Standard Solution for ICP - Cadmium 10000ppm in HNO3 5% (S 210)

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 22/12/2014 Revision date: 22/12/2014 : Version: 1.1

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

1.1. Product identifier

Product form : Mixture

Name : Standard Solution for ICP - Cadmium 10000ppm in HNO3 5% (S 210)

Product code : S210

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/Professional use spec : Industrial
For professional use only

Use of the substance/mixture : Laboratory chemical

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.
201 Dyke Road
BN3 1TL Hove
United Kingdom
T +44 (0)207 193 9114 - F +44 (0)203 432 4686
Email: contact@spectracer.co.uk

1.4. Emergency telephone number

Emergency number : 112 (EU)

Country	Organisation/Company	Address	Emergency number
IRELAND (REPUBLIC OF)	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 Tox. 4 (Oral) H302

Acute Tox. 4 (Dermal) H312

Acute Tox. 4 (Inhalation) H332

Skin Corr. 1B H314

Aquatic Chronic 2 H411

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xn; R20/21/22

C; R34

N; R51/53

Full text of R-phrases: 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) :

GHS05 GHS07 GHS09

Signal word (CLP) : Danger

Hazardous ingredients : nitric acid

Hazard statements (CLP) : H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled
H314 - Causes severe skin burns and eye damage
H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (CLP) : P260 - Do not breathe fume, vapours, mist, spray
P264 - Wash hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment
P280 - Wear eye protection, face protection, protective clothing, protective gloves

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 Directive 67/548/EEC
nitric acid	(CAS No) 7697-37-2 (EC no) 231-714-2 (EC index no) 007-004-00-1	5	O; R8 C; R35
cadmium nitrate	(CAS No) 10325-94-7 (EC no) 233-710-6 (EC index no) 048-001-00-5	2,103	O; R8 Xn; R20/21/22 N; R50/53

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	(5 =< C < 20) C;R34 (C >= 20) C;R35 (C >= 70) O;R8
cadmium nitrate	(CAS No) 10325-94-7 (EC no) 233-710-6 (EC index no) 048-001-00-5	(C >= 0,1) Xn;R20/21/22

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	5	Ox. Liq. 3, H272 Skin Corr. 1A, H314
cadmium nitrate	(CAS No) 10325-94-7 (EC no) 233-710-6 (EC index no) 048-001-00-5	2,103	Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

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	(5 =< C < 20) Skin Corr. 1B, H314 (C >= 20) Skin Corr. 1A, H314 (C >= 65) Ox. Liq. 3, H272

Full text of R- and H-phrases: 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. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after skin contact : Immediately call a POISON CENTER or doctor/physician. Wash with plenty of soap and water. Wash contaminated clothing before reuse. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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. Call a POISON CENTER or doctor/physician if you feel unwell. 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.

Symptoms/injuries after skin contact : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

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

No additional information available

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 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.

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. Do not breathe fume, vapours, mist, spray.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. 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

nitric acid (7697-37-2)		
Austria	Local name	Salpetersäure
Austria	MAK Short time value (mg/m³)	2,6 mg/m³
Austria	MAK Short time value (ppm)	1 ppm
Belgium	Local name	Acide nitrique
Belgium	Short time value (mg/m³)	2,6 mg/m³
Belgium	Short time value (ppm)	1 ppm
Bulgaria	Local name	Азотна киселина•
Bulgaria	OEL STEL (mg/m³)	2,6 mg/m³
Croatia	Local name	Dušična kiselina
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m³)	2,6 mg/m³
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (ppm)	1 ppm
Croatia	Naznake (HR)	EU** O, C
Czech Republic	Local name	Kyselina dusi ná
Czech Republic	Expoziční limity (PEL) (mg/m³)	1 mg/m³
Czech Republic	Expoziční limity (PEL) (ppm)	0,39 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	2,5 mg/m³
Czech Republic	Expoziční limity (NPK-P) (ppm)	1 ppm
Denmark	Local name	Salpetersyre (2007)
Denmark	Grænseværdie (kortvarig) (mg/m³)	2,6 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	1 ppm
Denmark	Anmærkninger (DK)	ES
Estonia	Local name	Lämmastikhape
Estonia	OEL STEL (mg/m³)	2,6 mg/m³
Estonia	OEL STEL (ppm)	1 ppm
Finland	Local name	Typpihappo
Finland	HTP-arvo (8h) (mg/m³)	1,3 mg/m³
Finland	HTP-arvo (8h) (ppm)	0,5 ppm
Finland	HTP-arvo (15 min)	2,6 mg/m³
Finland	HTP-arvo (15 min) (ppm)	1 ppm
France	Local name	Acide nitrique
France	VLE (mg/m³)	2,6 mg/m³
France	VLE (ppm)	1 ppm
Germany	Local name	Salpetersäure
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	2,6 mg/m³
Germany	TRGS 900 Occupational exposure limit value (ppm)	1 ppm
Germany	Remark (TRGS 900)	EU,13,16
Greece	OEL STEL (mg/m³)	2,6 mg/m³
Greece	OEL STEL (ppm)	1 ppm
Hungary	Local name	SALÉTROMSAV
Hungary	CK-érték	2,6 mg/m³
Hungary	Megjegyzések (HU)	i, m; I.
Ireland	Local name	Nitric acid

nitric acid (7697-37-2)		
Ireland	OEL (15 min ref) (mg/m3)	2,6 mg/m³
Ireland	OEL (15 min ref) (ppm)	1 ppm
Ireland	Notes (IE)	IOELV
Italy	Local name	Acido nitrico
Italy	OEL STEL (mg/m³)	2,6 mg/m³
Italy	OEL STEL (ppm)	1 ppm
Lithuania	Local name	Nitrato rūgštis (azoto rūgštis)
Lithuania	TPRV (mg/m³)	2,6 mg/m³
Lithuania	TPRV (ppm)	1 ppm
Luxembourg	Local name	Acide nitrique
Luxembourg	OEL STEL (mg/m³)	2,6 mg/m³
Luxembourg	OEL STEL (ppm)	1 ppm
Malta	Local name	Nitric acid
Malta	OEL STEL (mg/m³)	2,6 mg/m³
Malta	OEL STEL (ppm)	1 ppm
Netherlands	Local name	Salpeterzuur
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	1,3 mg/m³
Poland	Local name	Kwas azotowy(V)
Poland	NDS (mg/m³)	1,4 mg/m³
Poland	NDSCh (mg/m³)	2,6 mg/m³
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/m³)	2,6 mg/m³
Romania	OEL STEL (ppm)	1 ppm
Slovenia	Local name	dušikova kislina
Slovenia	OEL TWA (mg/m³)	2,6 mg/m³
Slovenia	OEL TWA (ppm)	1 ppm
Slovenia	OEL STEL (mg/m³)	2,6 mg/m³
Slovenia	OEL STEL (ppm)	1 ppm
Sweden	Local name	Nitric acid
Sweden	kortidsvärde (KTV) (mg/m³)	13 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	5 ppm
United Kingdom	Local name	Nitric acid
United Kingdom	WEL TWA (mg/m³)	5 mg/m³
United Kingdom	WEL STEL (mg/m³)	2,6 mg/m³
United Kingdom	WEL STEL (ppm)	1 ppm
Iceland	Local name	Saltpéturssýra
Iceland	OEL (15 min ref) (mg/m3)	2,6 mg/m³
Iceland	OEL (15 min ref) (ppm)	1 ppm
Norway	Local name	Salpetersyre
Norway	Gjennomsnittsverdier (AN) (mg/m³)	5 mg/m³
Norway	Gjennomsnittsverdier (AN) (ppm)	2 ppm
Switzerland	Local name	Acide nitrique
Switzerland	VME (mg/m³)	5 mg/m³
Switzerland	VME (ppm)	2 ppm
Switzerland	VLE (mg/m³)	5 mg/m³

nitric acid (7697-37-2)		
Switzerland	VLE (ppm)	2 ppm
Switzerland	Remark (CH)	15 min
Australia	Local name	Nitric acid
Australia	TWA (mg/m³)	5,2 mg/m³
Australia	TWA (ppm)	2 ppm
Australia	STEL (mg/m³)	10 mg/m³
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/m³)	5 mg/m³
USA - OSHA	OSHA PEL (TWA) (ppm)	2 ppm

cadmium nitrate (10325-94-7)		
Belgium	Limit value (mg/m³)	0,002 mg/m³
Bulgaria	Local name	Кадмий и неорг. Съединения (като кадмий)
Bulgaria	OEL TWA (mg/m³)	0,05 mg/m³
Croatia	Local name	Kadmijevi (nepiroforni) spojevi (kao Cd)
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	0,025 mg/m³
Croatia	Naznake (HR)	T+, N
Czech Republic	Local name	jakoKadmiumCd a jeho slou eniny,
Czech Republic	Expoziční limity (PEL) (mg/m³)	0,05 mg/m³
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	0,1 mg/m³
Czech Republic	Remark (CZ)	D
Denmark	Local name	Cadmium, pulver, støv, røg og uorganiske forbindelser, beregnet som Cd (2000)
Denmark	Grænseværdie (langvarig) (mg/m³)	0,005 mg/m³
Denmark	Anmærkninger (DK)	K
Finland	Local name	Kadmium, metalli
Finland	HTP-arvo (8h) (mg/m³)	0,02 mg/m³
France	Local name	Cadmium et composés,en Cd
France	VME (mg/m³)	0,05 mg/m³
Greece	OEL TWA (mg/m³)	0,025 mg/m³
Greece	OEL STEL (mg/m³)	0,1 mg/m³
Hungary	Local name	KADMIUM ÉS SZERVETLEN VEGYÜLETEI
Hungary	MK-érték	0,015 mg/m³
Hungary	Megjegyzések (HU)	k; BEM
Netherlands	Local name	Cadmiumchloride (als Cd)
Netherlands	Grenswaarde TGG 8H (mg/m³)	0,005 mg/m³
Portugal	Local name	Cádmio, elemento e ompostos, expressos em Cd
Portugal	OEL TWA (mg/m³)	0,01 mg/m³
Romania	Local name	Cadmiu şi compuşi (exprimatîn Cd)
Romania	OEL TWA (mg/m³)	0,05 mg/m³
United Kingdom	WEL TWA (mg/m³)	0,025 mg/m³
Switzerland	Local name	Cadmium et ses composés (sauf oxyde de cadmium)
Switzerland	VME (mg/m³)	0,015 mg/m³
Australia	Local name	Cadmium and compounds (as Cd)
Australia	TWA (mg/m³)	0,01 mg/m³
USA - ACGIH	ACGIH TWA (mg/m³)	0,01 mg/m³

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

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	:	No data available
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	:	No data available
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

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 : Oral: Harmful if swallowed. Dermal: Harmful in contact with skin. Inhalation: Harmful if inhaled.

cadmium nitrate (10325-94-7)	
LD50 oral rat	300 mg/kg (Rat)

Skin corrosion/irritation : Causes severe skin burns and eye damage.

Serious eye damage/irritation : Serious eye damage, category 1, implicit

Respiratory or skin sensitisation : Not classified
Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified
Based on available data, the classification criteria are not met

Carcinogenicity : Not classified
Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated exposure) : Not classified
Based on available data, the classification criteria are not met

Aspiration hazard : Not classified
Based on available data, the classification criteria are not met

Potential adverse human health effects and symptoms : Harmful if swallowed. Harmful in contact with skin.

SECTION 12: Ecological information

12.1. Toxicity

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

nitric acid (7697-37-2)	
LC50 fish 1	25 - 36 mg/l (96 h; Lepomis macrochirus)
LC50 other aquatic organisms 1	180 mg/l (48h) Crustaceans; Portmann, J.E., and K.W. Wilson 1971. The Toxicity of 140 Substances to the Brown Shrimp and Other Marine Animals. Shellfish Information Leaflet No.22 (2nd Ed.), Ministry of Agric.Fish.Food, Fish.Lab.Burnham-on-Crouch, Essex, and Fish Exp.Station Conway, North Wales :12 p.
EC50 Daphnia 1	180 mg/l (48 h; Daphnia magna)
LC50 fish 2	72 ppm (Gambusia affinis)
Threshold limit algae 1	> 19 mg/l (Algae)

cadmium nitrate (10325-94-7)	
LC50 fish 1	0,802 mg/l (48 h; Pimephales promelas)
EC50 Daphnia 1	0,04 mg/l (48 h; Daphnia magna; Larvae)
LC50 fish 2	0,055 mg/l 48 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 2	0,16 mg/l (24 h; Daphnia magna)
Threshold limit other aquatic organisms 1	0,011 mg/l (Protozoa; Cadmium ion)
Threshold limit algae 1	0,031 mg/l (Scenedesmus quadricauda; Cadmium ion)
Threshold limit algae 2	0,7 mg/l (136 h; Reproduction)

12.2. Persistence and degradability

Standard Solution for ICP - Cadmium 10000ppm in HNO3 5% (S 210)	
Persistence and degradability	May cause long-term adverse effects in the environment.

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
BOD (% of ThOD)	Not applicable

cadmium nitrate (10325-94-7)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

Standard Solution for ICP - Cadmium 10000ppm in HNO3 5% (S 210)	
Bioaccumulative potential	Not established.

nitric acid (7697-37-2)	
BCF fish 1	<= 1 (Pisces)
Log Pow	-2,3 (OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)
Bioaccumulative potential	Bioaccumulation: Not applicable.

cadmium nitrate (10325-94-7)	
BCF other aquatic organisms 1	1220 (Crassostrea sp.; Chronic)
BCF other aquatic organisms 2	603 (504 h; Lemna sp.)
Bioaccumulative potential	bioaccumulable.

12.4. Mobility in soil

No additional information available

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

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to a licensed waste centre in accordance with local/regional/national/international 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

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR) : 1760

UN-No. (IMDG) : 1760

UN-No.(IATA) : 1760

UN-No.(ADN) : 1760

UN-No. (RID) : 1760

14.2. UN proper shipping name

Proper Shipping Name (ADR) : CORROSIVE LIQUID, N.O.S.

Proper Shipping Name (IMDG) : CORROSIVE LIQUID, N.O.S.

Proper Shipping Name (IATA) : Corrosive liquid, n.o.s.

Proper Shipping Name (ADN)	:	CORROSIVE LIQUID, N.O.S.
Proper Shipping Name (RID)	:	CORROSIVE LIQUID, N.O.S.
Transport document description (ADR)	:	UN 1760 CORROSIVE LIQUID, N.O.S. (CONTAINS nitric acid(7697-37-2) ; cadmium nitrate(10325-94-7)), 8, II, (E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG)	:	UN 1760 CORROSIVE LIQUID, N.O.S., 8, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 8

Danger labels (ADR) : 8

:

IMDG

Transport hazard class(es) (IMDG) : 8

Danger labels (IMDG) : 8

:

IATA

Transport hazard class(es) (IATA) : 8

Hazard labels (IATA) : 8

:

ADN

Transport hazard class(es) (ADN) : 8

Danger labels (ADN) : 8

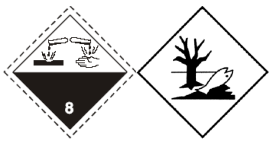
:

RID

Transport hazard class(es) (RID) : 8

Danger labels (RID) : 8

:



14.4. Packing group

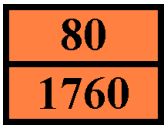
Packing group (ADR)	:	II
Packing group (IMDG)	:	II
Packing group (IATA)	:	II
Packing group (ADN)	:	II
Packing group (RID)	:	II

14.5. Environmental hazards

Dangerous for the environment	:	Yes
Marine pollutant	:	Yes
Other information	:	No supplementary information available

14.6. Special precautions for user

14.6.1. Overland transport

Classification code (ADR)	:	C9
Special provisions (ADR)	:	274
Limited quantities (ADR)	:	1l
Excepted quantities (ADR)	:	E2
Packing instructions (ADR)	:	P001, IBC02
Mixed packing provisions (ADR)	:	MP15
Portable tank and bulk container instructions (ADR)	:	T11
Portable tank and bulk container special provisions (ADR)	:	TP2, TP27
Tank code (ADR)	:	L4BN
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	2
Hazard identification number (Kemler No.)	:	80
Orange plates	:	
Tunnel restriction code (ADR)	:	E
EAC code	:	2X
APP code	:	B

14.6.2. Transport by sea

Special provisions (IMDG)	:	274
Limited quantities (IMDG)	:	1 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
IBC packing instructions (IMDG)	:	IBC02
Tank instructions (IMDG)	:	T11
Tank special provisions (IMDG)	:	TP2, TP27
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-B
Stowage category (IMDG)	:	B

14.6.3. Air transport

PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y840
PCA limited quantity max net quantity (IATA)	:	0.5L
PCA packing instructions (IATA)	:	851
PCA max net quantity (IATA)	:	1L
CAO packing instructions (IATA)	:	855
CAO max net quantity (IATA)	:	30L

Special provisions (IATA)	:	A3
ERG code (IATA)	:	8L

14.6.4. Inland waterway transport

Classification code (ADN)	:	C9
Special provisions (ADN)	:	274
Limited quantities (ADN)	:	1 L
Excepted quantities (ADN)	:	E2
Carriage permitted (ADN)	:	T
Equipment required (ADN)	:	PP, EP
Number of blue cones/lights (ADN)	:	0
Carriage prohibited (ADN)	:	No
Not subject to ADN	:	No

14.6.5. Rail transport

Classification code (RID)	:	C9
Special provisions (RID)	:	274
Limited quantities (RID)	:	1L
Excepted quantities (RID)	:	E2
Packing instructions (RID)	:	P001, IBC02
Mixed packing provisions (RID)	:	MP15
Portable tank and bulk container instructions (RID)	:	T11
Portable tank and bulk container special provisions (RID)	:	TP2, TP27
Tank codes for RID tanks (RID)	:	L4BN
Transport category (RID)	:	2
Colis express (express parcels) (RID)	:	CE6
Hazard identification number (RID)	:	80
Carriage prohibited (RID)	:	No

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	Standard Solution for ICP - Cadmium 10000ppm in HNO3 5% (S 210)
23. Cadmium	cadmium nitrate

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

Water hazard class (WGK)	:	2 - hazard to waters
WGK remark	:	Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

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 R-, H- and EUH-phrases:

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 (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
Ox. Liq. 3	Oxidising Liquids, Category 3
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H272	May intensify fire; oxidiser
H301	Toxic if swallowed
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H332	Harmful if inhaled
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
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R34	Causes burns
R35	Causes severe burns
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R8	Contact with combustible material may cause fire
C	Corrosive
N	Dangerous for the environment
O	Oxidising
Xn	Harmful

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.