 2015, item 257) | y of 16 July 2015 on the acceptance of v ronment of 6 February 2015 on municipa | · | |
| Waste DAB-11: -Sediments and mineral wastes (I); -Construction waste (III); -Waste from waste treatment (VI); -Sewage sludge (IX); -Slags, ashes and furnace dust (XI); -Other municipal waste, including mixed waste (XXVIII) -Sediments from industrial processes (VII) -Waste from the processing of petroleum, natural gas and coal (XXI) -Plastics (XXV); -Wood (XXVI); -Leather and textiles (XXVII) | Sampling for chemical and physical analysis | PB-206, ed. II of 11.04.2019 | |

DAB-11) Waste codes according to Minister of Climate Regulation on the waste catalogue for the validation group are given in Annex No. 1 to DAB-11.

| Sample Homogenization and Physical Analysis Section Chwaszczyńska 180, 81-571 Gdynia | | | |
|--|--|---|--|
| Subject of testing/product | Type of activity/tested qualities/method | Reference document | |
| Oilseeds | Impurities content Range: (0,1 – 20) % Gravimetric method | PN-EN ISO 658:2004 ISO 658:2002 | |
| Fish and fishery products and seafood | Glaze content Range: (5,0 – 45,0) % (m/m) Gravimetric method | CODEX STAN 165-1989 (Rev. 1-1995) PB-281 ed. IV of 11.01.2021 | |
| Cereals and cereal products | Gluten content Range: (15 – 37) % Gravimetric method | PN-77/A-74041 p. 2.5.2. | |
| Cereals | Bulk density (mass per hectolitre) Range: (35 – 90) kg/hl Gravimetric method | PN-EN ISO 7971-3:2019 | |
| Canned meat | Tightness Vacuum method Visual method | PN-A-82055-4:1997+Az1:2002 | |
| Canned meat | Content of melt fat and jelly Range: (1,0 – 25,0) % Gravimetric method | PN-A-82056:1985 p. 2.3.8 | |
| Canned vegetables, fruit, meat and vegetable | Tightness Vacuum method | PN-A-75052-02:1990 | |
| Tea and coffee, Food concentrates, Meat and meat products, Milk and dairy products, Fruits, vegetables, fruit and vegetable products and vegetable with meat products, Fish and fishery products and seafood, Sweets and sugar confectionery, Herbal raw materials and products, spices, Foodstuffs for particular nutritional uses, Animal and vegetable fats and oils, Cereals and cereal products, Frozen products, Ready-made culinary products, Food additives, Products used in animal nutrition | Weight Range: (1,0 – 5000) g Gravimetric method | PB-281 ed. IV of 11.01.2021 | |
| Dietary supplements | Weight Range: (0,15 – 100) g Gravimetric method | PB-281 ed IV of 11.01.2021 | |
| Canned meat | Weight Range: (50,0 – 5000) g Gravimetric method | PN-A-82056:1985 p. 2.3.5 | |
| Fruits, vegetables, fruit and vegetable with meat products | Weight Range: (50,0 – 5000) g Gravimetric method | PN-A-75101-15:1990 p. 2 | |

| Subject of testing/product | Type of activity/tested qualities/method | Reference document |
|---|---|----------------------------|
| Milk and milk products, Alcoholic beverages, Non-alcoholic beverages, | Volume measurement Range: (50 - 2000) ml Volumetric method | PB-369 ed. I of 04.01.2018 |
| Liquid food concentrates, Liquid dietary supplements Vegetable and fruits juices, nectars | Volume measurement Range: (50 - 5000) ml Gravimetric method | |
| Drinking water, Non-alcoholic beverages, Beer | Carbon dioxide concentration Range: (2,9 – 8,0) g/l Pressure method | PB-491 ed. 1 of 29.12.2021 |

| Dermatology Section Bajana 3D, 80-463 Gdańsk | | | |
|--|---|----------------------------|--|
| Subject of testing/product Type of activity/tested qualities/method | | Reference document | |
| cosmetic products, household hemistry products intended to ome into contact with skin, ygiene products Presence of an allergic reaction/contact eczema In vivo skin irritation method – open test | | PB-562 ed. 4 of 15.01.2025 | |
| Cosmetic products, household chemistry products intended to come into contact with skin, hygiene products | Presence of an allergic reaction/contact eczema In vivo skin irritation method – semiopen and closed test | PB-561 ed. 4 of 15.10.2025 | |

Summary of changes Scope of Accreditation No. AB 079

Status change:

| Page number | Current version of the page | Replaces the page version | Date of change |
|-------------|-----------------------------|---------------------------|----------------|
| 38/82 | В | Α | 01.04.2025 r. |