# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006 (REACH), amended by 2020/878/EU

Issue: 1 Revision: 13.03.2024

(EU-GB)

# SECTION 1:Identification of the substance/mixture and off the company/undertaking 1.1 Trade name:

# Silberprobiersäure/Test acid for Silver

Art.-No.12235, UFI: 0S00-R005-900F-S55C

Restricted to professional users

# 1.2 Relevant identified uses of the substance/mixture and uses advised against

**Application of the substance /** See trade name / according labelling under 1.1

the preparation Testing reagent for laboratory and precious metal trading

Uses advised against of the others

substance / the preparation all ways of spraying applications

# 1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier

Köhler Special Chemicals
Nils Köhler

Geranienstraße 1

e-mail: koehler-special-chemicals@gmx.de

D-76751Jockgrim

Website: www.koehler-special-chemicals.de

# 1.4 Emergency telephone number

This is an English-language document designed for the European region. For the emergency number and other country-specific data, please refer to the specific national versions of this safety data sheet. Medical Emergency information in case of poisoning:

Phone: +49 (0) 7271/9896365

University Hospital Bonn, Poison Information Center - 24h - Phone: +49 (0) 228 19240 (advisory service in German language)

#### 1.5 Further informations obtainable from

Köhler-Special-Chemicals, Contact datas see above

# **SECTION 2: Hazards information**

# 2.1 Classification of the product/mixture according to Regulation (EC) No 1272/2006 Regulation (EC) No 1272/2008:

Ox. Liq. 3; H272, Met. Corr. 1; H290, Carc. 1B; H350, Muta 1B; H340, Repr. Cat. 1B; H360FD, Acute Tox. 3; H331, Acute Tox. 4; H302, STOT RE 1; H372, Skin Corr. 1A; H314, Eye Dam. 1; H318, Resp. Sens. 1; H334, Stot. SE 3; H335, Aquatic Chronic. 1; H410

# 2.2 Labelling of the product/mixture according to Regulation (EC) No 1272/2006

Hazard pictograms:

GHS03, GHS05, GHS06, GHS08, GHS09

Signal word: Danger

**Hazard** H272 May intesify fire; oxidiser. **statements:** H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.H340 May cause genetic defects.

H350 May cause cancer

H360FD May damage fertility or the unborn child

H372 Causes damage to organs through prolonged or repeated exposure

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P201 Obtain special instructions before use.

P260 Do not breathe vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+330+331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P304+341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at

rest in a position comfortable for breathing..

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing..

P308+313 IF exposed or concerned: Get medical advice/attention.

P501 Dispose of contents/container in accordance to

local/regional/national/international regulations.

Additional information:

EUH071 Corrosive to the respiratory tract.

Hazardous ingredients for

Nitric acid, potassium dichromate

ingredients for labelling:

# 2.3 Other hazards

#### Results of PBT- and vPvB assesment

PBT: not applicable. vPvB: not applicable.

# **Endocrine disrupting properties**

Does not contain an endocrine disruptor (EDC) in a concentration of  $\geq 0,1\%$ .

# **SECTION 3: Composition/information on ingredients**

# 3.1 Substances

Not relevant (mixture)

#### 3.2 Mixtures

Hazardous components of the mixture

Ingredient:	EINECS:	CAS no:	INDEX-no.:	REACH-no.:	Concentration:	Classification: EC 1272/2008(CLP):
Nitric acid	231-714-2	7697-37-2	007-004-00-1	01- 2119487297- 23-xxxx	25 - 50 %	Ox. Liq. 3; H272 Met. Corr. 1; H290 Skin Corr. 1A; H314 Eye Dam. 1; H318 Acut Tox 3; H331
Potassium dichromate	231-906-6	7778-50-9	024-002-00-6		2,5 – 10 %	Carc. 1B; H350 Muta 1B; H340 Repr. 1B; H360FD Ox. Sol. 2; H272 Acute Tox. 4; H312 Acute Tox. 3; H301 Acute Tox. 2; H330 Skin Corr. 1B; H314 Resp. Sens. 1; H334 Skin Sens. 1; H377 STOT RE 1; H372 Aquatic Acute 1; H400 Aquatic Chronic. 1; H410

(Full text of H-phrases: see section 16.)

# 3.3 Additional informations

SVHC: 7778-50-9 potassium dichromat

#### **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

**General informations** Remove any clothing soiled by the product immediately.

Symptoms of poisoning may occur after several hours; therefore medical

observation for at least 48 hours after the accident. Remove breathing equipment

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only after removing contaminated clothing.

In case of irregular breathing or respiratory arrest provide artificial respiration.

In case of unconsciousness place and transport in stable side position.

**After inhalation** Fresh air or oxygen; seek medical advice.

In case of unconsciousness place and transport in stable side position.

**After skin contact** Remove any clothing soiled by the product immediately.

Wash off with plenty of water. Seek medical advice.

After eye contact After contact with the eyes, immediately rinse the open eyes 10 to 15 minutes

under running water. Seek medical advice (oculist).

After swallowing Immediately rinse the mouth with water for several times without swallowing the

water. Then let drink plenty of water. No administration in cases of

unconsciousness or convulsions. Do not induce vomiting. Seek medical advice.

**Self protection** First responders: take care of self-protection

# 4.2 Most important symptoms and effects, both acut and delayed

**Symptoms:** Breathing difficulties, allergic reactions

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

No further relevant information available.

# **SECTION 5: Firefighting measures**

# 5.1 Extinguishing media:

suitable: Water-spray, Carbon dioxid (CO2), foam, extinguishing powder

**Unsuitable:** Water with full jet

# 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released: Nitrogen oxides (NOx). May have a fire-promoting effected due to release of oxygen.

#### 5.3 Advice for firefighters

#### Protective equipement

Wear full protective suit with self-contained breathing apparatus.

#### **Additional informations**

Extinguishing measures in accordance to the surrounding conditions. The product itself does not burn. To protect persons and to cool endangered containers using water spray. Remove undamaged containers from the danger zone if possible without risk.Collect contaminated fire fighting water separately. It must not enter the sewage system

# **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipement and emergency procedures

Ensure adequate ventilation. Wear protective equipment. Remove persons to safety. Keep away unprotected persons.

#### 6.2 Environment precautions

Inform respective authorities in case of seepage into water coures or sewage system. Do not allow to enter sewers/surface or ground water.

# 6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, fused silica, acid-binder, universal-binder). Contaminated material has to be disposed as waste (see section 13). Avoid generations of dusts. Clean contaminated surface thoroughly. Ensure adequate ventilation.

#### 6.4 Reference to other sections

See section 5 for information on fire hazards of the substance or mixture

See section 7 for information on safe handling

See section 8 for inormation on personal protection equipement

See section 13 for disposal infomation

# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

# Advice on safe handling

Store locked up. Keep containers/bottles tightly closed. Open and handle container with care. Ensure good ventilation/exausting at the workplace. Do not breathe vapours/aerosols. Avoid contact with eyes and skin.

#### **Technical measures**

Ensure good ventilation.

# Notes on general hygiene at the workplace

Wash hands before breaks and at the end of work.

#### Additional information

None

# 7.2 Conditions for safe storage including any incompatibilities

# **Technical measures and conditions**

Ensure good ventilation.

#### Packaging materials

Keep containers/bottles tightly closed. Use original containers/bottles only.

# Requirements to be met by storerooms and receptacles

Store in cool, dry conditions. Observe official regulations on storage and handling of water harzardous substances.

#### Information about storage in one common storage facility

Observe storage instructions.

Keep away from flammable/combustible products.

Do not store together with alkalis (lyes).

Keep away from food, drink and animal feed.

# Further information about storage conditions

Protect against external influences such as UV radiation/sunlight, air/oxygen ingress.

Keep away from sources of heat and warmth.

Prevent contamination from entering.

Recommended storage temperature: 15 - 25 °C

Storage class: 6.1 B non flammable, toxic subsances (TRGS 510 German guideline)

# 7.3 Specific end use(s)

No further information available

# SECTION 8: Exposure controls/personal protection 8.1 Control parameters

# Ingredients with limit values that require monitoring at the workplace

Common exposure limits:

Country	Ingredient	CAS-No.	Identifier	TWA	STEL	Ceilling C	Notation	Source
EU	Nitric Acid	7697-37-2	IOLEV		1 ml/m <sup>3</sup> 2,6 mg/m <sup>3</sup>			2006/15/EG
EU	chromium(VI) compounds	7778-50-9	IOLEV	0,005 mg/m <sup>3</sup>			Cr, CrVI- limit	2017/2398/EU

#### Notation

Ceiling-C Ceiling value is a limit value above which exposure should not occur

Cr Calculated as Cr (chromium)

CrVI-limit Limit value 0,010 mg/m3 until 17 January 2025Limit value: 0,025 mg/m3 for welding or plasma cutting processes or similar

work processes that generate fumeuntil 17 January 2025

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period

(unless otherwise specified)

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8hours time-weighted average (unless otherwise specified)

#### **DNELs**

7697-37-2 Nitric acid

Inhalative DNEL (worker) 2,6 mg/m<sup>3</sup> (Acute - local-effects)

DNEL (worker) 2,6 mg/m<sup>3</sup> (Long-term - local-effects)

7778-50-9 Potassium dichromate

Inhalative DNEL (worker) 0,028 mg/m³ (Long-term-local-effects)

#### **PNECs**

7778-50-9 Potassium dichromate

0.21 mg/l (sewage treatment plant(STP)

Aqua 0 mg/l (fresh water)

Sediment 0,15 mg/kg (fresh water)

Sediment 0,15 mg/kg (marine water)

Soil 0,035 mg/kg

Additional information: The information is based on the lists valid at the time of production.

# 8.2 Exposure controls

# General protective and hygiene measures

Technical measures and the application of suitable work processes should be given priority over the use of personal protective equipment.

The personal protective equipment must be defined depending on the quantitites and concentration of hazardous substances in the workplace. (Risk assessment)

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and the end of work. Store protective clothing separately. Avoid contact with eyes and skin. Do not breathe vapours/aerosols.

# **Breathing equipment**

Continuously respected workplace exposure limits and other limits respiratory protection normally is not required.

Exceeding the minimum triggering level --> breathing filter apparatus

In case of brief exposure or low pollution use breathing filter apparatus. (Face mask according to EN 136) with filter type ABEK(P2) (EN 14387). In case of intensive or longer exposure use breathing apparatus that is independent of circulating air (according EN 137).

#### **Protection of hands**

The gloves must comply with EN 374-3.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

#### **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Gloves made of the following materials are suitable for permanent contact:

Recommended material thickness: ≥ 0.7 mm fluororubber (Viton), value for permeation: Level ≥ 480 min or

Recommended material thickness: ≥ 0.5 mm butyl rubber, value for permeation: level ≥ 480 min

Gloves made of the following materials are suitable for splash protection:

Recommended material thickness: ≥ 0.6 mm natural rubber (latex), value for permeation: level ≥ 120 min.

#### **Further protection measures**

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

# Eye protection

Tightly fitting safety glasses according EN 166.

#### **Body protection**

Protective clothing in accordance with EN 13688. Chemical resistant safety shoes or boots according EN 13832-1. If skin contact is possible, wear inpenetrable protective clothing against this substance according DIN EN 13034.

Protective clothing in accordance with EN 13688. Chemical resistant safety shoes or boots according EN 13832-1+2.

# **Environmental exposure controls**

see section 7. There are no further action is required.

# 8.3 Exposure scenario

none

# **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

**Appearance** 

Form: liquid
Color: orange clear
Odour: pungent

Safety relevant basic data

Density:	Parameter at 20°C	Value approx. 1,3	<b>Unit</b> g/cm³	Remark
pH:	undiluted	< 2		
Melting point / -range: Initial boiling point/boiling range		118	°C	No data available literature value for nitric acid 53 %
Flashpoint				not applicable
Ignition properties:				not applicable
Upper ignition limits				not applicable
Upper igniton limits				not applicable
Explosiv properties				not explosive

Upper explosive limits not applicable Upper explosive limits not applicable **Auto-ignition temperature** not applicable **Decomposition temperature** No data available **Oxidising properties** 

oxidising

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Vapour pressure at 20°C literature value for nitric acid approx. hPa

> 53 % 118

Vapour density No data available No data available **Evaporation rate** Solubility in water completely miscible Partition coefficient No data available

n-octanol/water

No data available Viscosity:

# 9.2 Additional information

No further relevant information available.

# **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

Reaction with: Alkalis, reduction agents

# 10.2 Chemical Stability

No decomposition if used according to the specifications .

# 10.3 Possibility of hazardous reactions

Reaction with: Alkalis, reduction agents Reacts with metals forming hydrogen.

#### 10.4 Conditions to avoid

UV rays/sunlight. Store away from heat.

# 10.5 Incompatible materials

Hazardous decomposition on contact with incompatible substances such as alkalis, (light) metals (release of flammable hydrogen on contact with metals).

# 10.6 Hazardous decomposition products

In case of fire, the following can be released: Nitrogen oxides (NOx).

#### 10.7 Additional information

No further relevant information available.

# **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

No data available for the mixture.

# **Acute Toxicity**

Toxic if inhaled

Acute toxicity estimate (ATE) of components of the mixture

7.00	ato toxioity com		<u> </u>	
Ingr	redient	CAS-No	Exposure route	ATE
Nitri	ic Acid	7697-37-2	inhalation: vapour	2,65 mg/l 4h

Acute toxicity of components of the mixture

Ingredient	CAS-No	Toxikologische Angaben	
Nitric Acid	7697-37-2	Acute toxicity, inhalation: vapour LC50/4 h: > 2,65 mg/l (rat)	(OECD 403)
Potassium dichromat	7778-50-9	Acute toxicity oral LD50: 67 mg/kg (rat)	(ECHA)
		Acute toxicity, dermal LD50: < 2000 mg/kg (rabbit)	(ECHA)
		Acute toxicity, inhalation dust/misz LD50: 83 mg/m³ /4h (rat)	(ECHA)

# **Primary irritant effect**

# On the skin

Causes severe skin burns and eye damage.

#### On the eye

Causes serious eye damage.

#### After inhalation

Corrosive to the respiratory tract.

# **Sensitisation**

Sensitization possible by inhalation.

Sensitization possible by skin conatct.

# Specific target-organ toxicity

Single exposure – based on available data, the classification criteria are not met.

Repeated exposure - damages the organs in case of prolonged or repeated exposure. (K-dichromate).

# **Aspiration hazard**

Is not to be classified as an aspiration hazard.

# **CMR-effects**

# Carcinogenity

May cause cancer.

#### Mutagenicity

May cause genetic defects.

# Reproductiv toxicity

May damage fertility or the unborn child.

# **Endocriens**

No ingredient is listed.

# 11.2 General remarks

Even at a poisoning suspected medical examination is required.

# SECTION 12: Ecological information

# 12.1 Information on toxicological effects

No data available for the mixture.

**Ecotoxicity** 

Locioniony		
Substance:	CAS:	Ecotoxicity
Nitric acid	7697-37-2	Acute toxicity to crustacea LC50: 180 mg/l/48 h [Crangon crangon.]
Potassium dichromate	7778-50-9	Acute Fish toxicity LC50: 51,1 mg/l/96 h [Pimephales promelas.]
		Acute Fish toxicity LC50: 51,1 mg/l/96 h [Carassius auratus.]
		Acute Daphnientoxicity LC50: 7,18 mg/l/48 h [Daphnia magna.]
		Acute Daphnientoxicity EC50: 0,12 mg/l/48 h [Daphnia magna.]
		Toxicity to algae EC 50: 0,61 mg/l/72 h
		Toxicity to algae EC 50: 0,6 mg/l/96 h [Gracilaria tenuistipitata.]

Data is from the Gestis substance database

# 12.2 Persistence and degradability

Methods of the determination of biodegradability are not applicable on inorganic substances.

# 12.3 Bioaccumulative potential

No further relevant information available

# 12.4 Mobility in soil

No further relevant information available

# 12.5 Results of PBT- and vPvB-assessment

Not applicable

#### 12.6 Endocrins

No ingredient is listed.

# 12.7 Additional ecological information

Do not allow product to reach ground water, water bodies or sewage system, even in small quantities. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Toxic for fish.

#### 12.8 Additional information

Water hazard class 3 (German regulation) (Self-assessment): extremely hazardous for water.

# **SECTION 13: Disposal considerations**

# 13.1 Waste treatment methods

# Recommendation

Chemicals must be disposed of in compliance with the respectiv national regulations.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

#### Waste disposal key number

Since 01.01.1999 the waste code numbers have not only been product-related but are also essentially application-related. The valid waste code number of the application can be obtained from the European waste catalogue.

Our suggestion:

06 01 06\* other acids

or

16 05 07\* discarded inorganic chemicals consisting of or containing hazardous substances.

#### **Uncleaned packagings**

Disposal must be made according to official regulations. (Hand in at collection point for hazardous substances)

# **SECTION 14: Transport informations**

# 14.1 UN-Number

ADR, IMDG, ICAO-TI: UN 2922

# 14.2 Proper shipping name

ADR: 2922 CORROSIV LIQUID, TOXIC, N.O.S. (NITRIC ACID, potassium dichromate)

**ENVIROMENTALLY HAZARDOUS** 

IMDG: CORROSIV LIQUID, TOXIC, N.O.S. (NITRIC ACID, potassium dichromate), MARINE

POLLUTANT

ICAO-TI: CORROSIV LIQUID, TOXIC, N.O.S. (NITRIC ACID, potassium dichromate),

# 14.3 Transport hazard class(es)

ADR:

Class: 8 (CT1) Corrosive substances

Label: 8 + 6.1 **IMDG, ICAO-TI:** 

Class: 8 Corrosive substances

Label: 8 + 6.1

# 14.4 Packaging group

ADR, IMDG, ICAO-TI:

#### 14.5 Environmental hazards

Product contains environmental hazards: Potassium dichromate Marine pollutant: yes Symbol (Fish and tree) Special marking (ADR): Symbol (Fish and tree)

# 14.6 Special precautions for user

Warning: corrosive substances Danger code (Kemler): 86 EMS-Number: F-A, S-B Segregation groups: Acids Stowage category: B-SW2

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

Not applicable

# 14.8 Additional information

ADR:

Limited quantites (LQ): 1 L

Exepted quantities (EQ): Code E2 Maximum quantity per inner packaging: 30 ml Maximum quantity per outer packaging: 500 ml

Transport category (TC): 2
Tunnel restriction code (TRC): E

IMDG:

Limited quantities (LQ): 1 L

Excepted quantites (EQ): Code: E2 Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

UN "Model Regulation": UN2922 CORROSIV LIQUID, TOXIC, N.O.S. (NITRIC ACID,

potassium dichromate) ENVIROMENTALLY HAZARDOUS, 8 (6.1), II, (E)

# **SECTION 15:** Regulatory information

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

**EU-Regulations** 

1999/13/EG on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations

Not relevant

2037/2000/EG on Substances which damage the ozone layer

Not relevant

850/2004/EG on Persistent Organic Pollutants

Not relevant

#### 689/2008/EG on the export and import of dangerous chemicals

Not relevant

# 648/2004/EG on detergents

Not relevant

# 1148/2019/EU on the marketing and use of explosives percursors

Distribution restrictions and conditions must be observed. No distribution to private persons.

#### 1907/2006/EG - Annex XVII

Conditions of restriction: R3, R28-30, R47, R72, R75 (applies to individual components of the mixture)

# Substances of very high concern (SVHC) according 1907/2007/EG, Article 57

7778-50-9 Potassium dichromate

#### Information on employment restrictions

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions in accordance with the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

#### Other regulations, restrictions and prohibitions

For professional users only.

#### **National regulations**

Must be observed

# 15.2 Chemical Safety Assessment

A chemical safety assessment has not been carried out for this mixture.

Chemical safety assessments for substances in this mixture have not been carried out.

#### **SECTION 16: Other informations**

# 16.1 Hazard statements under section 3

Complete wording of hazard statements and risk phrases (H-phrases) mentioned in section 3. These phrases refer to the constituents. The labelling for this product is stated in section 2.

H272	May	intesify	fire:	oxidiser.

H290 May be corrosive to metals.

H301 Toxic if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H331 Toxic if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H340 May cause genetic defects.

H350 May cause cancer.

H360FD May damage fertility or the unborn child.

H372 Causes damage to organs through prolonged or repeated.

H400 Very toxic to aquatic life.

H410 May damage fertility or the unborn child.

#### 16.2 Origin of datas

Information taken from reference works and literature as well as the instructions of the supplier.

#### 16.3 Additional information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

# 16.4 Abbreviations and acronymes

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer

(Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage

of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008) EINECS: European Inventory of Existing Commercial Chemical Substances ELINECS: European List of Notified Chemical Substances

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted no-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent SVHC: Substance of Very High Concern PBT: Persistent, Bioakkumulierend, Toxisch vPvB: very Persistent and very Bioaccumulative Ox. Liq. 3: Oxidising Liquids, Hazard Category 3 Ox. Sol. 2: Oxidising Solids, Hazard Category 2 Met. Corr. 1: Corrosive to metals, Hazard Category 1

Acute Tox. 2: Acute toxicity, Hazard Category 2
Acute Tox. 3: Acute toxicity, Hazard Category 3
Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1A: Skin corrosive/irritation, Hazard Category 1A Skin Corr. 1B: Skin corrosive/irritation, Hazard Category 1B Eye Dam. 1: Serious eye damage/irritation, Hazard Category 1 Resp. Sens. 1: Sensitisation – Respiration, Hazard Category 1
Skin Sens. 1: Skin – Sensitisation, Hazard Category 1
Muta. 1B: Germ cell mutagenicity, Hazard Category 1
Carc. 1B: Carcinogenicity, Hazard Category 1
Repr. 1B: Reproductiv toxicity, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1

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

<sup>\*</sup> Data compared to the previous issue altered.