

according to Regulation (EC) No. 1907/2006

Revision Date 16.10.2014

Version 13.0

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

1.1 Product identifier

Catalogue No. 104865

Product name Potassium dichromate for analysis (max. 0.000001% Hg) EMSURE®

ACS,ISO

REACH Registration Number 01-2119454792-32-XXXX

CAS-No. 7778-50-9

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

Identified uses Reagent for analysis

For additional information on uses please refer to the Merck Chemicals

portal (www.merck-chemicals.com).

1.3 Details of the supplier of the safety data sheet

Company Merck KGaA * 64271 Darmstadt * Germany * Phone:+49 6151 72-0

Responsible Department EQ-RS * e-mail: prodsafe@merckgroup.com

1.4 Emergency telephone

number

Please contact the regional company representation in your country.

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture Classification (REGULATION (EC) No 1272/2008)

Carcinogenicity, Category 1B, H350

Germ cell mutagenicity, Category 1B, H340 Reproductive toxicity, Category 1B, H360FD

Oxidising solid, Category 2, H272

Acute toxicity, Category 2, Inhalation, H330 Acute toxicity, Category 4, Dermal, H312 Acute toxicity, Category 3, Oral, H301

Specific target organ toxicity - repeated exposure, Category 1, H372

Skin corrosion, Category 1B, H314

Respiratory sensitisation, Category 1, H334 Skin sensitisation, Category 1, H317

Acute aquatic toxicity, Category 1, H400 Chronic aquatic toxicity, Category 1, H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification (67/548/EEC or 1999/45/EC)

Carc.Cat.2	Carcinogenic Category 2	R45
Mut.Cat.2	Mutagenic Category 2	R46
Repr.Cat.2	Toxic to Reproduction Category 2	R60 - 61
0	Oxidising	R8
Xn	Harmful	R21
T+	Very toxic	R26
T	Toxic	R25 - 48/23

according to Regulation (EC) No. 1907/2006

Catalogue No. 104865

Product name Potassium dichromate for analysis (max. 0.000001% Hg) EMSURE® ACS,ISO

C Corrosive R34

R42/43

N Dangerous for the environment R50/53

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms











Signal word
Danger

Hazard statements

H350 May cause cancer.

H340 May cause genetic defects.

H360FD May damage fertility. May damage the unborn child.

H272 May intensify fire; oxidiser.

H330 Fatal if inhaled.

H301 Toxic if swallowed.

H312 Harmful in contact with skin.

H372 Causes damage to organs through prolonged or repeated exposure.

H314 Causes severe skin burns and eye damage.

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

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P201 Obtain special instructions before use.

P280 Wear protective gloves.

Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Restricted to professional users.

Reduced labelling (≤125 ml)

Hazard pictograms











Signal word
Danger

Hazard statements
H350 May cause cancer.

according to Regulation (EC) No. 1907/2006

Catalogue No. 104865

Product name Potassium dichromate for analysis (max. 0.000001% Hg) EMSURE® ACS,ISO

H340 May cause genetic defects.

H360FD May damage fertility. May damage the unborn child.

H330 Fatal if inhaled.

H301 Toxic if swallowed.

H372 Causes damage to organs through prolonged or repeated exposure.

H314 Causes severe skin burns and eye damage.

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

H317 May cause an allergic skin reaction.

Precautionary statements

P201 Obtain special instructions before use.

P280 Wear protective gloves.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Index-No. 024-002-00-6

2.3 Other hazards

None known.

SECTION 3. Composition/information on ingredients

3.1 Substance

Formula $K_2Cr_2O_7$ $Cr_2K_2O_7$ (Hill)

 Index-No.
 024-002-00-6

 EC-No.
 231-906-6

 Molar mass
 294,19 g/mol

Hazardous components (REGULATION (EC) No 1272/2008)

Chemical Name (Concentration)

CAS-No. Registration number Classification

potassium dichromate (>= 50 % - <= 100 %)

The concentration stated is the percentage by weight of chromate ions dissolved in water calculated with reference to the total weight of the mixture.

7778-50-9 01-2119454792-32-

XXXX Oxidising solid, Category 2, H272

Acute toxicity, Category 3, H301 Acute toxicity, Category 2, H330 Acute toxicity, Category 4, H312 Skin corrosion, Category 1B, H314

Respiratory sensitisation, Category 1, H334

Skin sensitisation, Category 1, H317 Germ cell mutagenicity, Category 1B, H340

Carcinogenicity, Category 1B, H350

Reproductive toxicity, Category 1B, H360FD

Specific target organ toxicity - repeated exposure, Category 1,

H372

Acute aquatic toxicity, Category 1, H400 Chronic aquatic toxicity, Category 1, H410

M-Factor: 1

For the full text of the H-Statements mentioned in this Section, see Section 16.

according to Regulation (EC) No. 1907/2006

Catalogue No. 104865

Product name Potassium dichromate for analysis (max. 0.000001% Hg) EMSURE® ACS,ISO

Hazardous components (1999/45/EC)

Chemical Name (Concentration)
CAS-No. Classification

potassium dichromate (>= 50 % - <= 100 %)

The concentration stated is the percentage by weight of chromate ions dissolved in water calculated with reference to the total weight of the mixture.

7778-50-9 O, Oxidising; R8

Carc.Cat.2; R45 Mut.Cat.2; R46 Repr.Cat.2; R60-61 T+, Very toxic; R26 T, Toxic; R25-48/23 Xn, Harmful; R21 C, Corrosive; R34

R42/43

N, Dangerous for the environment; R50/53

M-Factor: 1

For the full text of the R-phrases mentioned in this Section, see Section 16.

3.2 Mixture

Not applicable

SECTION 4. First aid measures

4.1 Description of first aid measures

General advice

First aider needs to protect himself.

After inhalation: fresh air. If breathing stops: immediately apply artificial respiration, if necessary oxygen. Immediately call in physician.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician immediately.

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible. Do not attempt to neutralise.

4.2 Most important symptoms and effects, both acute and delayed

Irritation and corrosion, Allergic reactions, Cough, Shortness of breath Chromium(VI) is highly toxic. It is absorbed via both the lungs and the gastrointestinal tract. Being strong oxidisers, chromates/ bichromates can cause burns and ulcerations on the skin and mucous membranes and also irritations in the upper respiratory tract. Poorly healing ulcers occur after wound contact. In predisposed persons the substance rapidly leads to sensitisation and allergic reactions of the respiratory tract (risk of pneumonia!) and damage to nasal mucous membranes (under given circumstances perforation of the septum). After swallowing severe symptoms in the gastrointestinal tract such as bloody diarrhoea, vomiting (aspiration pneumonia!), spasms, circulatory collapse, unconsciousness, formation of methaemoglobin. Absorption may result in hepatic and renal damage. Inhalable chromium(VI) compounds gave clear evidence to be carcinogenic in animal experiments. Lethal dose (man): 0.5g. Antidotes: chelating agents such as EDTA, DMPS (Demaval®)

Risk of blindness!

according to Regulation (EC) No. 1907/2006

Catalogue No. 104865

Product name Potassium dichromate for analysis (max. 0.000001% Hg) EMSURE® ACS,ISO

4.3 Indication of any immediate medical attention and special treatment needed

Carefully clean wounds and cover with sterile dressing material.

SECTION 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Has a fire-promoting effect due to release of oxygen.

5.3 Advice for firefighters

Special protective equipment for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

6.2 Environmental precautions

Do not empty into drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7 and 10).

Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

Indications about waste treatment see section 13.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture.

Observe label precautions.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

7.2 Conditions for safe storage, including any incompatibilities

according to Regulation (EC) No. 1907/2006

Catalogue No. 104865

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Requirements for storage areas and containers

No metal containers.

Storage conditions

Tightly closed. Dry. Do not store near combustible materials. Keep locked up or in an area accessible only to qualified or authorised persons.

Recommended storage temperature see product label.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection

Tightly fitting safety goggles

Hand protection

full contact:

Glove material: Nitrile rubber Glove thickness: 0,11 mm Break through time: > 480 min

splash contact:

Glove material: Nitrile rubber
Glove thickness: 0,11 mm
Break through time: > 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Other protective equipment

Acid-resistant protective clothing

Respiratory protection

required when dusts are generated.

Recommended Filter type: Filter P 3 (acc. to DIN 3181) for solid and liquid particles of toxic

according to Regulation (EC) No. 1907/2006

Catalogue No. 104865

Product name Potassium dichromate for analysis (max. 0.000001% Hg) EMSURE® ACS,ISO

and very toxic substances

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental exposure controls

Do not empty into drains.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form solid

Colour orange

Odour odourless

Odour Threshold Not applicable

pH 3,6

at 100 g/l

Melting point 398 °C

Boiling point/boiling range > 500 °C

at 1.013 hPa

Flash point Not applicable

Evaporation rate No information available.

Flammability (solid, gas) No information available.

Lower explosion limit Not applicable

Upper explosion limit Not applicable

Vapour pressure Not applicable

Relative vapour density No information available.

Density ca.2,7 g/cm³

at 20 °C

Method: OECD Test Guideline 109

Relative density No information available.

Water solubility 130 g/l

at 20 °C

Partition coefficient: n-

octanol/water

No information available.

Auto-ignition temperature No information available.

according to Regulation (EC) No. 1907/2006

Catalogue No. 104865

Product name Potassium dichromate for analysis (max. 0.000001% Hg) EMSURE® ACS,ISO

Decomposition temperature ca.500 °C

Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties May intensify fire; oxidiser.

The substance or mixture is classified as oxidizing with the

category 2.

9.2 Other data

Ignition temperature Not applicable

Bulk density 1.250 kg/m³

SECTION 10. Stability and reactivity

10.1 Reactivity

See section 10.3

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Risk of explosion with:

Iron, magnesium, hydrazine and derivatives, hydroxylamine, ammonium nitrate, Boron, Acetic anhydride, oxidisable substances, Reducing agents, sulphuric acid, silicon

Exothermic reaction with:

anhydrides, phosphides, Sulphides, nitrides, Fluorine

Risk of ignition or formation of inflammable gases or vapours with:

organic combustible substances, glycerol, Powdered metals, hydrides, alkali compounds

Acetone, with, sulphuric acid

Generates dangerous gases or fumes in contact with:

hydrochloric acid

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

no information available

10.6 Hazardous decomposition products

no information available

according to Regulation (EC) No. 1907/2006

Catalogue No. 104865

Product name Potassium dichromate for analysis (max. 0.000001% Hg) EMSURE® ACS,ISO

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity

LD50 Rat: 90,5 - 168 mg/kg OECD Test Guideline 401

absorption

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

Acute inhalation toxicity

LC50 Rat: 0,083 - 0,099 mg/l; 4 h; aerosol

OECD Test Guideline 403

absorption

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of

respiratory tract

Acute dermal toxicity

LD50 Rat: 1.170 mg/kg (IUCLID)

LD50 Rabbit: 14 mg/kg (External MSDS)

absorption
Skin irritation

Rabbit

Result: irritating

OECD Test Guideline 404

Causes burns.

Eye irritation

Causes serious eye damage.

Risk of blindness!

Sensitisation

Sensitisation test (Magnusson and Kligman):

Result: positive

(IUCLID)

Patch test: human Result: positive

(IUCLID)

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

May cause an allergic skin reaction.

Germ cell mutagenicity

This information is not available.

Carcinogenicity

This information is not available.

Reproductive toxicity

This information is not available.

Teratogenicity

This information is not available.

according to Regulation (EC) No. 1907/2006

Catalogue No. 104865

Product name Potassium dichromate for analysis (max. 0.000001% Hg) EMSURE® ACS,ISO

CMR effects

Carcinogenicity:

May cause cancer.

Mutagenicity:

May cause genetic defects.

Teratogenicity:

May damage the unborn child.

Reproductive toxicity:

May damage fertility.

Specific target organ toxicity - single exposure

This information is not available.

Specific target organ toxicity - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

This information is not available.

11.2 Further information

Chromium(VI) is highly toxic. It is absorbed via both the lungs and the gastrointestinal tract. Being strong oxidisers, chromates/ bichromates can cause burns and ulcerations on the skin and mucous membranes and also irritations in the upper respiratory tract. Poorly healing ulcers occur after wound contact. In predisposed persons the substance rapidly leads to sensitisation and allergic reactions of the respiratory tract (risk of pneumonia!) and damage to nasal mucous membranes (under given circumstances perforation of the septum). After swallowing severe symptoms in the gastrointestinal tract such as bloody diarrhoea, vomiting (aspiration pneumonia!), spasms, circulatory collapse, unconsciousness, formation of methaemoglobin. Absorption may result in hepatic and renal damage. Inhalable chromium(VI) compounds gave clear evidence to be carcinogenic in animal experiments. Lethal dose (man): 0.5g. Antidotes: chelating agents such as EDTA, DMPS (Demaval®)

This substance should be handled with particular care.

SECTION 12. Ecological information

12.1 Toxicity

Toxicity to fish

LC50 Pimephales promelas (fathead minnow): 26,13 mg/l; 96 h (IUCLID)

LC50 Lepomis macrochirus (Bluegill sunfish): 0,131 mg/l; 96 h (External MSDS)

Toxicity to daphnia and other aquatic invertebrates

Immobilization EC50 Daphnia magna (Water flea): 0,62 mg/l; 48 h

OECD Test Guideline 202

EC50 Daphnia magna (Water flea): 0,035 mg/l; 48 h (External MSDS)

Toxicity to algae

IC50 Chlorella vulgaris (Fresh water algae): 0,16 - 0,59 mg/l; 96 h (IUCLID)

EC50 Pseudokirchneriella subcapitata (green algae): 0,31 mg/l; 72 h (External MSDS)

Toxicity to bacteria

microtox test EC50 Photobacterium phosphoreum: 58 mg/l; 30 min

Toxicity to fish (Chronic toxicity)

NOEC Pimephales promelas (fathead minnow): 6 mg/l; 7 d

(External MSDS)

according to Regulation (EC) No. 1907/2006

Catalogue No. 104865

Product name Potassium dichromate for analysis (max. 0.000001% Hg) EMSURE® ACS,ISO

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) NOEC Daphnia (water flea): 0,016 - 0,064 mg/l; 7 d (External MSDS)

12.2 Persistence and degradability

Biodegradability

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

Bioaccumulation

Bioconcentration factor (BCF): 17,4 Oncorhynchus mykiss (rainbow trout)

(External MSDS)

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Additional ecological information

Discharge into the environment must be avoided.

SECTION 13. Disposal considerations

Waste treatment methods

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14. Transport information

Land transport (ADR/RID)

14.1 UN number UN 3086

14.2 Proper shipping name TOXIC SOLID, OXIDIZING, N.O.S. (POTASSIUM

DICHROMATE)

14.3 Class 6.1 (5.1)

14.4 Packing group II14.5 Environmentally hazardous yes14.6 Special precautions for yes

user

Tunnel restriction code D/E

Inland waterway transport (ADN)

Not relevant

Air transport (IATA)

14.1 UN number UN 3086

14.2 Proper shipping name TOXIC SOLID, OXIDIZING, N.O.S. (POTASSIUM

DICHROMATE)

14.3 Class 6.1 (5.1)

14.4 Packing group14.5 Environmentally hazardous yes

according to Regulation (EC) No. 1907/2006

104865 Catalogue No.

Product name Potassium dichromate for analysis (max. 0.000001% Hg) EMSURE® ACS,ISO

14.6 Special precautions for

user

Sea transport (IMDG)

14.1 UN number **UN 3086**

14.2 Proper shipping name TOXIC SOLID, OXIDIZING, N.O.S. (POTASSIUM

no

DICHROMATE)

14.3 Class 6.1 (5.1)

14.4 Packing group Ш 14.5 Environmentally hazardous yes 14.6 Special precautions for yes

user

EmS F-A S-Q

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

Not relevant

SECTION 15. Regulatory information

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

EU regulations

Major Accident Hazard

Legislation

96/82/EC

Very toxic

Quantity 1: 5 t Quantity 2: 20 t

96/82/EC Oxidising

Quantity 1: 50 t Quantity 2: 200 t

96/82/EC

Dangerous for the environment

Quantity 1: 100 t Quantity 2: 200 t

Occupational restrictions

Take note of Dir 94/33/EC on the protection of young people at work. Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where

not regulated

applicable.

Regulation (EC) No 1005/2009 on substances that not regulated

deplete the ozone layer

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on

persistent organic pollutants and amending

Directive 79/117/EEC

Regulation (EC) No 689/2008 concerning the export not regulated and import of dangerous chemicals

according to Regulation (EC) No. 1907/2006

Catalogue No. 104865

Product name Potassium dichromate for analysis (max. 0.000001% Hg) EMSURE® ACS,ISO

Substances of very high concern (SVHC)

This product does contain substances of

very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory

above the respective regulatory concentration limit of $\geq 0.1 \%$ (w/w).

Contains: potassium dichromate

National legislation

Storage class 5.1B

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

SECTION 16. Other information

Full text of H-Statements referred to under sections 2 and 3.

H272 May intensify fire; oxidiser. 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.

H330 Fatal 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. May damage the unborn child.
H372 Causes damage to organs through prolonged or repeated

exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Full text of R-phrases referred to under sections 2 and 3

R 8 Contact with combustible material may cause fire.

R21 Harmful in contact with skin.

R25 Toxic if swallowed.
R26 Very toxic by inhalation.

R34 Causes burns.

R42/43 May cause sensitisation by inhalation and skin contact.

R45 May cause cancer.

R46 May cause heritable genetic damage.

R48/23 Toxic: danger of serious damage to health by prolonged exposure

through inhalation.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse

effects in the aquatic environment.

R60 May impair fertility.

R61 May cause harm to the unborn child.

Training advice

Provide adequate information, instruction and training for operators.

Catalogue No. 104865

Product name Potassium dichromate for analysis (max. 0.000001% Hg) EMSURE® ACS,ISO

Labelling (67/548/EEC or 1999/45/EC)

Symbol(s) T+ Very toxic

N Dangerous for the environment

O Oxidising

R-phrase(s) 45-46-60-61-8-21- May cause cancer. May cause heritable genetic damage.

25-26-34-42/43- May impair fertility. May cause harm to the unborn child. 48/23-50/53 Contact with combustible material may cause fire. Also

harmful in contact with skin. Also toxic if swallowed. Also very toxic by inhalation. Causes burns. May cause sensitisation by inhalation and skin contact. Also toxic: danger of serious

Very toxic to aquatic organisms, may cause long-term

adverse effects in the aquatic environment.

S-phrase(s) 53-45-60-61 Avoid exposure - obtain special instructions before use. In

case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). This material and its container must be disposed of as hazardous waste.

damage to health by prolonged exposure through inhalation.

Avoid release to the environment. Refer to special

instructions/ Safety data sheets.

EC-No. 231-906-6 EC Label

Reduced labelling (≤125 ml)

Symbol(s) T+ Very toxic

N Dangerous for the environment

O Oxidising

R-phrase(s) 45-46-60-61-21-25-26 May cause cancer. May cause heritable genetic damage. May impair fertility. May cause harm to the unborn child. Also harmful in contact

fertility. May cause harm to the unborn child. Also harmful in contact with skin. Also toxic if swallowed. Also very toxic by inhalation. Causes burns. May cause sensitisation by inhalation and skin contact. Also toxic: danger of serious damage to health by prolonged exposure

through inhalation.

S-phrase(s) 53-45 Avoid exposure - obtain special instructions before use. In case of

accident or if you feel unwell, seek medical advice immediately (show

the label where possible).

Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Regional representation

This information is given on the authorised Safety Data Sheet for your country.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.