



Organisme belge d'Accréditation  
Belgische Accreditatieinstelling  
Belgische Akkreditierungsstelle  
Belgian Accreditation Body

Signatory to EA, ILAC and IAF  
Multilateral Agreements

## Accreditation Certificate No. 531-CAL

In compliance with the provisions of the Royal Decree of 31 January 2006 setting up BELAC, the Accreditation Board hereby declares, that the calibration laboratory

**CHEM-LAB NV**  
**Industriezone "De Arend", 2**  
**8210 ZEDELGEM - Belgium**

has the competence to perform the calibrations as described in the annex which is an integral part of the present certificate, in accordance with the requirements of the standard EN ISO/IEC 17025:2005. The present accreditation is the subject of regular surveillance in order to confirm the compliance with the accreditation conditions.

The Chair of the Accreditation Board BELAC,

Nicole MEURÉE-VANLAETHEM

Issue date : **2018-03-06**

Validity date : **2023-03-05**

Original version of this certificate is in Dutch.



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Bijlage bij accreditatie-certificaat  
Annexe au certificat d'accréditation  
Annex to the accreditation certificate  
Beilage zur Akkreditierungszertifikat

**531-CAL**

NBN EN ISO/IEC 17025:2005

|                                                                                      |            |
|--------------------------------------------------------------------------------------|------------|
| Versie/Version/Fassung                                                               | 5/2        |
| Uitgiftedatum / Date d'émission /<br>Issue date / Ausgabedatum:                      | 2018-03-06 |
| Geldigheidsdatum / Date limite de<br>validité / Validity date /<br>Gültigkeitsdatum: | 2023-03-05 |

**Nicole Meurée-Vanlaethem**  
Voorzitster van het Accreditatiebureau  
La Présidente du Bureau d'Accréditation  
Chair of the Accreditation Board  
Vorsitzende des Akkreditierungsbüro

**De accreditatie werd uitgereikt aan/ L'accréditation est délivrée à/  
The accreditation is granted to/ Die akkreditierung wurde erteilt für:**

**Chem-Lab nv  
Industriezone "De Arend", 2  
8210 ZEDELGEM**

Secrétariat :  
Service public fédéral Economie,  
P.M.E., Classes moyennes et Energie  
Direction générale de la Qualité et de la Sécurité  
Division Qualité et Innovation  
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Numéro d'entreprise : 0314.595.348

**Accréditation B E L A C Accreditation**

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Federale Overheidsdienst Economie,  
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Afdeling Kwaliteit en Innovatie  
Koning Albert II-laan 16  
1000 Brussel  
Website: <http://economie.fgov.be>  
Ondernemingsnummer: 0314.595.348

.be

| Code                 | Product subjected to the test                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Concentration (at 20°C)      | CMC Calibration and Measurement Capability, expressed as an expanded uncertainty (95 %) (% Relative) |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------|
| BM001<br>comment (1) | <b>Anorganic standards in aqueous solution – Monoelements</b><br><i>-Anions : Chloride, Bromide, Fluoride, Nitrite, Nitrate, Sulphate, Phosphate, Acetate, Bromate, Formate, Phthalate</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 900 mg/L tot<br>100.000 mg/L | 0,5 % to 1,0 %                                                                                       |
|                      | <b>Anorganic standards in aqueous solution – Multielements:</b><br><i>-Anions : Chloride, Bromide, Fluoride, Nitrite, Nitrate, Sulphate, Phosphate</i><br><i>-Cations : Ag, Al, As, Au, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Hg, Ho, In, Ir, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, Os, P, Pb, Pd, Pr, Pt, Rb, Re, Rh, Ru, S, Sb, Sc, Se, Si, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1 mg/L to<br>11.000 mg/L     | 1,0%                                                                                                 |
|                      | <b>Organic standards in organic solvents– Monocomponents:</b><br><i>-Volatiles: Dichlorodifluoromethane; Chloromethane; Vinyl Chloride; Bromomethane; Chloroethane; Trichlorofluoromethane; trans-1,2-Dichloroethene; Methylene Chloride; cis-1,2-Dichloroethene; 1,1-Dichloroethane; 1,1-Dichloroethene; 2,2-Dichloropropane; Bromochloromethane; Chloroform; 1,1,1-Trichloroethane; 1,2-Dichloroethane; cis-1,3-Dichloropropene; Benzene; Carbon Tetrachloride; 1,2-Dichloropropane; Trichloroethene; Dibromomethane; Bromodichloromethane; trans-1,3-Dichloropropene; 1,1-Dichloropropene; Toluene; 1,1,2-Trichloroethane; 1,3-Dichloropropane; Dibromochloromethane; 1,2-Dibromoethane; Tetrachloroethene; Chlorobenzene; 1,1,1,2-Tetrachloroethane; Ethylbenzene; m-Xylene; p-Xylene; Bromoform; Styrene; o-Xylene; 1,1,2,2-Tetrachloroethane; 1,2,3-Trichloropropane; Isopropylbenzene; Bromobenzene; n-Propylbenzene; 2-Chlorotoluene; 4-Chlorotoluene; 1,3,5-Trimethylbenzene; tert-Butylbenzene; 1,2,4-Trimethylbenzene; 1,3-Dichlorobenzene; sec-Butylbenzene; 1,4-Dichlorobenzene; p-Isopropyltoluene; 1,2-Dichlorobenzene; n-Butylbenzene; 1,2-Dibromo-3-Chloropropane; 1,2,4-Trichlorobenzene; Naphthalene; Hexachlorobutadiene; 1,2,3-Trichlorobenzene</i><br><br><i>-Phenols: phenol; 2-chlorophenol; 2-methylphenol (o-cresol); m-Cresol; p-Cresol; 2-nitrophenol; 2,4-dimethylphenol; 2,4-dichlorophenol; 2,6-Dichlorophenol; 4-chloro-3-methylphenol; 2,4,5-Trichlorophenol; 2,4,6-trichlorophenol; 2,4-dinitrophenol; 4-nitrophenol; 2,3,5,6-Tetrachlorophenol; 2,3,4,5-Tetrachlorophenol; 2,3,4,6-Tetrachlorophenol; 2-methyl-4,6-dinitrophenol; pentachlorophenol; Dinoseb; Dinex</i><br><br><i>-PAHs : Naphthalene; Acenaphthylene; Acenaphthene; Fluorene; Phenanthrene; Anthracene; Fluoranthene; Pyrene; Benz[a]anthracene; Chrysene; Benzo[b]fluoranthene; Benzo[k]fluoranthene; Benzo[a]pyrene; Indeno[1,2,3,c,d]pyrene; Dibenzo[a,h]anthracene; Benzo[g,h,i]perylene</i> | 90 mg/L tot<br>200.000 mg/L  | 1,0 % to 4,0 %                                                                                       |

| Code                 | Product subjected to the test                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Concentration (at 20°C)     | CMC Calibration and Measurement Capability, expressed as an expanded uncertainty (95 %) (% Relative) |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------|
| BM001<br>comment (1) | <b>-Pesticides :</b> Etridiazole; Chlorneb; alfa-HCH; beta-HCH; Simazine; Atrazine; delta.HCH; Chlorothalonil; Lindane; Alachlor; Heptachlor; Aldrin; DCPA (Dacthal); Heptachlor epoxide; cis-Chlordane; Endosulfan I; Dichlorophos; EPTC; Mevinphos; Butylate; Vernolate; Pebulate; Tebuthiuron; Molinate; Propachlor; Cycloate; Ethoprophos; Chlorpropham; Trifluralin; Atraton; Prometon; Atrazine; Propazine; Propyzamide; Methyl Paraoxon; Turbacil; Metribuzin; Alachlor; Simetryn; Ametryn; Prometryn; Terbutryn; Metolachlor; Chlorpyrifos; Bromacil; Triademefon; Cyanazine; Diphenamid; MGK 275 (Isomer 1); MGK 275 (Isomer 2); Stirifos (Tetrachlorvinphos); Butachlor; Propanamide; Tricyclazole; Norflurazon; Hexazinone; Fenarimol; Fluridone; trans-Chlordane; trans-Nonachlor; 4.4'-DDE; Dieldrin; Endrin; Chlorobenzilate; Endosulfan II; 4.4'-DDD; Endrin Aldehyde; Endosulfan sulfate; 4.4'-DDT; Methoxychlor; cis-Permethrine; trans-Permethrin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 90 mg/L tot<br>200.000 mg/L | 1,0 % to 4,0 %                                                                                       |
|                      | <b>- Polychlorinated Biphenyls (PCBs) :</b> 2,4,4'-Trichlorobiphenyl (PCB 28); 2,2',5,5'-Tetrachlorobiphenyl (PCB 52); 2,2',4,5,5'-Pentachlorobiphenyl (PCB 101); 2,3',4,4',5-Pentachlorobiphenyl (PCB 118); 2,2',3,4,4',5'-Hexachlorobiphenyl (PCB 138); 2,2',4,4',5,5'-Hexachlorobiphenyl (PCB 153); 2,2',3,4,4',5,5'-Heptachlorobiphenyl (PCB 180)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 10 mg/L tot<br>10.000 mg/L  | 1,0 % to 4,0 %                                                                                       |
|                      | <b>Organic standards in organic solvents – Multicomponents:</b><br><b>-Volatiles:</b> Dichlorodifluoromethane; Chloromethane; Vinyl Chloride; Bromomethane; Chloroethane; Trichlorofluoromethane; trans-1,2-Dichloroethene; Methylene Chloride; cis-1,2-Dichloroethene; 1,1-Dichloroethane; 1,1-Dichloroethene; 2,2-Dichloropropane; Bromochloromethane; Chloroform; 1,1,1-Trichloroethane; 1,2-Dichloroethane; cis-1,3-Dichloropropene; Benzene; Carbon Tetrachloride; 1,2-Dichloropropane; Trichloroethene; Dibromomethane; Bromodichloromethane; trans-1,3-Dichloropropene; 1,1-Dichloropropene; Toluene; 1,1,2-Trichloroethane; 1,3-Dichloropropane; Dibromochloromethane; 1,2-Dibromoethane; Tetrachloroethene; Chlorobenzene; 1,1,1,2-Tetrachloroethane; Ethylbenzene; m-Xylene; p-Xylene; Bromoform; Styrene; o-Xylene; 1,1,2,2-Tetrachloroethane; 1,2,3-Trichloropropane; Isopropylbenzene; Bromobenzene; n-Propylbenzene; 2-Chlorotoluene; 4-Chlorotoluene; 1,3,5-Trimethylbenzene; tert-Butylbenzene; 1,2,4-Trimethylbenzene; 1,3-Dichlorobenzene; sec-Butylbenzene; 1,4-Dichlorobenzene; p-Isopropyltoluene; 1,2-Dichlorobenzene; n-Butylbenzene; 1,2-Dibromo-3-Chloropropane; 1,2,4-Trichlorobenzene; Naphthalene; Hexachlorobutadiene; 1,2,3-Trichlorobenzene<br><br><b>-Phenols:</b> phenol; 2-chlorophenol; 2-methylphenol (o-cresol); m-Cresol; p-Cresol; 2-nitrophenol; 2,4-dimethylphenol; 2,4-dichlorophenol; 2,6-Dichlorophenol; 4-chloro-3-methylphenol; 2,4,5-Trichlorophenol; 2,4,6-trichlorophenol; 2,4-dinitrophenol; 4-nitrophenol; 2,3,5,6-Tetrachlorophenol; 2,3,4,5-Tetrachlorophenol; 2,3,4,6-Tetrachlorophenol; 2-methyl-4,6-dinitrophenol; pentachlorophenol; Dinoseb; Dinex | 1 mg/L tot<br>2.200 mg/L    | 1,0 % to 4,0 %                                                                                       |

| Code                 | Product subjected to the test                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Concentration (at 20°C)                                            | CMC Calibration and Measurement Capability, expressed as an expanded uncertainty (95 %) (% Relative) |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| BM001<br>comment (1) | <p><b>-PAHs:</b> Naphthalene; Acenaphthylene; Acenaphthene; Fluorene; Phenanthrene; Anthracene; Fluoranthene; Pyrene; Benz[a]anthracene; Chrysene; Benzo[b]fluoranthene; Benzo[k]fluoranthene; Benzo[a]pyrene; Indeno[1,2,3,c,d]pyrene; Dibenz[a,h]anthracene; Benzo[g,h,i]perylene</p> <p><b>-Pesticides:</b> Etridiazole; Chlorneb; alfa-HCH; beta-HCH; Simazine; Atrazine; delta.HCH; Chlorothalonil; Lindane; Alachlor; Heptachlor; Aldrin; DCPA (Dacthal); Heptachlor epoxide; cis-Chlordane; Endosulfan I; Dichlorphos; EPTC; Mevinphos; Butylate; Vernolate; Pebulate; Tebuthiuron; Molinate; Propachlor; Cycloate; Ethoprophos; Chlorpropham; Trifluralin; Atraton; Prometon; Atrazine; Propazine; Propyzamide; Methyl Paraoxon; Turbacil; Metribuzin; Alachlor; Simetryn; Ametryn; Prometryn; Terbutryn; Metolachlor; Chlorpyrifos; Bromacil; Triademefon; Cyanazine; Diphenamid; MGK 275 (Isomer 1); MGK 275 (Isomer 2); Stirfos (Tetrachlorvinphos); Butachlor; Propanamide; Tricyclazole; Norflurazon; Hexazinone; Fenarimol; Fluridone; trans-Chlordane; trans-Nonachlor; 4,4'-DDE; Dieldrin; Endrin; Chlorobenzilate; Endosulfan II; 4,4'-DDD; Endrin Aldehyde; Endosulfan sulfate; 4,4'-DDT; Methoxychlor; cis-Permethrine; trans-Permethrin</p> <p><b>- Polychlorinated Biphenyls (PCBs) :</b> 2,4,4'-Trichlorobiphenyl (PCB 28); 2,2',5,5'-Tetrachlorobiphenyl (PCB 52); 2,2',4,5,5'-Pentachlorobiphenyl (PCB 101); 2,3',4,4',5-Pentachlorobiphenyl (PCB 118); 2,2',3,4,4',5'-Hexachlorobiphenyl (PCB 138); 2,2',4,4',5,5'-Hexachlorobiphenyl (PCB 153); 2,2',3,4,4',5,5'-Heptachlorobiphenyl (PCB 180)</p> | <p>1 mg/L tot<br/>2.200 mg/L</p> <p>1 mg/L tot<br/>11.000 mg/L</p> | <p>1,0 % to 4,0 %</p> <p>1,0 % to 4,0 %</p>                                                          |
| Code                 | Product subjected to the test                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Mass fraction                                                      | CMC Calibration and Measurement Capability, expressed as an expanded uncertainty (95 %) (% Relative) |
| BM006<br>comment (2) | <p><b>Anorganic standards in aqueous solution – Monoelements:</b></p> <p><b>-Cations:</b> Ag, Al, As, Au, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Hg, Ho, In, Ir, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, Os, P, Pb, Pd, Pr, Pt, Rb, Re, Rh, Ru, S, Sb, Sc, Se, Si, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <p>900 µg/g tot<br/>11.000 µg/g</p>                                | <p>0,2 % to 1,0 %</p>                                                                                |
| Code                 | Product subjected to the test                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Density (at 20°C)                                                  | CMC Calibration and Measurement Capability, expressed as an expanded uncertainty (95 %) (% Relative) |
| BM008<br>comment (2) | Aqueous solutions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 0,8 to 3 g/L                                                       | 0,02% to 0,2%                                                                                        |

**Comments:**

- (1) Results and their measurement uncertainties are only valid on the volumetric/gravimetric value of the batch solution and not on the individual bottles (or ampules) produced from this batch solution.**
- (2) Results and their measurement uncertainties are only valid on the analytical value of the batch solution and not on the individual bottles (or ampules) produced from this batch solution.**