Nessler's Reagent

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 7/3/2025 Revision date: 1/15/2026 Supersedes: 7/3/2025 Version: 4.1
SDS No: 12192-0008

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	Nessler's Reagent
UFI	:	2Q00-7098-100C-4NWY
Product code	:	TN1515, TN1515-01

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

1.2.1. Relevant identified uses

Use of the substance/mixture	:	Detection reagent for the analysis of microorganisms.

1.2.2. Uses advised against

Restrictions on use	:	Not for consumer use, only for use by trained personnel.

1.3. Details of the supplier of the safety data sheet

sifin diagnostics gmbh
Berliner Allee 317-321
13088 Berlin
Germany
T +49 30 700 144-0, F +49 30 700 144-30
info@sifin.de
E-mail address of competent person responsible for the SDS: sds@gbk-ingelheim.de

1.4. Emergency telephone number

Emergency number	:	+49 30 700 144-0, available during normal office hours

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Corrosive to metals, Category 1	H290
Acute toxicity (oral), Category 3	H301
Acute toxicity (dermal), Category 2	H310
Acute toxicity (inhalation:dust,mist) Category 3	H331
Skin corrosion/irritation, Category 1, Sub-Category 1A	H314
Serious eye damage/eye irritation, Category 1	H318
Specific target organ toxicity – Repeated exposure, Category 2	H373
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

May be corrosive to metals. May cause damage to organs through prolonged or repeated exposure. Fatal in contact with skin. Toxic if inhaled. Toxic if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05 GHS06 GHS08 GHS09

Signal word (CLP) : Danger

Contains : potassium hydroxide; Potassium tetraiodo-mercurat(II)

Hazard statements (CLP) : H290 - May be corrosive to metals.
H301+H331 - Toxic if swallowed or if inhaled.
H310 - Fatal in contact with skin.
H314 - Causes severe skin burns and eye damage.
H373 - May cause damage to organs (kidneys, central nervous system) through prolonged or repeated exposure.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340+P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314 - Get medical advice/attention if you feel unwell.

Labelling according to: exemption for packages of a capacity of 125ml or less

Hazard pictograms (CLP) :



GHS05 GHS06 GHS08 GHS09

Signal word (CLP) : Danger

Hazardous ingredients : potassium hydroxide; Potassium tetraiodo-mercurat(II)

Hazard statements (CLP) : H301+H331 - Toxic if swallowed or if inhaled.
H310 - Fatal in contact with skin.
H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP) : P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340+P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
potassium hydroxide	CAS-No.: 1310-58-3 EC-No.: 215-181-3 EC Index-No.: 019-002-00-8 REACH-no: 01-2119487136-33	≥ 10 – < 20	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Corr. 1A, H314 Eye Dam. 1, H318

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Potassium tetraiodo-mercurat(II)	CAS-No.: 7783-33-7 EC-No.: 231-990-4	≥ 1 – < 10	Acute Tox. 2 (Oral), H300 (ATE=5 mg/kg bodyweight) Acute Tox. 1 (Dermal), H310 (ATE=5 mg/kg bodyweight) Acute Tox. 2 (Inhalation), H330 (ATE=0.05 mg/l/4h) STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits (%)**
potassium hydroxide	CAS-No.: 1310-58-3 EC-No.: 215-181-3 EC Index-No.: 019-002-00-8 REACH-no: 01-2119487136-33	(0.5 ≤ C < 2) Skin Irrit. 2; H315 (0.5 ≤ C < 2) Eye Irrit. 2; H319 (2 ≤ C < 5) Skin Corr. 1B; H314 (5 ≤ C ≤ 100) Skin Corr. 1A; H314
Potassium tetraiodo-mercurat(II)	CAS-No.: 7783-33-7 EC-No.: 231-990-4	(1 ≤ C ≤ 100) STOT RE 2; H373

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Consult a doctor/medical service if you feel unwell. Call a doctor.

First-aid measures after skin contact : Take off immediately all contaminated clothing. Call a physician immediately. Rinse skin with water/shower.

First-aid measures after eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth thoroughly with water. If the person is fully conscious, make him/her drink plenty of water. Never give an unconscious person anything to drink. Call a doctor. Rinse mouth. Call a physician immediately. Do not induce vomiting.

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

Symptoms/effects : Mercury compounds have a cytotoxic and protoplasmatoxic effect. Intoxication symptoms, acute contact with eyes causes severe lesions. Swallowing and inhalation of dusts damages mucous membranes of gastrointestinal and respiratory tract (metallic taste, nausea, vomiting, abdominal pain, bloody diarrhoea, intestinal burns, glottal oedema, aspiration pneumonia); drop in blood pressure, cardiac dysrhythmia, circulatory collapse, and renal failure; chronic: inflammation of the mouth with loss of teeth and mercurial line. The principal signs manifest themselves in the CNS (impaired speech, vision, hearing, and sensitivity, loss of memory, irritability, hallucinations, delirium inter alia).

Symptoms/effects after inhalation : Toxic if inhaled.

Symptoms/effects after skin contact : Fatal in contact with skin. Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Toxic if swallowed. Burns.

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 : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : mercury vapours. hydrogen iodide.

5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Contain the extinguishing fluids by bunding. Do not allow run-off from fire fighting to enter drains or water courses.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Do not breathe dust/fume/gas/mist/vapours/spray. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter drains or water courses.

6.3. Methods and material for containment and cleaning up

For containment : Do not allow into drains or water courses. Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Use only outdoors or in a well-ventilated area.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Keep in a cool, well-ventilated place away from heat.
Storage conditions	:	Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Storage temperature 10 - 25 °C.
Incompatible materials	:	Metals.
Storage temperature	:	10 – 25 °C
Information on mixed storage	:	Keep away from food, drink and animal feeding stuffs.
Packaging materials	:	Always store product in container of same material as original container.

7.3. Specific end use(s)

See Section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available.

8.1.2. Recommended monitoring procedures

No additional information available.

8.1.3. Air contaminants formed

No additional information available.

8.1.4. DNEL and PNEC

No additional information available.

8.1.5. Control banding

No additional information available.

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:
Wear recommended personal protective equipment.

8.2.2.1. Eye and face protection

Eye protection:
Protective goggles (EN 166). Face shield

8.2.2.2. Skin protection

Skin and body protection:
Long sleeved protective clothing (DIN EN ISO 6530)

Hand protection:
Chemically resistant protective gloves. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer.

Hand protection

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Chemically resistant protective gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,11		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:
Breathing apparatus in the event of aerosol or mist formation. Breathing apparatus with filter. Filter type. Hg-P3. [In case of inadequate ventilation] wear respiratory protection.

Respiratory protection			
Device	**Filter type**	**Condition**	**Standard**
Breathing apparatus with filter	Hg-P3	If vapors/aerosols occur	EN 143

8.2.2.4. Thermal hazards

No additional information available.

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	light yellow
Odour	:	Odourless
Odour threshold	:	Not available
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	Decomposes before boiling
Flammability	:	No data available.
Lower explosive limit (LEL)	:	Not available
Upper explosive limit (UEL)	:	Not available
Flash point	:	Not available
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	Strongly alkaline
Viscosity, kinematic	:	Not available
Solubility	:	Water: completely miscible
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	0 Pa
Vapour pressure at 50°C	:	Not available
Density	:	1.16 g/100ml (20 °C)
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable.

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available.

9.2.2. Other safety characteristics

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts violently with. Metals. Light metals. Halogens. Halogenated compounds. organic nitro-compounds. Phosphorus. anhydrides. non-metallic oxides. Gives off hydrogen by reaction with metals.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Glass. Animal / vegetable tissues. metals.

10.6. Hazardous decomposition products

mercury vapours. hydrogen iodide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Toxic if swallowed.
Acute toxicity (dermal) : Fatal in contact with skin.
Acute toxicity (inhalation) : Inhalation:dust,mist: Toxic if inhaled.

Nessler's Reagent	
LD50 oral	77.06 mg/kg
LD50 dermal	79.07 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	0.791 mg/l/4h

Skin corrosion/irritation : Causes severe skin burns.
pH: Strongly alkaline
Serious eye damage/irritation : Causes serious eye damage.
pH: Strongly alkaline
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)
STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure : May cause damage to organs (kidneys, central nervous system) through prolonged or repeated exposure.
Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available.

11.2.2. Other information

No additional information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short–term (acute) : Very toxic to aquatic life.

Hazardous to the aquatic environment, long–term (chronic) : Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

No additional information available.

12.3. Bioaccumulative potential

No additional information available.

12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment

No additional information available.

12.6. Endocrine disrupting properties

No additional information available.

12.7. Other adverse effects

No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Product must be disposed of in accordance with the Waste Directive 2008/98/EC and national and regional regulations. Leave chemicals in original container. Do not mix with other waste. Contaminated packagings are to be treated like the product itself. Must not be disposed together with household garbage.

Sewage disposal recommendations : Do not discharge into drains. Avoid discharge to the environment.

Product/Packaging disposal recommendations : Product residues are subject to disposal as hazardous waste in accordance with national and regional regulations.

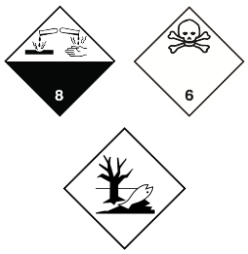
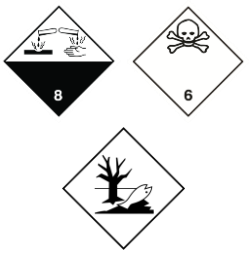
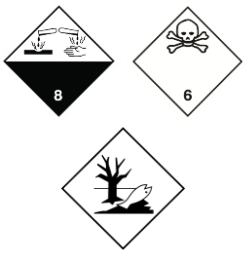
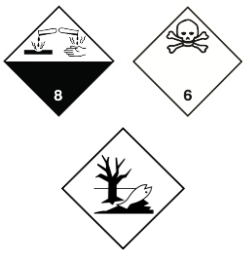
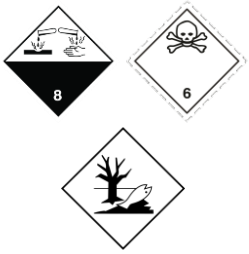
Additional information : **Do not autoclave the product for disposal purposes. Heating may release mercury vapors. Dispose of used tubes containing potentially infectious material and mercury compounds via a local waste disposal service provider, specifying the waste code number (LoW).**

European List of Waste (LoW, EC 2000/532) : **18 01 03* - wastes whose collection and disposal is subject to special requirements in order to prevent infection**
06 04 04* - wastes containing mercury

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 2922	UN 2922	UN 2922	UN 2922	UN 2922
14.2. UN proper shipping name				
CORROSIVE LIQUID, TOXIC, N.O.S. (potassium hydroxide ; Potassium tetraiodo-mercurat(II))	CORROSIVE LIQUID, TOXIC, N.O.S. (potassium hydroxide ; Potassium tetraiodo-mercurat(II))	Corrosive liquid, toxic, n.o.s. (potassium hydroxide ; Potassium tetraiodo-mercurat(II))	CORROSIVE LIQUID, TOXIC, N.O.S. (potassium hydroxide ; Potassium tetraiodo-mercurat(II))	CORROSIVE LIQUID, TOXIC, N.O.S. (potassium hydroxide ; Potassium tetraiodo-mercurat(II))
14.3. Transport hazard class(es)				
8 (6.1)	8 (6.1)	8 (6.1)	8 (6.1)	8 (6.1)

ADR	IMDG	IATA	ADN	RID
				
14.4. Packing group				
II	II	II	II	II
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	CT1
Special provisions (ADR)	:	274
Limited quantities (ADR)	:	1l
Excepted quantities (ADR)	:	E2
Packing instructions (ADR)	:	P001, IBC02
Mixed packing provisions (ADR)	:	MP15
Transport category (ADR)	:	2
Hazard identification number (Kemler No.)	:	86
Orange plates	:	
Tunnel restriction code (ADR)	:	E

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)	:	T7
Tank special provisions (IMDG)	:	TP2
Stowage category (IMDG)	:	B
Stowage and handling (IMDG)	:	SW2

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, A4, A803
ERG code (IATA)	:	8P

Inland waterway transport

Classification code (ADN)	:	CT1
Special provisions (ADN)	:	274, 802
Limited quantities (ADN)	:	1 L
Excepted quantities (ADN)	:	E2
Carriage permitted (ADN)	:	T
Equipment required (ADN)	:	PP, EP, TOX, A
Ventilation (ADN)	:	VE02
Number of blue cones/lights (ADN)	:	2

Rail transport

Classification code (RID)	:	CT1
Special provisions (RID)	:	274
Limited quantities (RID)	:	1L
Excepted quantities (RID)	:	E2
Packing instructions (RID)	:	P001, IBC02
Transport category (RID)	:	2
Hazard identification number (RID)	:	86

14.7. Maritime transport in bulk according to IMO instruments

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

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals): dipotassium tetraiodomercurate (7783-33-7)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation (EU) 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Seveso Directive (Disaster Risk Reduction)

Seveso III Part I (Categories of dangerous substances)	Qualifying quantity (tonnes)	
	Lower-tier	Upper-tier
H2 ACUTE TOXIC — Category 2, all exposure routes — Category 3, inhalation exposure route	50	200
E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1	100	200

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstracts Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
CSA	Chemical safety assessment
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
N.O.S.	Not Otherwise Specified
NOAEC	No-Observed Adverse Effect Concentration

Abbreviations and acronyms:	
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OSHA	Occupational Safety & Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TF	Technical function
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
UFI	Unique Formula Identifier
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
ADG	Transport of Australian Dangerous Goods
DOT	Department of Transport
GHS	Globally Harmonized System of Classification, Labelling and Packaging of Chemicals
IBC-Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
MARPOL 73/78	MARPOL 73/78: International Convention for the Prevention of Pollution From Ships
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
TDG	Transportation of Dangerous Goods

Other information : Data of sections 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities. The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge. The delivery specifications are contained in the corresponding product sheet. This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

Full text of H- and EUH-statements:	
Acute Tox. 1 (Dermal)	Acute toxicity (dermal), Category 1
Acute Tox. 2 (Dermal)	Acute toxicity (dermal), Category 2
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4

Full text of H- and EUH-statements:	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
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
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
H290	May be corrosive to metals.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H373	May cause damage to organs (kidneys, central nervous system) through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Met. Corr. 1	H290	On basis of test data
Acute Tox. 3 (Oral)	H301	On basis of test data
Acute Tox. 2 (Dermal)	H310	On basis of test data
Acute Tox. 3 (Inhalation:dust,mist)	H331	On basis of test data
Skin Corr. 1A	H314	Calculation method
Eye Dam. 1	H318	Calculation method
STOT RE 2	H373	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	Expert judgement

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 therefore not be construed as guaranteeing any specific property of the product.