



Multi-element Standard Solution for ICP. 28 Components in HNO₃ 5%

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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Version: 1.1

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : Multi-element Standard Solution for ICP.
28 Components in HNO₃ 5%
Product code : MS102

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Professional use, Industrial use
Industrial/Professional use spec : Industrial
For professional use only
Use of the substance/mixture : Certified reference material for laboratory use
Function or use category : Laboratory chemicals

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Spectracer UK Ltd.

Second Floor,
27 Gloucester Place,
London,
W1U 8HU,
United Kingdom.

Tel: +44 (0) 207 193 9114

Fax: +44 (0) 203 432 4686

Email: contact@spectracer.co.uk

Web: www.spectracer.com

1.4. Emergency telephone number

Emergency number : Tel: +44(0)1933 445260 Option 1. Language: English only.
For Chemical Emergencies Only
Llewellyn (Safety Advisors) Europe Ltd

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964	
United Kingdom	National Poisons Information Service (NHS Direct)	http://www.npis.org	111 (England & Wales only) or 112 (EU) or 08454 24 24 24 (Scotland)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (inhalation:dust,mist) Category 4 H332
Skin corrosion/irritation, Category 1B H314
Sensitisation — Skin, Category 1 H317
Carcinogenicity, Category 1B H350
Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412

Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazardous ingredients :

cobalt dinitrate; nitric acid; beryllium nitrate; nickel nitrate

Hazard statements (CLP) :

H314 - Causes severe skin burns and eye damage
 H317 - May cause an allergic skin reaction
 H332 - Harmful if inhaled
 H350 - May cause cancer
 H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (CLP) :

P202 - Do not handle until all safety precautions have been read and understood
 P260 - Do not breathe fume, vapours
 P273 - Avoid release to the environment
 P280 - Wear eye protection, face protection, protective clothing, protective gloves
 P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
 P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
 P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P310 - Immediately call a POISON CENTER or doctor
 P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
 P362+P364 - Take off contaminated clothing and wash it before reuse
 P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
nitric acid	(CAS No) 7697-37-2 (EC no) 231-714-2 (EC index no) 007-004-00-1 (REACH-no) 01-2119487297-23-XXXX	5	Ox. Liq. 2, H272 Met. Corr. 1, H290 Skin Corr. 1A, H314
beryllium nitrate	(CAS No) 13597-99-4 (EC no) 237-062-5 (EC index no) 004-002-00-2	0,1 - 1	Acute Tox. 3 (Oral), H301 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Carc. 1B, H350i STOT SE 3, H335 STOT RE 1, H372 Aquatic Chronic 2, H411
aluminium nitrate substance with national workplace exposure limit(s) (BE, DK, FR, GB, IE)	(CAS No) 13473-90-0 (EC no) 236-751-8	0,1 - 1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319
boric acid substance listed as REACH Candidate substance with national workplace exposure limit(s) (BE, DE, ES, IT, LT, LV, PT)	(CAS No) 10043-35-3 (EC no) 233-139-2 (EC index no) 005-007-00-2	< 0,1	Repr. 1B, H360FD



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chromium(III) nitrate substance with national workplace exposure limit(s) (AT, BE, DE, DK, FI, GB, GR, HU, IE, IT, NL, PT, RO, SE)	(CAS No) 13548-38-4 (EC no) 236-921-1	< 0,1	Skin Sens. 1, H317
iron(III) nitrate substance with national workplace exposure limit(s) (BE, GB, IE, IT, PT)	(CAS No) 10421-48-4 (EC no) 233-899-5	< 0,1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
manganese(II)nitrate substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, ES, FI, GB, HU, IT, LV, PL, PT, RO)	(CAS No) 10377-66-9 (EC no) 233-828-8	< 0,1	Skin Irrit. 2, H315 Eye Irrit. 2, H319
nickel nitrate	(CAS No) 13138-45-9 (EC no) 236-068-5 (EC index no) 028-012-00-1	< 0,1	Ox. Sol. 2, H272 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1A, H350i Repr. 1B, H360D STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
cobalt dinitrate substance listed as REACH Candidate (Cobalt(II) dinitrate)	(CAS No) 10141-05-6 (EC no) 233-402-1 (EC index no) 027-009-00-2	< 0,1	Resp. Sens. 1, H334 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1B, H350i Repr. 1B, H360F Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
copper(II) nitrate	(CAS No) 3251-23-8 (EC no) 221-838-5	< 0,1	Ox. Sol. 2, H272 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)
zinc nitrate	(CAS No) 7779-88-6 (EC no) 231-943-8	< 0,1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
potassium nitrate substance with national workplace exposure limit(s) (BG, LT, LV)	(CAS No) 7757-79-1 (EC no) 231-818-8 (REACH-no) 01-2119488224-35-XXXX	< 0,1	Ox. Sol. 3, H272
cadmium nitrate	(CAS No) 10325-94-7 (EC no) 233-710-6 (EC index no) 048-001-00-5	< 0,1	Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)
Molybdenum(V) fluoride substance with national workplace exposure limit(s) (AT, CZ, IE, PL)	(CAS No) 13819-84-6	< 0,1	Not classified
hexafluoroantimonic acid substance with a Community workplace exposure limit substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DK, ES, FR, GB, GR, HU, IE, IT, LV, NL, PL, PT, RO, SE)	(CAS No) 16950-06-4 (EC no) 241-023-8 (EC index no) 051-003-00-9	< 0,1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1B, H314 Aquatic Chronic 2, H411
barium nitrate substance with a Community workplace exposure limit substance with national workplace exposure limit(s) (BE, DK, ES, FR, GB, IE, IT, NL, PL, PT, RO)	(CAS No) 10022-31-8 (EC no) 233-020-5 (EC index no) 056-002-00-7	< 0,1	Acute Tox. 4 (Oral), H302
arsenic acid substance listed as REACH Candidate substance listed in REACH Annex XIV substance with national workplace exposure limit(s) (AT, BE, GB, IT, NL, PT)	(CAS No) 7778-39-4 (EC no) 231-901-9 (EC index no) 033-005-00-1	< 0,1	Acute Tox. 2 (Oral), H300 Carc. 1A, H350 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
selenious acid substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, ES, FI, GB, IE, IT, PL, PT, RO, SE)	(CAS No) 7783-00-8 (EC no) 231-974-7 (EC index no) 034-002-00-8	< 0,1	Acute Tox. 3 (Oral), H301 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
lead nitrate substance listed as REACH Candidate (Lead dinitrate) substance with a Community workplace exposure limit substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DK, ES, FR, GB, HU, IT, LV, PL, PT, RO)	(CAS No) 10099-74-8 (EC no) 233-245-9 (EC index no) 082-001-00-6	< 0,1	Repr. 1A, H360Df STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
silver nitrate	(CAS No) 7761-88-8 (EC no) 231-853-9 (EC index no) 047-001-00-2	< 0,1	Ox. Sol. 2, H272 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410

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thallium(I)nitrate substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DK, ES, FI, FR, GB, IE, IT, PL, PT, RO)	(CAS No) 10102-45-1 (EC no) 233-273-1 (EC index no) 081-002-00-9	< 0,1	Acute Tox. 2 (Oral), H300 STOT RE 2, H373 Aquatic Chronic 2, H411
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Specific concentration limits:

Name	Product identifier	Specific concentration limits
nitric acid	(CAS No) 7697-37-2 (EC no) 231-714-2 (EC index no) 007-004-00-1 (REACH-no) 01-2119487297-23-XXXX	(5 =<C < 20) Skin Corr. 1B, H314 (C >= 20) Skin Corr. 1A, H314 (C >= 65) Ox. Liq. 3, H272
boric acid	(CAS No) 10043-35-3 (EC no) 233-139-2 (EC index no) 005-007-00-2	(C >= 5,5) Repr. 1B, H360FD
nickel nitrate	(CAS No) 13138-45-9 (EC no) 236-068-5 (EC index no) 028-012-00-1	(C >= 0,01) Skin Sens. 1, H317 (0,1 =<C < 1) STOT RE 2, H373 (C >= 1) STOT RE 1, H372 (C >= 20) Skin Irrit. 2, H315
cobalt dinitrate	(CAS No) 10141-05-6 (EC no) 233-402-1 (EC index no) 027-009-00-2	(C >= 0,01) Carc. 1B, H350i
lead nitrate	(CAS No) 10099-74-8 (EC no) 233-245-9 (EC index no) 082-001-00-6	(C >= 0,5) STOT RE 2, H373 (C >= 2,5) Repr. 2, H361f

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Wash with plenty of soap and water. Get medical advice/attention. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: Causes severe skin burns and eye damage. May cause cancer.
Symptoms/injuries after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. May cause an allergic skin reaction.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if substance enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Use only outdoors or in a well-ventilated area. Do not breathe dust, fume, gas, mist, spray, vapours. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing fume, Vapours.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Wash Skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Keep container closed when not in use. Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat and ignition sources.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

silver nitrate (7761-88-8)		
EU	Local name	Silver, metallic
EU	IOELV TWA (mg/m ³)	0,1 mg/m ³
Austria	Local name	Silber
Austria	MAK (mg/m ³)	0,1 mg/m ³
Austria	MAK Short time value (mg/m ³)	0,1 mg/m ³
Belgium	Limit value (mg/m ³)	0,01 mg/m ³ (Argent (composés solubles) (en Ag); Belgium; Time-weighted average exposure limit 8 h)
Bulgaria	Local name	Сребро, метал*
Bulgaria	OEL TWA (mg/m ³)	0,1 mg/m ³
Croatia	Local name	Srebro, metal
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	0,1 mg/m ³
Croatia	Naznake (HR)	EU*
Czech Republic	Local name	Stříbro
Czech Republic	Expoziční limity (PEL) (mg/m ³)	0,1 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	0,3 mg/m ³
Denmark	Local name	Sølv, pulver, støv og opløselige forbindelser, beregnet som Ag
Denmark	Grænseværdie (langvarig) (mg/m ³)	0,01 mg/m ³
Denmark	Anmærkninger (DK)	E
Estonia	Local name	Hõbe, metall, vähelahustuvad ühendid (arvutatudhõbedale)
Estonia	OEL TWA (mg/m ³)	0,1 mg/m ³
France	Local name	Argent (métallique)

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silver nitrate (7761-88-8)		
France	VME (mg/m ³)	0,1 mg/m ³
Germany	Local name	Silber
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	0,1 mg/m ³
Germany	Remark (TRGS 900)	DFG,EU
Hungary	Local name	EZÜST, fém
Hungary	AK-érték	0,1 mg/m ³
Hungary	CK-érték	0,4 mg/m ³
Hungary	Megjegyzések (HU)	EU1
Ireland	Local name	Silver (metallic)
Ireland	OEL (8 hours ref) (mg/m ³)	0,1 mg/m ³
Ireland	Notes (IE)	IOELV
Italy	Local name	Argento, metallico
Italy	OEL TWA (mg/m ³)	0,1 mg/m ³
Latvia	Local name	Sudrabs,metāliskais
Latvia	OEL TWA (mg/m ³)	0,1 mg/m ³
Malta	Local name	Silver,metallic
Malta	OEL TWA (mg/m ³)	0,1 mg/m ³
Netherlands	Local name	Zilver, metallisch
Netherlands	Grenswaarde TGG 8H (mg/m ³)	0,1 mg/m ³
Poland	Local name	Srebro dymy i pyły
Poland	NDS (mg/m ³)	0,05 mg/m ³
Slovenia	Local name	srebro [7440-22-4] (topne spojine, računano kot Ag)
Slovenia	OEL TWA (mg/m ³)	0,01 mg/m ³
Sweden	Local name	Silver* and sparingly soluble compounds (as Ag) total dust
Sweden	nivågränsvärde (NVG) (mg/m ³)	0,1 mg/m ³
United Kingdom	Local name	Silver, metallic
United Kingdom	WEL TWA (mg/m ³)	0,1 mg/m ³
Iceland	Local name	Silfur, duft, ryk og leysanleg sambönd, sem Ag
Iceland	OEL (8 hours ref) (mg/m ³)	0,01 mg/m ³
Norway	Local name	Sølv, metallstøv og røyk
Norway	Grenseverdier (AN) (mg/m ³)	0,1 mg/m ³
USA - ACGIH	ACGIH TWA (mg/m ³)	0,01 mg/m ³ (Silver Soluble compounds, as Ag; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
USA - OSHA	Local name	Silver, metal and soluble compounds (as Ag)
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	0,01 mg/m ³
aluminium nitrate (13473-90-0)		
Belgium	Local name	Aluminium (sels solubles) (en Al)
Belgium	Limit value (mg/m ³)	2 mg/m ³
Denmark	Local name	Aluminium, opløselige salte, beregnet som Al (2005)
Denmark	Grænseværdie (langvarig) (mg/m ³)	1 mg/m ³
France	Local name	Aluminium (sels solubles)
France	VME (mg/m ³)	2 mg/m ³
Ireland	Local name	Aluminium salts, soluble
Ireland	OEL (8 hours ref) (mg/m ³)	2 mg/m ³
United Kingdom	Local name	Aluminium salts, soluble
United Kingdom	WEL TWA (mg/m ³)	2 mg/m ³
Norway	Local name	Aluminiumløselige salter (beregnet som Al)

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aluminium nitrate (13473-90-0)		
Norway	Grenseverdier (AN) (mg/m ³)	2 mg/m ³
Switzerland	Local name	Aluminium, sels hydrosolubles et dérivés alkylés
Switzerland	VME (mg/m ³)	2 mg/m ³
boric acid (10043-35-3)		
Belgium	Local name	Borate, composés inorganiques de
Belgium	Limit value (mg/m ³)	2 mg/m ³
Belgium	Short time value (mg/m ³)	6 mg/m ³
Germany	Local name	BorsäureundNatriumborate
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	0,5 mg/m ³
Germany	Remark (TRGS 900)	AGS,Y,10
Latvia	Local name	Borskābe
Latvia	OEL TWA (mg/m ³)	10 mg/m ³
Lithuania	Local name	Boro rūgštis
Lithuania	IPRV (mg/m ³)	10 mg/m ³
Lithuania	Remark (LT)	R
Portugal	Local name	Boratos, compostos inorgânicos
Portugal	OEL TWA (mg/m ³)	2 mg/m ³
Portugal	OEL STEL (mg/m ³)	6 mg/m ³
Spain	Local name	Ácido bórico
Spain	VLA-ED (mg/m ³)	2 mg/m ³
Spain	VLA-EC (mg/m ³)	6 mg/m ³
Spain	Notes	(2011), TR1B (cuando las pruebas utilizadas para la clasificación procedan principalmente de datos en animales), s (Esta sustancia tiene prohibida total o parcialmente su comercialización y uso como fitosanitario y/o como biocida. Para unainformación detallada acerca de las prohibiciones consúltese:Base de datos de productos biocidas:htthttp://www.msssi.gob.es/ciudadanos/productos.do?tipo=plaguicidasBase de datos de productos fitosanitarios:http://www.magrama.gob.es/agricultura/pags/fitos/registro/fichas/pdf/Lista_sa.pdf)
Switzerland	Local name	Acide borique*
Switzerland	VME (mg/m ³)	10 mg/m ³
Switzerland	VLE (mg/m ³)	10 mg/m ³
Switzerland	Remark (CH)	15 min*
USA - ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³ (Borate compounds, inorganic; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction)
USA - ACGIH	ACGIH STEL (mg/m ³)	6 mg/m ³ (Borate compounds, inorganic; USA; Short time value; TLV - Adopted Value; Inhalable fraction)
barium nitrate (10022-31-8)		
EU	IOELV TWA (mg/m ³)	0,5 mg/m ³ (Barium (soluble compounds as Ba); EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
Belgium	Local name	Baryum (composés solubles) (en Ba)
Belgium	Limit value (mg/m ³)	0,5 mg/m ³ (Baryum (composés solubles) (en Ba); Belgium; Time-weighted average exposure limit 8 h)
Denmark	Local name	Bariumforbindelser, opløselige, beregnet som Ba
Denmark	Grænseværdie (langvarig) (mg/m ³)	0,5 mg/m ³
Denmark	Anmærkninger (DK)	E
France	VME (mg/m ³)	0,5 mg/m ³ (Baryum (composés solubles), en Ba; France; Time-weighted average exposure limit 8 h; VRI: Valeur réglementaire indicative)
Ireland	Local name	Barium compounds, (soluble compounds as Ba)
Ireland	OEL (8 hours ref) (mg/m ³)	0,5 mg/m ³

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barium nitrate (10022-31-8)		
Ireland	Notes (IE)	IOELV
Netherlands	Local name	Barium, oplosbare verbindingen (als Ba)
Netherlands	Grenswaarde TGG 8H (mg/m ³)	0,5 mg/m ³ (Barium, oplosbare verbindingen (als Ba); Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value; als Ba)
Poland	Local name	Bar i jego związki nieorganiczne w przeliczeniu na Ba
Poland	NDS (mg/m ³)	0,5 mg/m ³
Portugal	Local name	Bário e compostos solúveis, expressos em Ba
Portugal	OEL TWA (mg/m ³)	0,5 mg/m ³
Romania	Local name	Bariu (compuși solubili exprimati ca Ba)
Romania	OEL TWA (mg/m ³)	0,5 mg/m ³
Slovenia	Local name	barij (topne spojine, računano kot Ba)
Slovenia	OEL TWA (mg/m ³)	0,5 mg/m ³
Spain	Local name	Bario
Spain	VLA-ED (mg/m ³)	0,5 mg/m ³ elemental 0,5 mg/m ³ Compuestos de bario solubles, como Ba
Spain	Notes	c (Los términos “soluble” e “insoluble” se entienden con referencia al agua.), VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su transposición a los valores límites de cada país miembro. Una vez adoptados, estos valores tienen la misma validez que el resto de los valores adoptados por el país.)
United Kingdom	WEL TWA (mg/m ³)	0,5 mg/m ³ Barium compounds, soluble (as Ba); United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
Iceland	Local name	Baríumsambönd, uppleysanleg (sem Ba)
Iceland	OEL (8 hours ref) (mg/m ³)	0,5 mg/m ³
Switzerland	Local name	Baryum, composés solubles (exprimé en Ba)
Switzerland	VME (mg/m ³)	0,5 mg/m ³
Switzerland	VLE (mg/m ³)	1 mg/m ³
Switzerland	Remark (CH)	4x15
Australia	Local name	Barium, soluble compounds (as Ba)
Australia	TWA (mg/m ³)	0,5 mg/m ³
USA - ACGIH	Local name	Barium and soluble compounds
USA - ACGIH	ACGIH TWA (mg/m ³)	0,5 mg/m ³ (Barium, soluble compounds, as Ba; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
USA - OSHA	Local name	Barium, soluble compounds (as Ba)
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	0,5 mg/m ³
cadmium nitrate (10325-94-7)		
Belgium	Limit value (mg/m ³)	0,002 mg/m ³ (Cadmium et ses composés (particules alvéolaires) (en Cd); Belgium; Time-weighted average exposure limit 8 h; Cadmium et ses composés (particules alvéolaires) (en Cd); 0.01 mg/m ³ ; Belgium; Time-weighted average exposure limit 8 h)
Bulgaria	Local name	Кадмий и неорг. Съединения (като кадмий)
Bulgaria	OEL TWA (mg/m ³)	0,05 mg/m ³
Croatia	Local name	Kadmijevi (nepiroforni) spojevi (kao Cd)
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	0,025 mg/m ³
Croatia	Naznake (HR)	T+, N
Czech Republic	Local name	jakoKadmiumCd a jeho slou eniny,

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cadmium nitrate (10325-94-7)		
Czech Republic	Expoziční limity (PEL) (mg/m ³)	0,05 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	0,1 mg/m ³
Czech Republic	Remark (CZ)	D
Denmark	Local name	Cadmium, pulver, støv, røg og uorganiske forbindelser, beregnet som Cd (2000)
Denmark	Grænseværdie (langvarig) (mg/m ³)	0,005 mg/m ³
Denmark	Anmærkninger (DK)	K
Finland	Local name	Kadmium, metalli
Finland	HTP-arvo (8h) (mg/m ³)	0,02 mg/m ³
France	Local name	Cadmium et composés, en Cd
France	VME (mg/m ³)	0,05 mg/m ³
Greece	OEL TWA (mg/m ³)	0,025 mg/m ³
Greece	OEL STEL (mg/m ³)	0,1 mg/m ³
Hungary	Local name	KADMIUM ÉS SZERVETLEN VEGYÜLETEI
Hungary	MK-érték	0,015 mg/m ³
Hungary	Megjegyzések (HU)	k; BEM
Latvia	Local name	Kadmijstātā neorganiskie savienojumi
Latvia	OEL TWA (mg/m ³)	0,01 mg/m ³
Latvia	OEL STEL (mg/m ³)	0,05 mg/m ³
Netherlands	Local name	Cadmiumchloride (als Cd)
Netherlands	Grenswaarde TGG 8H (mg/m ³)	0,005 mg/m ³
Portugal	Local name	Cádmio, elemento e ompostos, expressos em Cd
Portugal	OEL TWA (mg/m ³)	0,01 mg/m ³
Romania	Local name	Cadmiu și compuși (exprimați în Cd)
Romania	OEL TWA (mg/m ³)	0,05 mg/m ³
United Kingdom	WEL TWA (mg/m ³)	0,025 mg/m ³ Cadmium compounds except cadmium oxide fume, cadmium sulphide and cadmium sulphide pigments (as Cd); United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
Switzerland	Local name	Cadmium et ses composés (sauf oxyde de cadmium)
Switzerland	VME (mg/m ³)	0,015 mg/m ³
Australia	Local name	Cadmium and compounds (as Cd)
Australia	TWA (mg/m ³)	0,01 mg/m ³
USA - ACGIH	ACGIH TWA (mg/m ³)	0,01 mg/m ³ (Cadmium, compounds, as Cd; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Cadmium, compounds, as Cd; 0.002 mg/m ³ ; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction)
cobalt dinitrate (10141-05-6)		
Austria	Local name	Cobalt(II)-nitrat
Austria	Remark (AT)	H,Sah
Spain	Local name	Nitrato de cobalto
Spain	VLA-ED (mg/m ³)	0,02 mg/m ³ como Co

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cobalt dinitrate (10141-05-6)		
Spain	Notes	Sen (Sensibilizante. Véase Apartado 6.), TR1B (cuando las pruebas utilizadas para la clasificación procedan principalmente de datos en animales), r (Esta sustancia tiene establecidas restricciones a la fabricación, la comercialización o el uso en los términos especificados en el "Reglamento (CE) nº 1907/2006 sobre Registro, Evaluación, Autorización y Restricción de sustancias y preparados químicos"(REACH) de 18 de diciembre de 2006 (DOUE L 369 de 30 de diciembre de 2006). Las restricciones de una sustancia pueden aplicarse a todos los usos o sólo a usos concretos. El anexo XVII del Reglamento REACH contiene la lista de todas las sustancias restringidas y especifica los usos que se han restringido.)
United Kingdom	WEL TWA (mg/m ³)	0,1 mg/m ³ Cobalt compounds (as Co); United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
USA - ACGIH	ACGIH TWA (mg/m ³)	0,02 mg/m ³ (Cobalt, inorganic compounds, as Co; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
chromium(III) nitrate (13548-38-4)		
Austria	Local name	Chrommetall, anorganische Chrom(II)-und anorganische Chrom(III)-Verbindungen (unlöslich)
Austria	MAK (mg/m ³)	2 mg/m ³
Austria	Remark (AT)	Sh
Belgium	Local name	Chrome métal et composés inorganiques (à l'exception des composés Cr VI)
Belgium	Limit value (mg/m ³)	0,5 mg/m ³
Croatia	Local name	Krom, metal (kao Cr)
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	2 mg/m ³
Croatia	Naznake (HR)	EU**
Denmark	Local name	Chrom, pulver og opløselige chromi- og chromosalte, beregnet som Cr
Denmark	Grænseværdie (langvarig) (mg/m ³)	0,5 mg/m ³
Estonia	Local name	Kroom (metall) ja tema anorgaanilised ühendid, v. akroomhape ja kromaadid (arvutatud kroomile)
Estonia	OEL TWA (mg/m ³)	2 mg/m ³
Finland	Local name	Kromi, metalli
Finland	HTP-arvo (8h) (mg/m ³)	0,5 mg/m ³
Germany	Local name	Chrom und anorganische Chrom und(III)-Verbindungen
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	2 mg/m ³
Germany	Remark (TRGS 900)	10,EU
Greece	OEL TWA (mg/m ³)	1 mg/m ³
Hungary	Local name	KRÓM (fém), SZERVETLEN KRÓM(II) és KRÓM(III) VEGYÜLETEK (nem oldható)
Hungary	AK-érték	2 mg/m ³
Hungary	Megjegyzések (HU)	i, sz; BEM
Ireland	Local name	Chromium metal
Ireland	OEL (8 hours ref) (mg/m ³)	2 mg/m ³
Ireland	Notes (IE)	IOELV
Netherlands	Local name	Chroom (metallisch)
Netherlands	Grenswaarde TGG 8H (mg/m ³)	0,5 mg/m ³
Romania	Local name	Crom metalic, compuși anorganici ai cromului (II) și compuși anorganici ai cromului (insolubili) (III)

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chromium(III) nitrate (13548-38-4)		
Romania	OEL TWA (mg/m ³)	2 mg/m ³
Sweden	Local name	Chromium* and its inorganic (II, III)-compounds (as Cr) total dust
Sweden	nivågränsvärde (NVG) (ppm)	0,5 ppm
United Kingdom	Local name	Chromium
United Kingdom	WEL TWA (mg/m ³)	0,5 mg/m ³
Iceland	Local name	Króm, duft og króm (króm II og III), sambönd sem Cr
Iceland	OEL (8 hours ref) (mg/m ³)	0,5 mg/m ³
Switzerland	Local name	Chrome (exprimé en chrome)
Switzerland	VME (mg/m ³)	0,5 mg/m ³
Australia	Local name	Chromium (metal)
Australia	TWA (mg/m ³)	0,5 mg/m ³
USA - ACGIH	ACGIH TWA (mg/m ³)	0,5 mg/m ³ (Chromium, inorganic Cr III compounds; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
copper(II) nitrate (3251-23-8)		
Finland	Local name	Kupari-(II)-nitraatti
Finland	HTP-arvo (8h) (mg/m ³)	1 mg/m ³
Netherlands	Grenswaarde TGG 8H (mg/m ³)	0,1 mg/m ³ (Koper en anorganische koperverbindingen (inhaleerbaar); Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value; inhaleerbaar)
United Kingdom	Local name	Copper and compounds
United Kingdom	WEL TWA (mg/m ³)	1 mg/m ³ dusts and mists (as Cu)
United Kingdom	WEL STEL (mg/m ³)	2 mg/m ³ dusts and mists (as Cu)
iron(III) nitrate (10421-48-4)		
Belgium	Limit value (mg/m ³)	1 mg/m ³ (Fer (sels solubles) (en Fe); Belgium; Time-weighted average exposure limit 8 h)
Ireland	Local name	Iron salts (as Fe)
Ireland	OEL (8 hours ref) (mg/m ³)	1 mg/m ³
Ireland	OEL (15 min ref) (mg/m ³)	2 mg/m ³
United Kingdom	Local name	Iron salts
United Kingdom	WEL TWA (mg/m ³)	1 mg/m ³ (as Fe)
United Kingdom	WEL STEL (mg/m ³)	2 mg/m ³ (as Fe)
Australia	Local name	Iron salts, soluble (as Fe)
Australia	TWA (mg/m ³)	1 mg/m ³
USA - ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³ (Iron salts, soluble, as Fe; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
potassium nitrate (7757-79-1)		
Bulgaria	Local name	Калиев нитрат
Bulgaria	OEL TWA (mg/m ³)	5 mg/m ³
Latvia	Local name	Kālijanitrāts
Latvia	OEL TWA (mg/m ³)	5 mg/m ³
Lithuania	Local name	Kalio nitratas
Lithuania	IPRV (mg/m ³)	5 mg/m ³
manganese(II)nitrate (10377-66-9)		
Austria	Local name	Mangan und seine anorganischen
Austria	MAK (mg/m ³)	0,5 mg/m ³
Austria	MAK Short time value (mg/m ³)	2 mg/m ³
Belgium	Local name	Manganèse et ses composés (en Mn)
Belgium	Limit value (mg/m ³)	0,2 mg/m ³
Bulgaria	Local name	Манган-оксид и неорганични съединения (като манган)



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manganese(II)nitrate (10377-66-9)		
Bulgaria	OEL TWA (mg/m ³)	0,3 mg/m ³
Bulgaria	OEL STEL (mg/m ³)	3 mg/m ³
Croatia	Local name	Mangan i njegovi anorganski spojevi (kao Mn)
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	0,5 mg/m ³
Czech Republic	Local name	Mangan
Czech Republic	Expoziční limity (PEL) (mg/m ³)	1 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	2 mg/m ³
Estonia	Local name	Mangaan ja anorgaanilised ühendid (arvutatudmangaanile) kogutolm
Estonia	OEL TWA (mg/m ³)	0,2 mg/m ³
Finland	Local name	Mangaani, metalli
Finland	HTP-arvo (8h) (mg/m ³)	0,2 mg/m ³
Germany	Local name	ManganundseineanorganischenVerbindungen
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	0,5 mg/m ³
Germany	Remark (TRGS 900)	DFG, Y, 10
Hungary	Local name	MANGÁN ÉS SZERVETLEN SÓI (mangán-tetraoxid kivételével, Mn-ra számítva)
Hungary	AK-érték	5 mg/m ³
Hungary	CK-érték	20 mg/m ³
Latvia	Local name	Mangānsmetināšanas aerosolos(kondensācijas aerosols)
Latvia	OEL TWA (mg/m ³)	0,1 mg/m ³
Poland	Local name	Mangan i jego związki nieorganiczne w przeliczeniu na Mn
Poland	NDS (mg/m ³)	0,3 mg/m ³
Portugal	Local name	Manganês e compostos inorgânicos, expressos em Mn
Portugal	OEL TWA (mg/m ³)	0,2 mg/m ³
Romania	Local name	Mangan
Romania	OEL TWA (mg/m ³)	0,5 mg/m ³
Romania	OEL STEL (mg/m ³)	3 mg/m ³
Slovenia	Local name	mangan in njegove anorganske spojine vključno strimanganovim tetraoksidom
Slovenia	OEL TWA (mg/m ³)	0,5 mg/m ³
Slovenia	OEL STEL (mg/m ³)	2 mg/m ³
Spain	Local name	Manganeso
Spain	VLA-ED (mg/m ³)	0,2 mg/m ³ elemental 0,2 mg/m ³ Compuestos inorgánicos de Manganeso, como Mn
United Kingdom	WEL TWA (mg/m ³)	0,5 mg/m ³ Manganese inorganic compounds (as Mn); United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
Switzerland	Local name	Manganèse et ses composés inorg. (exprimé en manganèse)
Switzerland	VME (mg/m ³)	0,5 mg/m ³
USA - ACGIH	Local name	Manganese
USA - ACGIH	ACGIH TWA (mg/m ³)	0,02 mg/m ³
USA - ACGIH	Remark (ACGIH)	CNS impair; A4
nickel nitrate (13138-45-9)		
Austria	Local name	Nickel (Stäube von Nickelmetall, Nickelsulfid und sulfidischen Erzen, Nickeloxide und Nickelcarbonat) und Stäube von Nickelverbindungen und Nickellegierungen
Austria	MAK (mg/m ³)	0,5 mg/m ³

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nickel nitrate (13138-45-9)		
Austria	MAK Short time value (mg/m ³)	2 mg/m ³
Austria	Remark (AT)	Sah
Belgium	Limit value (mg/m ³)	0,1 mg/m ³ (Nickel (composés solubles) (en Ni); Belgium; Time-weighted average exposure limit 8 h)
Bulgaria	Local name	Никел - метал, и съединения (като никел)
Bulgaria	OEL TWA (mg/m ³)	0,05 mg/m ³
Croatia	Local name	Nikal
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	0,5 mg/m ³
Croatia	Naznake (HR)	T
Czech Republic	Local name	Nikl
Czech Republic	Expoziční limity (PEL) (mg/m ³)	0,5 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	1 mg/m ³
Czech Republic	Remark (CZ)	S
Denmark	Local name	Nikkel, pulver og støv, beregnet som Ni (1994)
Denmark	Grænseværdie (langvarig) (mg/m ³)	0,05 mg/m ³
Denmark	Anmærkninger (DK)	K
Estonia	Local name	Nikkel, metall
Estonia	OEL TWA (mg/m ³)	0,5 mg/m ³
Finland	Local name	Nikkeli, metalli
Finland	HTP-arvo (8h) (mg/m ³)	1 mg/m ³
France	Local name	Nickel (métal)
France	VME (mg/m ³)	1 mg/m ³
Ireland	Local name	Nickel
Ireland	OEL (8 hours ref) (mg/m ³)	0,5 mg/m ³
Latvia	Local name	Niķelis, niķeļaksoīdi, sulfidiunsavienojumu maisījumi (pēcNi)
Latvia	OEL TWA (mg/m ³)	0,05 mg/m ³
Lithuania	Local name	Nikelis
Lithuania	IPRV (mg/m ³)	0,5 mg/m ³
Lithuania	Remark (LT)	KJ
Poland	Local name	Nikiel i jego związki, z wyjątkiem tetrakarbonylku niklu (niklu karbonylku) w przeliczeniu na Ni
Poland	NDS (mg/m ³)	0,25 mg/m ³
Portugal	Local name	Níquel, expresso em Ni Elementar
Portugal	OEL TWA (mg/m ³)	1,5 mg/m ³
Romania	Local name	Nichel și compuși
Romania	OEL TWA (mg/m ³)	0,1 mg/m ³
Romania	OEL STEL (mg/m ³)	0,5 mg/m ³
Sweden	Local name	Nickel total dust
Sweden	nivågränsvärde (NVG) (mg/m ³)	0,5 mg/m ³
United Kingdom	WEL TWA (mg/m ³)	0,1 mg/m ³ Nickel, water-soluble inorganic compounds (as Ni); United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
Iceland	Local name	Nikkel, duft og ryk, sem Ni
Iceland	OEL (8 hours ref) (mg/m ³)	0,05 mg/m ³
Iceland	Notes (IS)	O,K
USA - ACGIH	ACGIH TWA (mg/m ³)	0,1 mg/m ³ (Nickel, Soluble inorganic compounds (NOS), as Ni; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction)

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lead nitrate (10099-74-8)		
EU	IOELV TWA (mg/m ³)	15 mg/m ³ (Inorganic lead and its compounds; EU; Time-weighted average exposure limit 8 h; Binding occupational exposure limit value)
Austria	Local name	Blei und seine Verbindungen außer Bleiarsenat, Bleichromat, Bleichromatoxid und Alkylbleiverbindungen
Austria	MAK (mg/m ³)	0,1 mg/m ³
Austria	MAK Short time value (mg/m ³)	0,4 mg/m ³
Belgium	Local name	Plomb inorg. (poussières et fumées) (en Pb)
Belgium	Limit value (mg/m ³)	0,15 mg/m ³ (Plomb inorg. (poussières et fumées) (en Pb); Belgium; Time-weighted average exposure limit 8 h)
Bulgaria	Local name	Олово и неорганични съединения
Bulgaria	OEL TWA (mg/m ³)	0,05 mg/m ³
Croatia	Local name	Olovo i njegovi anorganski spojevi (kao Pb)*
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	0,15 mg/m ³
Croatia	Naznake (HR)	EU0, T, N
Czech Republic	Local name	Olovo
Czech Republic	Expoziční limity (PEL) (mg/m ³)	0,05 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	0,2 mg/m ³
Czech Republic	Remark (CZ)	P*
Denmark	Local name	Bly, pulver, støv, røg og uorganiske forbindelser, beregnet som Pb (1996)
Denmark	Grænseværdie (langvarig) (mg/m ³)	0,05 mg/m ³
Denmark	Anmærkninger (DK)	E
Estonia	Local name	Plii j aanorgaanilised ühendid, (arvutatudpliile) kogutolm
Estonia	OEL TWA (mg/m ³)	0,1 mg/m ³
France	VME (mg/m ³)	0,1 mg/m ³ (Plomb métallique et composés, en Pb; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
Hungary	Local name	ÓLOM és SZERVETLEN VEGYÜLETEI (Pb-ra számítva)
Hungary	AK-érték	0,15 mg/m ³
Hungary	Megjegyzések (HU)	i; III.
Latvia	Local name	Svinsuntāneorganiskie savienojumi,(pēcsvina)
Latvia	OEL TWA (mg/m ³)	0,005 mg/m ³
Latvia	OEL STEL (mg/m ³)	0,01 mg/m ³
Poland	Local name	Ołów i jego związki nieorganiczne w przeliczeniu na Pb
Poland	NDS (mg/m ³)	0,05 mg/m ³
Portugal	Local name	Chumbo elementar e compostos inorgânicos , expressos em Pb
Portugal	OEL TWA (mg/m ³)	0,05 mg/m ³
Romania	Local name	Plumb și compuși (în afară de PbS)
Romania	OEL TWA (mg/m ³)	0,05 mg/m ³
Romania	OEL STEL (mg/m ³)	0,1 mg/m ³
Slovenia	Local name	svinec in njegove spojine (računano kot Pb) razen svinčevega arzenata, svinčevega kromata in alkilsvinčevih spojin
Slovenia	OEL TWA (mg/m ³)	0,1 mg/m ³
Slovenia	OEL STEL (mg/m ³)	0,4 mg/m ³
Spain	Local name	Plomo

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lead nitrate (10099-74-8)		
Spain	VLA-ED (mg/m ³)	0,15 mg/m ³ elemental 0,15 mg/m ³ Compuestos inorgánicos de plomo, como Pb
Spain	Notes	k (Véase el Real Decreto 374/2001, de 6 de abril (BOE nº 104 de 1 de mayo de 2001), sobre la protección de la salud y seguridad de los trabajadores contra los riesgos relacionados con los agentes químicos durante el trabajo.), VLB® (Agente químico que tiene Valor Límite Biológico específico en este documento.), TR1A (cuando las pruebas utilizadas para la clasificación procedan principalmente de datos en humanos)
United Kingdom	WEL TWA (mg/m ³)	15 mg/cm ³ Lead other than lead alkyls; United Kingdom; Time-weighted average exposure limit 8 h; Occupational exposure limit (Control of lead at work)
Iceland	Local name	Blý, duft, ryk, reykur, ólfræn sambönd, sem Pb
Iceland	OEL (8 hours ref) (mg/m ³)	0,05 mg/m ³
Switzerland	Local name	Plomb et ses composés (sauf les alcoylés) (exprimé en plomb)
Switzerland	VME (mg/m ³)	0,1 mg/m ³
Switzerland	VLE (mg/m ³)	0,8 mg/m ³
Switzerland	Remark (CH)	4x15
Australia	Local name	Lead, inorganic dusts & fumes (as Pb)
Australia	TWA (mg/m ³)	0,15 mg/m ³
Australia	Remark (AU)	(f)
USA - ACGIH	Local name	Lead
USA - ACGIH	ACGIH TWA (mg/m ³)	0,05 mg/m ³ (Lead, inorganic compounds, as Pb; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
USA - ACGIH	Remark (ACGIH)	CNS & PNS impair
thallium(I)nitrate (10102-45-1)		
Austria	Local name	Thalliumverbindungen lösliche
Austria	MAK (mg/m ³)	0,1 mg/m ³
Austria	MAK Short time value (mg/m ³)	1 mg/m ³
Belgium	Local name	Thallium (composés solubles) (en Tl)
Belgium	Limit value (mg/m ³)	0,1 mg/m ³
Belgium	Remark (BE)	D
Bulgaria	Local name	Талий и неговите съединения (като талий)
Bulgaria	OEL TWA (mg/m ³)	0,05 mg/m ³
Czech Republic	Local name	Thallium
Czech Republic	Expoziční limity (PEL) (mg/m ³)	0,1 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	0,5 mg/m ³
Czech Republic	Remark (CZ)	D, P
Denmark	Local name	Thalliumforbindelser, opløselige, beregnet som Tl
Denmark	Grænseværdie (langvarig) (mg/m ³)	0,1 mg/m ³
Denmark	Anmærkninger (DK)	H
Finland	Local name	Tallium
Finland	HTP-arvo (8h) (mg/m ³)	0,1 mg/m ³
France	Local name	Thallium
France	VME (mg/m ³)	0,1 mg/m ³
Ireland	Local name	Thallium, soluble compounds (as Tl)
Ireland	OEL (8 hours ref) (mg/m ³)	0,1 mg/m ³
Ireland	Notes (IE)	Sk
Poland	Local name	Tal i jego związku w przeliczeniu na Tl

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thallium(I)nitrate (10102-45-1)		
Poland	NDS (mg/m ³)	0,1 mg/m ³
Poland	NDSch (mg/m ³)	0,3 mg/m ³
Portugal	Local name	Tálio, e compostos solúveis, expressos em TI
Portugal	OEL TWA (mg/m ³)	0,1 mg/m ³
Romania	Local name	Thaliu (compuși solubili)
Romania	OEL STEL (mg/m ³)	0,05 mg/m ³
Spain	Local name	Talio
Spain	VLA-ED (mg/m ³)	0,1 mg/m ³ elemental 0,1 mg/m ³ Compuestos solubles de talio, como TI
Spain	Notes	Vía dérmica: (Indica que, en las exposiciones a esta sustancia, la aportación por la vía cutánea puede resultar significativa para el contenido corporal total si no se adoptan medidas para prevenir la absorción. En estas situaciones, es aconsejable la utilización del control biológico para poder cuantificar la cantidad global absorbida del contaminante. Para más información véase el Apartado 5 de este documento.), c (Los términos "soluble" e "insoluble" se entienden con referencia al agua.)
United Kingdom	Local name	Thallium, soluble compounds (as TI)
United Kingdom	WEL TWA (mg/m ³)	0,1 mg/m ³
United Kingdom	Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Iceland	Local name	Þallíumsambönd, uppleysanleg, sem TI
Iceland	OEL (8 hours ref) (mg/m ³)	0,1 mg/m ³
Iceland	Notes (IS)	H
Norway	Local name	Thallium og løselige Thalliumforb. (beregnet som TI)
Norway	Grenseverdier (AN) (mg/m ³)	0,1 mg/m ³
Norway	Merknader (NO)	H
Switzerland	Local name	Thallium, composés solubles (exprimé en TI)
Switzerland	VME (mg/m ³)	0,1 mg/m ³
Australia	Local name	Thallium, soluble compounds (as TI)
Australia	TWA (mg/m ³)	0,1 mg/m ³
USA - ACGIH	Local name	Thallium
USA - ACGIH	ACGIH TWA (mg/m ³)	0,02 mg/m ³
USA - ACGIH	Remark (ACGIH)	dam; peripheral neuropathy
USA - OSHA	Local name	Thallium, soluble compounds (as TI)
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	0,1 mg/m ³
nitric acid (7697-37-2)		
EU	IOELV STEL (mg/m ³)	2,6 mg/m ³ (Nitric acid; EU; Short time value; Indicative occupational exposure limit value)
EU	IOELV STEL (ppm)	1 ppm (Nitric acid; EU; Short time value; Indicative occupational exposure limit value)
Austria	Local name	Salpetersäure
Austria	MAK Short time value (mg/m ³)	2,6 mg/m ³
Austria	MAK Short time value (ppm)	1 ppm
Belgium	Local name	Acide nitrique
Belgium	Short time value (mg/m ³)	2,6 mg/m ³
Belgium	Short time value (ppm)	1 ppm
Bulgaria	Local name	Азотна киселина•
Bulgaria	OEL STEL (mg/m ³)	2,6 mg/m ³
Croatia	Local name	Dušična kiselina
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m ³)	2,6 mg/m ³

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nitric acid (7697-37-2)		
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (ppm)	1 ppm
Croatia	Naznake (HR)	EU** O, C
Czech Republic	Local name	Kyselina dusí ná
Czech Republic	Expoziční limity (PEL) (mg/m ³)	1 mg/m ³
Czech Republic	Expoziční limity (PEL) (ppm)	0,39 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	2,5 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (ppm)	1 ppm
Denmark	Local name	Salpetersyre (2007)
Denmark	Grænseværdie (kortvarig) (mg/m ³)	2,6 mg/m ³
Denmark	Grænseværdie (kortvarig) (ppm)	1 ppm
Denmark	Anmærkninger (DK)	ES
Estonia	Local name	Lämmastikhape
Estonia	OEL STEL (mg/m ³)	2,6 mg/m ³
Estonia	OEL STEL (ppm)	1 ppm
Finland	Local name	Typpihappo
Finland	HTP-arvo (8h) (mg/m ³)	1,3 mg/m ³
Finland	HTP-arvo (8h) (ppm)	0,5 ppm
Finland	HTP-arvo (15 min)	2,6 mg/m ³
Finland	HTP-arvo (15 min) (ppm)	1 ppm
France	Local name	Acide nitrique
France	VLE (mg/m ³)	2,6 mg/m ³
France	VLE (ppm)	1 ppm
Germany	Local name	Salpetersäure
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	2,6 mg/m ³
Germany	TRGS 900 Occupational exposure limit value (ppm)	1 ppm
Germany	Remark (TRGS 900)	EU, 13, 16
Greece	OEL STEL (mg/m ³)	2,6 mg/m ³
Greece	OEL STEL (ppm)	1 ppm
Hungary	Local name	SALÉTROMSAV
Hungary	CK-érték	2,6 mg/m ³
Hungary	Megjegyzések (HU)	i, m; l.
Ireland	Local name	Nitric acid
Ireland	OEL (15 min ref) (mg/m ³)	2,6 mg/m ³
Ireland	OEL (15 min ref) (ppm)	1 ppm
Ireland	Notes (IE)	IOELV
Italy	Local name	Acido nitrico
Italy	OEL STEL (mg/m ³)	2,6 mg/m ³
Italy	OEL STEL (ppm)	1 ppm
Latvia	Local name	Slāpekļskābe
Latvia	OEL TWA (mg/m ³)	2 mg/m ³
Latvia	OEL TWA (ppm)	0,78 ppm
Latvia	OEL STEL (mg/m ³)	2,6 mg/m ³
Latvia	OEL STEL (ppm)	1 ppm
Lithuania	Local name	Nitrato rūgštis (azoto rūgštis)
Lithuania	TPRV (mg/m ³)	2,6 mg/m ³



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nitric acid (7697-37-2)		
Lithuania	TPRV (ppm)	1 ppm
Luxembourg	Local name	Acide nitrique
Luxembourg	OEL STEL (mg/m ³)	2,6 mg/m ³
Luxembourg	OEL STEL (ppm)	1 ppm
Malta	Local name	Nitric acid
Malta	OEL STEL (mg/m ³)	2,6 mg/m ³
Malta	OEL STEL (ppm)	1 ppm
Netherlands	Local name	Salpeterzuur
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	1,3 mg/m ³
Netherlands	Grenswaarde TGG 15MIN (ppm)	0,5 ppm (Salpeterzuur; Netherlands; Short time value; Public occupational exposure limit value)
Poland	Local name	Kwas azotowy(V)
Poland	NDS (mg/m ³)	1,4 mg/m ³
Poland	NDSch (mg/m ³)	2,6 mg/m ³
Portugal	Local name	Ácido nítrico
Portugal	OEL TWA (ppm)	2 ppm
Portugal	OEL STEL (ppm)	4 ppm
Romania	Local name	Acid nitric
Romania	OEL STEL (mg/m ³)	2,6 mg/m ³
Romania	OEL STEL (ppm)	1 ppm
Slovenia	Local name	dušikova kislina
Slovenia	OEL TWA (mg/m ³)	2,6 mg/m ³
Slovenia	OEL TWA (ppm)	1 ppm
Slovenia	OEL STEL (mg/m ³)	2,6 mg/m ³
Slovenia	OEL STEL (ppm)	1 ppm
Spain	Local name	Ácido nítrico
Spain	VLA-EC (mg/m ³)	2,6 mg/m ³
Spain	VLA-EC (ppm)	1 ppm
Spain	Notes	(2007), VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su transposición a los valores límites de cada país miembro. Una vez adoptados, estos valores tienen la misma validez que el resto de los valores adoptados por el país.)
Sweden	Local name	Nitric acid
Sweden	kortidsvärde (KTV) (mg/m ³)	13 mg/m ³
Sweden	kortidsvärde (KTV) (ppm)	5 ppm
United Kingdom	Local name	Nitric acid
United Kingdom	WEL STEL (mg/m ³)	2,6 mg/m ³
United Kingdom	WEL STEL (ppm)	1 ppm
Iceland	Local name	Saltpéturssýra
Iceland	OEL (15 min ref) (mg/m ³)	2,6 mg/m ³
Iceland	OEL (15 min ref) (ppm)	1 ppm
Norway	Local name	Salpetersyre
Norway	Grenseverdier (AN) (mg/m ³)	5 mg/m ³
Norway	Grenseverdier (AN) (ppm)	2 ppm
Switzerland	Local name	Acide nitrique
Switzerland	VME (mg/m ³)	5 mg/m ³

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nitric acid (7697-37-2)		
Switzerland	VME (ppm)	2 ppm
Switzerland	VLE (mg/m ³)	5 mg/m ³
Switzerland	VLE (ppm)	2 ppm
Switzerland	Remark (CH)	15 min
Australia	Local name	Nitric acid
Australia	TWA (mg/m ³)	5,2 mg/m ³
Australia	TWA (ppm)	2 ppm
Australia	STEL (mg/m ³)	10 mg/m ³
Australia	STEL (ppm)	4 ppm
USA - ACGIH	Local name	Nitric acid
USA - ACGIH	ACGIH TWA (ppm)	2 ppm
USA - ACGIH	ACGIH STEL (ppm)	4 ppm
USA - ACGIH	Remark (ACGIH)	URT & eye irr; dental erosion
USA - OSHA	Local name	Nitric acid
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
USA - OSHA	OSHA PEL (TWA) (ppm)	2 ppm
arsenic acid (7778-39-4)		
Austria	Local name	Arsentrioxid und -pentoxid, arsenige Säure, Arsensäure und deren Salze (Arsenite, Arsenate z.B. Bleiarsenat, Calciumarsenat)
Austria	MAK (mg/m ³)	0,1 mg/m ³
Austria	MAK Short time value (mg/m ³)	0,4 mg/m ³
Belgium	Limit value (mg/m ³)	0,01 mg/m ³ (Arsenic et ses composés inorganiques (en As); Belgium; Time-weighted average exposure limit 8 h)
Croatia	Local name	Arsenska kiselina i njezine soli
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	0,1 mg/m ³
Croatia	Naznake (HR)	T, N
Netherlands	Local name	Arseenzuur (als As) in water oplosbare
Netherlands	Grenswaarde TGG 8H (mg/m ³)	0,025 mg/m ³ (Arseenzuur (als As); Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value; als As)
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	0,05 mg/m ³ (Arseenzuur (als As); Netherlands; Short time value; Public occupational exposure limit value; als As)
Slovenia	Local name	arzenova kislina (As ₂ O ₅) in njene soli
Slovenia	OEL TWA (mg/m ³)	0,1 mg/m ³
Slovenia	OEL STEL (mg/m ³)	0,4 mg/m ³
United Kingdom	WEL TWA (mg/m ³)	0,1 mg/m ³ Arsenic and compounds except arsine (as As); United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
Switzerland	Local name	– acide arsénieux et ses sels (exprimés en As)
Switzerland	VME (mg/m ³)	0,1 mg/m ³
USA - ACGIH	ACGIH TWA (mg/m ³)	0,01 mg/m ³ (Arsenic, inorganic compounds (except Arsine), as As; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
beryllium nitrate (13597-99-4)		
Belgium	Local name	Béryllium et ses composés (en Be)
Belgium	Limit value (mg/m ³)	0,002 mg/m ³
Belgium	Short time value (mg/m ³)	0,01 mg/m ³
Belgium	Remark (BE)	C
Bulgaria	Local name	Берилий и съединения (като берилий)
Bulgaria	OEL TWA (mg/m ³)	0,002 mg/m ³
Croatia	Local name	Berilij
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	0,002 mg/m ³



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beryllium nitrate (13597-99-4)		
Croatia	Naznake (HR)	T+
Czech Republic	Local name	Beryllium
Czech Republic	Expoziční limity (PEL) (mg/m ³)	0,001 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	0,002 mg/m ³
Czech Republic	Remark (CZ)	S, P
Denmark	Local name	Beryllium, pulver og forbindelser, beregnet som Be
Denmark	Grænseværdie (langvarig) (mg/m ³)	0,001 mg/m ³
Denmark	Anmærkninger (DK)	K
Estonia	Local name	Berülliumjauhendid (arvutatud berülliumile)
Estonia	OEL TWA (mg/m ³)	0,002 mg/m ³
Finland	Local name	Beryllium, metalli
Finland	HTP-arvo (8h) (mg/m ³)	0,001 mg/m ³
France	Local name	Béryllium et composés, en Be
France	VME (mg/m ³)	0,002 mg/m ³
Greece	OEL TWA (mg/m ³)	0,005 mg/m ³
Hungary	Local name	BERILLIUM ÉS VEGYÜLETEI (Be-ra számítva)
Hungary	MK-érték	0,002 mg/m ³
Hungary	Megjegyzések (HU)	k
Ireland	Local name	Beryllium and beryllium compounds (as Be)
Ireland	OEL (8 hours ref) (mg/m ³)	0,0002 mg/m ³
Ireland	Notes (IE)	Carc1B
Latvia	Local name	Beriljsuntā savienojumi
Latvia	OEL TWA (mg/m ³)	0,001 mg/m ³
Poland	Local name	Beryl i jego związki nieorganiczne w przeliczeniu na Be
Poland	NDS (mg/m ³)	0,0002 mg/m ³
Portugal	Local name	Berílio e compostos, expressos em Be
Portugal	OEL TWA (mg/m ³)	0,002 mg/m ³
Portugal	OEL STEL (mg/m ³)	0,01 mg/m ³
Romania	Local name	Beriliu și compuși (exprimați în Be)
Romania	OEL TWA (mg/m ³)	0,002 mg/m ³
Spain	Local name	Berilio
Spain	VLA-ED (mg/m ³)	0,0002 mg/m ³ elemental 0,0002 mg/m ³ Compuestos de berilio, como Be, excepto los expresamente indicados
Spain	Notes	Sen (Sensibilizante. Véase Apartado 6.), r (Esta sustancia tiene establecidas restricciones a la fabricación, la comercialización o el uso en los términos especificados en el "Reglamento (CE) n° 1907/2006 sobre Registro, Evaluación, Autorización y Restricción de sustancias y preparados químicos" (REACH) de 18 de diciembre de 2006 (DOUE L 369 de 30 de diciembre de 2006). Las restricciones de una sustancia pueden aplicarse a todos los usos o sólo a usos concretos. El anexo XVII del Reglamento REACH contiene la lista de todas las sustancias restringidas y especifica los usos que se han restringido.)
Sweden	Local name	Beryllium* and compounds (as Be) total dust
Sweden	nivågränsvärde (NVG) (mg/m ³)	0,002 mg/m ³
Sweden	kortidsvärde (KTV) (mg/m ³)	0 mg/m ³
Sweden	kortidsvärde (KTV) (ppm)	0 ppm

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beryllium nitrate (13597-99-4)		
United Kingdom	WEL TWA (mg/m ³)	0,002 mg/m ³ Beryllium compounds (as Be); United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
Iceland	Local name	Beryllium, duft og sambönd (sem Be)
Iceland	OEL (8 hours ref) (mg/m ³)	0,001 mg/m ³
Iceland	Notes (IS)	O,K
Switzerland	Local name	Béryllium et ses composés(exprimé en béryllium)
Switzerland	VME (mg/m ³)	0,002 mg/m ³
Australia	Local name	Beryllium & compounds
Australia	TWA (mg/m ³)	0,002 mg/m ³
USA - ACGIH	Local name	Beryllium and compounds, as Be
USA - ACGIH	ACGIH TWA (mg/m ³)	0,00005 mg/m ³
USA - ACGIH	Remark (ACGIH)	Beryllium sens; chronic beryllium; Skin; DSEN; RSEN; A1
USA - OSHA	Local name	Beryllium and beryllium compounds (as Be)
USA - OSHA	Remark (OSHA)	(2) See Table Z-2.
Molybdenum(V) fluoride (13819-84-6)		
Austria	Local name	Molybdän und Molybdänverbindungen, unlösliche
Austria	MAK (mg/m ³)	10 mg/m ³
Austria	MAK Short time value (mg/m ³)	20 mg/m ³
Czech Republic	Local name	Molybden
Czech Republic	Expoziční limity (PEL) (mg/m ³)	5 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	25 mg/m ³
Ireland	Local name	Molybdenum compounds (as Mo),
Ireland	OEL (8 hours ref) (mg/m ³)	0,5 mg/m ³
Poland	Local name	Molibden i jego związki w przeliczeniu na Mo
Poland	NDS (mg/m ³)	4 mg/m ³
Poland	NDSch (mg/m ³)	10 mg/m ³
hexafluoroantimony acid (16950-06-4)		
EU	IOELV TWA (mg/m ³)	2,5 mg/m ³ (Fluorides, inorganic; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
Austria	Local name	Antimon
Austria	MAK (mg/m ³)	0,5 mg/m ³
Austria	MAK Short time value (mg/m ³)	5 mg/m ³
Belgium	Local name	Antimoine et ses composés (en Sb)
Belgium	Limit value (mg/m ³)	0,5 mg/m ³
Bulgaria	Local name	Антимон и неорганични съе-
Bulgaria	OEL TWA (mg/m ³)	0,5 mg/m ³
Croatia	Local name	Antimon i drugi spojevi kao (Sb) osim atimonovog trihidrida
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	0,5 mg/m ³
Croatia	Naznake (HR)	Xn, N
Czech Republic	Local name	Antimon
Czech Republic	Expoziční limity (PEL) (mg/m ³)	0,5 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	1,5 mg/m ³
Denmark	Local name	Antimon, pulver og forbindelser, beregnet som Sb, se dog stibin
Denmark	Grænseværdie (langvarig) (mg/m ³)	0,5 mg/m ³
Estonia	Local name	Antimon ja oksiidid (arvutatud antimonile)
Estonia	OEL TWA (mg/m ³)	0,5 mg/m ³

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hexafluoroantimony acid (16950-06-4)		
France	VME (mg/m ³)	0,5 mg/m ³ (Antimoine et ses composés, en Sb; France; Time-weighted average exposure limit 8 h; VL: Valeur non réglementaire indicative; Fluorures inorganiques; 2.5 mg/m ³ ; France; Time-weighted average exposure limit 8 h; VRI: Valeur réglementaire indicative)
Greece	OEL TWA (mg/m ³)	0,5 mg/m ³
Hungary	Local name	ANTIMON ÉS SZERVETLEN VEGYÜLETEI (Sb-ra számítva)
Hungary	AK-érték	0,5 mg/m ³
Hungary	CK-érték	2 mg/m ³
Hungary	Megjegyzések (HU)	i, III.
Ireland	Local name	Antimony & compounds (as Sb)
Ireland	OEL (8 hours ref) (mg/m ³)	0,5 mg/m ³
Ireland	Notes (IE)	-
Latvia	Local name	Antimonametāliskie putekļi
Latvia	OEL TWA (mg/m ³)	0,2 mg/m ³
Latvia	OEL STEL (mg/m ³)	0,5 mg/m ³
Netherlands	Local name	Antimoon en -verbindingen (als Sb)
Netherlands	Grenswaarde TGG 8H (mg/m ³)	0,5 mg/m ³
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	2 mg/m ³ (Fluoriden, anorganisch en oplosbaar (als F); Netherlands; Short time value; Public occupational exposure limit value; als F)
Poland	Local name	Antymon i jego związki nieorganiczne, z wyjątkiem stibanu w przeliczeniu na Sb
Poland	NDS (mg/m ³)	0,5 mg/m ³
Portugal	Local name	Antimónio e compostos, expressos em Sb
Portugal	OEL TWA (mg/m ³)	0,5 mg/m ³
Romania	Local name	Antimoniu (stibiu)
Romania	OEL TWA (mg/m ³)	0,2 mg/m ³
Romania	OEL STEL (mg/m ³)	0,5 mg/m ³
Slovenia	Local name	antimon
Slovenia	OEL TWA (mg/m ³)	0,5 mg/m ³
Slovenia	OEL STEL (mg/m ³)	2 mg/m ³
Spain	Local name	Antimonio
Spain	VLA-ED (mg/m ³)	0,5 mg/m ³ elemental 0,5 mg/m ³ Compuestos de antimonio, como Sb, excepto hidruro de antimonio
Sweden	Local name	Antimony* and oxides (as Sb) total dust
Sweden	nivågränsvärde (NVG) (mg/m ³)	0,5 mg/m ³
United Kingdom	Local name	Antimony and compounds except stibine (as Sb)
United Kingdom	WEL TWA (mg/m ³)	0,5 mg/m ³
Iceland	Local name	Antimón, duft og sambönd (sem Sb)
Iceland	OEL (8 hours ref) (mg/m ³)	0,5 mg/m ³
Switzerland	Local name	Antimoine
Switzerland	VME (mg/m ³)	0,5 mg/m ³
Australia	Local name	Antimony & compounds (as Sb)
Australia	TWA (mg/m ³)	0,5 mg/m ³
USA - ACGIH	Local name	Antimony
USA - ACGIH	ACGIH TWA (mg/m ³)	0,5 mg/m ³
USA - ACGIH	Remark (ACGIH)	Skin & URT irr
USA - OSHA	Local name	Antimony and compounds (as Sb)

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hexafluoroantimonyic acid (16950-06-4)		
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	0,5 mg/m ³
selenious acid (7783-00-8)		
Austria	Local name	Selen und seine Verbindungen (außer Selenwasserstoff)
Austria	MAK (mg/m ³)	0,1 mg/m ³
Austria	MAK Short time value (mg/m ³)	0,3 mg/m ³
Belgium	Local name	Sélénium et ses composés (en Se)
Belgium	Limit value (mg/m ³)	0,2 mg/m ³ (Sélénium et ses composés (en Se); Belgium; Time-weighted average exposure limit 8 h)
Bulgaria	Local name	Селен и съединения (като селен)
Bulgaria	OEL TWA (mg/m ³)	0,2 mg/m ³
Croatia	Local name	Selen
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	0,1 mg/m ³
Croatia	Naznake (HR)	T
Czech Republic	Local name	Selen
Czech Republic	Expoziční limity (PEL) (mg/m ³)	0,1 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	0,2 mg/m ³
Denmark	Local name	Selen og forbindelser, beregnet som Se, se dog hydrogenselenid og selenhexafluorid
Denmark	Grænseværdie (langvarig) (mg/m ³)	0,1 mg/m ³
Estonia	Local name	Seleeni, anorgaanilisedühendid, v.a vesinikseleniid (arvutatudseleenile)
Estonia	OEL TWA (mg/m ³)	0,1 mg/m ³
Finland	Local name	Seleeni
Finland	HTP-arvo (8h) (mg/m ³)	0,1 mg/m ³
Finland	HTP-arvo (15 min)	0,3 mg/m ³
Germany	Local name	Selen
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	0,05 mg/m ³
Germany	Remark (TRGS 900)	DFG, Y
Ireland	Local name	Selenium and compounds, except hydrogen selenide (as Se)
Ireland	OEL (8 hours ref) (mg/m ³)	0,1 mg/m ³
Poland	Local name	Selen i jego związki, z wyjątkiem selenanu w przeliczeniu na Se
Poland	NDS (mg/m ³)	0,1 mg/m ³
Poland	NDSCh (mg/m ³)	0,3 mg/m ³
Portugal	Local name	Selénio e compostos, expressos em Se
Portugal	OEL TWA (mg/m ³)	0,2 mg/m ³
Romania	Local name	Seleniu și compuși exprimați în Se
Romania	OEL TWA (mg/m ³)	0,1 mg/m ³
Romania	OEL STEL (mg/m ³)	0,2 mg/m ³
Slovenia	Local name	selen in njegove spojine
Slovenia	OEL TWA (mg/m ³)	0,1 mg/m ³
Spain	Local name	Selenio
Spain	VLA-ED (mg/m ³)	0,1 mg/m ³ elemental 0,1 mg/m ³ Compuestos de Selenio, como Se (excepto el Seleniuro de hidrógeno)
Sweden	Local name	Selenium and inorganic compounds other than hydrogen selenide (as Se) total dust
Sweden	nivågränsvärde (NVG) (mg/m ³)	0,1 mg/m ³

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selenious acid (7783-00-8)		
United Kingdom	WEL TWA (mg/m ³)	0,1 mg/m ³ Selenium compounds, except hydrogen selenide (as Se); United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
Iceland	Local name	Selen og sambönd þess, sem Se
Iceland	OEL (8 hours ref) (mg/m ³)	0,1 mg/m ³
Switzerland	Local name	Sélénium et ses composés inorganiques (exprimé en Se)
Switzerland	VME (mg/m ³)	0,02 mg/m ³
Switzerland	VLE (mg/m ³)	0,16 mg/m ³
Switzerland	Remark (CH)	4x15
Australia	Local name	Selenium compounds (as Se) excluding hydrogen selenide
Australia	TWA (mg/m ³)	0,1 mg/m ³
USA - ACGIH	Local name	Selenium
USA - ACGIH	ACGIH TWA (mg/m ³)	0,2 mg/m ³ (Selenium compounds, as Se; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
USA - ACGIH	Remark (ACGIH)	78.96 Eye & URT irr
USA - OSHA	Local name	Selenium compounds (as Se)
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	0,2 mg/m ³

8.2. Exposure controls

Appropriate engineering controls	: Provide adequate general and local exhaust ventilation.
Personal protective equipment	: Protective clothing. Protective goggles. Gloves.
Hand protection	: Wear protective gloves
Eye protection	: Chemical goggles or face shield
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Wear appropriate mask



Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: characteristic.
Odour threshold	: No data available
pH	: < 2
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.

Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Miscible with water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates : Corrosive vapours.

10.2. Chemical stability

Stable under normal conditions. Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide. Thermal decomposition generates : Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Inhalation:dust,mist: Harmful if inhaled.

ATE CLP (dust,mist)	1,500 mg/l/4h
silver nitrate (7761-88-8)	
LD50 oral rat	1173 mg/kg (Rat)
boric acid (10043-35-3)	
LD50 oral rat	2660 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; >2600 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 2000 mg/kg Rabbit; Experimental value; FIFRA (40 CFR)
barium nitrate (10022-31-8)	
LD50 oral rat	355 mg/kg (Rat)
cadmium nitrate (10325-94-7)	
LD50 oral rat	300 mg/kg (Rat)
chromium(III) nitrate (13548-38-4)	
LD50 oral rat	3250 mg/kg (Rat)
copper(II) nitrate (3251-23-8)	
LD50 oral rat	794 mg/kg (Rat)
potassium nitrate (7757-79-1)	
LD50 oral rat	3750 mg/kg (Rat)
lead nitrate (10099-74-8)	
LD50 oral rat	4665 mg/kg bodyweight (Rat; Equivalent or similar to OECD 401; Read-across; 5610 mg/kg bodyweight; Rat; Equivalent or similar to OECD 401; Read-across)
zinc nitrate (7779-88-6)	
LD50 oral rat	1330 mg/kg (Rat)

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arsenic acid (7778-39-4)	
LD50 oral rat	48 mg/kg (Rat)
Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: < 2
Serious eye damage/irritation	: Serious eye damage, category 1, implicit pH: < 2
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: May cause cancer.
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure)	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Harmful if inhaled.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Harmful to aquatic life with long lasting effects.

silver nitrate (7761-88-8)	
LC50 fish 2	0,006 mg/l (LC50; 96 h; Salmo gairdneri)
EC50 Daphnia 1	0,0006 mg/l (EC50; 48 h)
aluminium nitrate (13473-90-0)	
LC50 fish 1	4,25 mg/l (LC50; 96 h)
barium nitrate (10022-31-8)	
LC50 fish 1	> 1000 mg/l (LC50; 96 h)
cadmium nitrate (10325-94-7)	
LC50 fish 2	0,055 mg/l (LC50; 48 h)
EC50 Daphnia 1	0,04 mg/l (EC50; 48 h)
cobalt dinitrate (10141-05-6)	
LC50 fish 1	0,49 mg/l (LC50; 672 h)
EC50 Daphnia 2	0,021 mg/l (EC50; 48 h)
Threshold limit algae 1	0,018 mg/l (EC50; 96 h)
copper(II) nitrate (3251-23-8)	
LC50 fish 2	0,25 mg/l (LC50; 96 h)
EC50 other aquatic organisms 1	0,085 mg/l (336 h; Selenastrum capricornutum)
potassium nitrate (7757-79-1)	
LC50 fish 2	1378 mg/l (LC50; 96 h; Poecilia reticulata)
LC50 other aquatic organisms 2	490 mg/l (48 h; Daphnia magna)
nickel nitrate (13138-45-9)	
LC50 fish 1	17,1 mg/l (LC50; 672 h)
Threshold limit algae 1	0,18 mg/l (EC50; 72 h)
lead nitrate (10099-74-8)	
LC50 fish 2	7,48 mg/l (TLm; 96 h)
EC50 Daphnia 1	0,3 mg/l (LC50; 48 h)
Threshold limit algae 1	0,14 mg/l (EC50)

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thallium(I)nitrate (10102-45-1)	
LC50 fish 1	180 mg/l (LC50)
EC50 Daphnia 1	1,6 mg/l (EC50; 24 h)
zinc nitrate (7779-88-6)	
LC50 fish 1	2,61 mg/l (LC50; 96 h)
EC50 Daphnia 1	0,068 mg/l (EC50; 48 h)
Threshold limit algae 1	< 0,12 mg/l (EC50)
nitric acid (7697-37-2)	
LC50 fish 2	72 ppm (LC50; 96 h)
EC50 Daphnia 1	180 mg/l (EC50; 48 h)
Threshold limit algae 1	> 19 mg/l (EC0)
arsenic acid (7778-39-4)	
LC50 fish 1	25,6 mg/l (LC50; 96 h)
EC50 Daphnia 1	0,93 mg/l (EC50; 672 h)
Threshold limit algae 1	< 0,002 mg/l (EC0)
beryllium nitrate (13597-99-4)	
LC50 fish 1	8 mg/l (LC50)
EC50 Daphnia 1	18 mg/l (EC50; 24 h)
Threshold limit algae 1	0,03 mg/l (EC0)
selenious acid (7783-00-8)	
LC50 fish 1	0,62 - 0,97 mg/l (LC50; 96 h; Pimephales promelas)
EC50 Daphnia 2	0,43 mg/l (EC50; 48 h)

12.2. Persistence and degradability

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Persistence and degradability	May cause long-term adverse effects in the environment.
silver nitrate (7761-88-8)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
aluminium nitrate (13473-90-0)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
boric acid (10043-35-3)	
Persistence and degradability	Biodegradability: Not applicable. Biodegradability in soil: Not applicable. No (test)data available on mobility of the substance.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
barium nitrate (10022-31-8)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
cadmium nitrate (10325-94-7)	
Persistence and degradability	Biodegradability: Not applicable.



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cadmium nitrate (10325-94-7)	
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

cobalt dinitrate (10141-05-6)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

chromium(III) nitrate (13548-38-4)	
Persistence and degradability	Biodegradability: Not applicable. Adsorbs into the soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

copper(II) nitrate (3251-23-8)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

iron(III) nitrate (10421-48-4)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

potassium nitrate (7757-79-1)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

manganese(II)nitrate (10377-66-9)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

nickel nitrate (13138-45-9)	
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

lead nitrate (10099-74-8)	
Persistence and degradability	Biodegradability: Not applicable. Adsorbs into the soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable



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thallium(I)nitrate (10102-45-1)	
Persistence and degradability	Biodegradability: Not applicable. Adsorbs into the soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

zinc nitrate (7779-88-6)	
Persistence and degradability	Biodegradability: Not applicable. Adsorbs into the soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

nitric acid (7697-37-2)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

arsenic acid (7778-39-4)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

beryllium nitrate (13597-99-4)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

hexafluoroantimonic acid (16950-06-4)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

selenious acid (7783-00-8)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.

silver nitrate (7761-88-8)	
BCF fish 1	11 - 19 (BCF)
BCF fish 2	15 - 150 (BCF)
Log Pow	0,19 (Estimated value)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).

aluminium nitrate (13473-90-0)	
Bioaccumulative potential	Not bioaccumulative.

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boric acid (10043-35-3)	
BCF fish 2	< 0,1 (BCF; 60 days; Oncorhynchus tshawytscha; Flow-through system; Fresh water; Weight of evidence)
Log Pow	-1,09 (Experimental value; EU Method A.8: Partition Coefficient; 22 °C)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).
barium nitrate (10022-31-8)	
Bioaccumulative potential	Not bioaccumulative.
cadmium nitrate (10325-94-7)	
BCF other aquatic organisms 1	1220 (BCF)
BCF other aquatic organisms 2	603 (BCF; 504 h)
Bioaccumulative potential	bioaccumulable.
cobalt dinitrate (10141-05-6)	
Bioaccumulative potential	Bioaccumulation: No data available.
chromium(III) nitrate (13548-38-4)	
BCF other aquatic organisms 1	17000 (BCF)
BCF other aquatic organisms 2	6500 (BCF)
Bioaccumulative potential	Bioaccumulation: No data available.
copper(II) nitrate (3251-23-8)	
BCF fish 1	200 - 667 (BCF)
BCF other aquatic organisms 1	471 (BCF; 168 h; Daphnia magna)
BCF other aquatic organisms 2	2400 (BCF; 168 h; Daphnia magna)
Bioaccumulative potential	bioaccumulable.
iron(III) nitrate (10421-48-4)	
Bioaccumulative potential	Not bioaccumulative.
potassium nitrate (7757-79-1)	
Bioaccumulative potential	Bioaccumulation: No data available.
manganese(II)nitrate (10377-66-9)	
Bioaccumulative potential	Bioaccumulation: No data available.
lead nitrate (10099-74-8)	
Bioaccumulative potential	bioaccumulable.
nitric acid (7697-37-2)	
BCF fish 1	<= 1 (BCF)
Log Pow	-2,3 (OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)
Bioaccumulative potential	Bioaccumulation: Not applicable.
arsenic acid (7778-39-4)	
Bioaccumulative potential	bioaccumulable.
beryllium nitrate (13597-99-4)	
Bioaccumulative potential	Not bioaccumulative.
hexafluoroantimonic acid (16950-06-4)	
Bioaccumulative potential	Bioaccumulation: No data available.
selenious acid (7783-00-8)	
BCF fish 1	20 (BCF)
Bioaccumulative potential	bioaccumulable.
12.4. Mobility in soil	
boric acid (10043-35-3)	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.
Ecology - waste materials	: Avoid release to the environment.
European List of Waste (LoW) code	: 16 05 06* - laboratory chemicals consisting of or containing dangerous substances including mixtures of laboratory chemicals
HP Code	: H8 - 'Corrosive': substances and preparations which may destroy living tissue on contact.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Transport document description				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	hexafluoroantimonic acid - ammonium hexafluorotitanate - nitric acid
3(a) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	silver nitrate - bismuth(III)nitrate,pentahydrate - nickel nitrate

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	silver nitrate - aluminium nitrate - barium nitrate - cadmium nitrate - chromium(III) nitrate - lead nitrate - strontium nitrate - calcium nitrate - magnesium nitrate - copper(II) nitrate - cobalt dinitrate - bismuth(III)nitrate.pentahydrate - iron(III) nitrate - selenious acid - hexafluoroantimonic acid - arsenic acid - zinc nitrate - ammonium hexafluorotitanate - ammonium metavanadate - nitric acid - sodium nitrate - lithium nitrate - beryllium nitrate - manganese(II)nitrate - thallium(I)nitrate - nickel nitrate
3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	silver nitrate - cadmium nitrate - lead nitrate - strontium nitrate - copper(II) nitrate - cobalt dinitrate - selenious acid - hexafluoroantimonic acid - arsenic acid - zinc nitrate - ammonium metavanadate - beryllium nitrate - thallium(I)nitrate - nickel nitrate
23. Cadmium	cadmium nitrate
28. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as Carcinogen category 1A or 1B (Table 3.1) or Carcinogen category 1 or 2 (Table 3.2) and listed as follows: Carcinogen category 1A (Table 3.1)/Carcinogen category 1 (Table 3.2) listed in Appendix 1 Carcinogen category 1B (Table 3.1)/Carcinogen category 2 (Table 3.2) listed in Appendix 2	cobalt dinitrate - nickel nitrate
30. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as Toxic to Reproduction category 1A or 1B (Table 3.1) or Toxic to Reproduction category 1 or 2 (Table 3.2) and listed as follows: Reproductive toxicant category 1A adverse effects on sexual function and fertility or on development (Table 3.1) or Reproductive toxicant category 1 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 5 Reproductive toxicant category 1B adverse effects on sexual function and fertility or on development (Table 3.1) or Reproductive toxicant category 2 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 6	boric acid - cobalt dinitrate - nickel nitrate

Contains a substance on the REACH candidate list in concentration $\geq 0.1\%$ or with a lower specific limit: Cobalt(II) dinitrate (EC 233-402-1, CAS 10141-05-6)

Contains no REACH Annex XIV substances in concentration \geq to the Annex XIV limit values

15.1.2. National regulations

Germany

VwVwS Annex reference : Water hazard class (WGK) 2, hazard to waters (Classification according to VwVwS, Annex 4)
 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : cobalt dinitrate,nickel nitrate are listed
 SZW-lijst van mutagene stoffen : None of the components are listed
 NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : nickel nitrate is listed
 NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : boric acid,cobalt dinitrate,nickel nitrate are listed
 NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : boric acid,nickel nitrate are listed

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product
 Pregnant/breastfeeding women working with the product must not be in direct contact with the product
 The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information



Multi-element Standard Solution for ICP.

28 Components in HNO₃ 5%

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:

Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Carc. 1A	Carcinogenicity, Category 1A
Carc. 1A	Carcinogenicity (inhalation) Category 1A
Carc. 1B	Carcinogenicity, Category 1B
Carc. 1B	Carcinogenicity (inhalation) Category 1B
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Muta. 2	Germ cell mutagenicity, Category 2
Ox. Liq. 2	Oxidising Liquids, Category 2
Ox. Sol. 2	Oxidising Solids, Category 2
Ox. Sol. 3	Oxidising Solids, Category 3
Repr. 1A	Reproductive toxicity, Category 1A
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 1B	Reproductive toxicity, Category 1B
Resp. Sens. 1	Sensitisation — Respiratory, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, Category 1
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H272	May intensify fire; oxidiser
H290	May be corrosive to metals
H300	Fatal if swallowed
H301	Toxic if swallowed
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H341	Suspected of causing genetic defects
H350	May cause cancer
H350i	May cause cancer by inhalation
H360D	May damage the unborn child



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H360Df	May damage the unborn child. Suspected of damaging fertility
H360F	May damage fertility
H360FD	May damage fertility. May damage the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

SDS EU Mod H F (REACH ANNEX II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.