



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Revision Date 29.10.2014

Version 16.0

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

1.1 Product identifier

Catalogue No. 100452
Product name Nitric acid 65% for analysis (max. 0.005ppm Hg) EMSURE® ISO
REACH Registration Number This product is a mixture. REACH Registration Number see section 3.

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

Identified uses Reagent for analysis, Chemical production
In compliance with the conditions described in the annex to this safety data sheet.

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)

Oxidising liquid, Category 3, H272
Corrosive to metals, Category 1, H290
Skin corrosion, Category 1A, H314

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

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

C Corrosive R35

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

H272 May intensify fire; oxidiser.
H290 May be corrosive to metals.

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H314 Causes severe skin burns and eye damage.

Precautionary statements

Prevention

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

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.

P308 + P310 IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.

Reduced labelling (≤125 ml)

Hazard pictograms



Signal word

Danger

Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

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

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.

P308 + P310 IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.

2.3 Other hazards

None known.

SECTION 3. Composition/information on ingredients

Chemical nature Aqueous solution

3.1 Substance

Not applicable

3.2 Mixture

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

Chemical Name (Concentration)

CAS-No.	Registration number	Classification
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nitric acid (>= 65 % - < 70 %)

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

7697-37-2	01-2119487297-23-XXXX	Oxidising liquid, Category 1, H271 Skin corrosion, Category 1A, H314 Corrosive to metals, Category 1, H290
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For the full text of the H-Statements mentioned in this Section, see Section 16.

Hazardous components (1999/45/EC)

Chemical Name (Concentration)

CAS-No.	Classification
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Catalogue No. 100452
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nitric acid ($\geq 65\%$ - $< 70\%$)
7697-37-2 O, Oxidising; R8
C, Corrosive; R35

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

SECTION 4. First aid measures

4.1 Description of first aid measures

General advice

First aider needs to protect himself.

After inhalation: fresh air. 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.

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

4.2 Most important symptoms and effects, both acute and delayed

Irritation and corrosion, Cough, Shortness of breath, Bloody vomiting, death, Risk of blindness!
The following applies to nitrites/nitrates in general: methaemoglobinaemia after the uptake of large quantities.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

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.

Ambient fire may liberate hazardous vapours.

Fire may cause evolution of:

nitrous gases, nitrogen oxides

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

Suppress (knock down) gases/vapours/mists with a water spray jet. Cool closed containers exposed to fire with water spray. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid substance contact. Do not breathe vapours, aerosols. 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 with liquid-absorbent and neutralising material (e.g. Chemisorb® H⁺, Merck Art. No. 101595). Dispose of properly. Clean up affected area.

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

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

Storage conditions

Requirements for storage areas and containers

No metal or light-weight-metal containers.

Tightly closed. Do not store near combustible materials.

Recommended storage temperature see product label.

7.3 Specific end use(s)

See exposure scenario in the Annex to this MSDS.

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

Derived No Effect Level (DNEL)

nitric acid (7697-37-2)

Worker DNEL, longterm	Local effects	inhalation	1,3 mg/m ³
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Predicted No Effect Concentration (PNEC)

nitric acid (7697-37-2)

PNEC no data available

8.2 Exposure controls

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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:	Viton (R)
Glove thickness:	0,7 mm
Break through time:	> 480 min

splash contact:

Glove material:	natural latex
Glove thickness:	0,6 mm
Break through time:	> 120 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 890 Vitoject® (full contact), KCL 706 Lapren® (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 vapours/aerosols are generated.

Recommended Filter type: filter E-(P2)

The entrepreneur 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	liquid
Colour	colourless

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Odour	stinging
Odour Threshold	0,27 ppm (anhydrous substance)
pH	< 1 at 20 °C
Melting point	ca. -32 °C
Boiling point/boiling range	121 °C at 1.013 hPa
Flash point	Not applicable
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapour pressure	ca.9,4 hPa at 20 °C
Relative vapour density	No information available.
Density	1,39 g/cm ³ at 20 °C
Relative density	No information available.
Water solubility	at 20 °C soluble
Partition coefficient: n-octanol/water	No information available.
Auto-ignition temperature	No information available.
Decomposition temperature	Distillable in an undecomposed state at normal pressure.
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	The substance or mixture is classified as oxidizing with the category 3.

9.2 Other data

Ignition temperature	Not applicable
Corrosion	May be corrosive to metals.

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SECTION 10. Stability and reactivity

10.1 Reactivity

strong oxidising agent

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:

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

formaldehyde, glycerol, sulphuric acid, hydrogen iodide, chlorates, Organic Substances, carbon/soot, Hydrocarbons, Alkali metals, lithium silicide, organic solvent, phosphorus, pyridine, sulphur dioxide, hydrogen sulphide, hydrogen peroxide, acetonitrile, acetylidene, Alcohols, anilines, antimony hydride, arsenic hydride, Amines, Ammonia, combustible substances, phosphides, Aldehydes, dichloromethane, hydrazines, Dioxane, acetic acid, Acetone, Acetic anhydride, Fluorine, Powdered metals

Violent reactions possible with:

Nitriles, antimony, arsenic, Boron, ferric oxide, alkalines, sodium hypochlorite

10.4 Conditions to avoid

no information available

10.5 Incompatible materials

Cellulose, Metals

Contact with metals may lead to the formation of nitrous gases and hydrogen.

10.6 Hazardous decomposition products

in the event of fire: See section 5.

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Mixture

Acute oral toxicity

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

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:., damage of respiratory tract, After a latency period:., Inhalation may lead to the formation of oedemas in the respiratory tract.

Acute dermal toxicity

This information is not available.

Skin irritation

Mixture causes severe burns.

Eye irritation

Mixture causes serious eye damage. Risk of blindness!

Sensitisation

This information is not available.

Germ cell mutagenicity

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This information is not available.

Carcinogenicity

This information is not available.

Reproductive toxicity

This information is not available.

Teratogenicity

This information is not available.

Specific target organ toxicity - single exposure

This information is not available.

Specific target organ toxicity - repeated exposure

This information is not available.

Aspiration hazard

This information is not available.

11.2 Further information

After uptake:

Bloody vomiting, strong pain (risk of perforation!), tissue damage, death

The following applies to nitrites/nitrates in general: methaemoglobinaemia after the uptake of large quantities.

Handle in accordance with good industrial hygiene and safety practice.

Components

nitric acid

Skin irritation

Rabbit

Result: Causes severe burns.

(IUCLID)

Eye irritation

Rabbit

Result: Causes burns.

(IUCLID)

Germ cell mutagenicity

Genotoxicity in vitro

Ames test

Salmonella typhimurium

Result: negative

Method: OECD Test Guideline 471

SECTION 12. Ecological information

Mixture

12.1 Toxicity

No information available.

12.2 Persistence and degradability

Biodegradability

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

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

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12.5 Results of PBT and vPvB assessment

Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.

12.6 Other adverse effects

Additional ecological information

Biological effects:

Harmful effect due to pH shift. Forms corrosive mixtures with water even if diluted. Does not cause biological oxygen deficit. Hazard for drinking water supplies.

Discharge into the environment must be avoided.

Components

nitric acid

Toxicity to fish

LC50 *Gambusia affinis* (Mosquito fish): 72 mg/l; 96 h (IUCLID)

Biodegradability

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

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

Henry constant

2482 Pa·m³/mol

Method: (calculated)

(Lit.) Distribution preferentially in air.

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 2031
14.2 Proper shipping name	NITRIC ACID
14.3 Class	8 (5.1)
14.4 Packing group	II
14.5 Environmentally hazardous	--
14.6 Special precautions for user	yes
Tunnel restriction code	E

Inland waterway transport (ADN)

Not relevant

Air transport (IATA)

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14.1 UN number UN 2031
14.2 Proper shipping name NITRIC ACID
14.3 Class 8 (5.1)
14.4 Packing group II
14.5 Environmentally hazardous --
14.6 Special precautions for user yes
Not permitted for transport

Sea transport (IMDG)

14.1 UN number UN 2031
14.2 Proper shipping name NITRIC ACID WITH AT LEAST 65% BUT NOT MORE THAN 70%
14.3 Class 8 (5.1)
14.4 Packing group II
14.5 Environmentally hazardous --
14.6 Special precautions for user yes
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 96/82/EC
Legislation Directive 96/82/EC does not apply

Occupational restrictions Take note of Dir 94/33/EC on the protection of young people at work.

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer not regulated

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 not regulated

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

Substances of very high concern (SVHC) This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of ≥ 0.1 % (w/w).

National legislation

Storage class 5.1B

15.2 Chemical Safety Assessment

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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.

H271 May cause fire or explosion; strong oxidiser.
H272 May intensify fire; oxidiser.
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

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

R 8 Contact with combustible material may cause fire.
R35 Causes severe burns.

Training advice

Provide adequate information, instruction and training for operators.

Labelling

Hazard pictograms



Signal word

Danger

Hazard statements

H272 May intensify fire; oxidiser.
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

Precautionary statements

Prevention

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

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.
P308 + P310 IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.

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

Symbol(s)  C Corrosive


R-phrase(s) 35 Causes severe burns.

S-phrase(s) 26-36/37/39-45 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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Symbol(s)  C

Corrosive

R-phrase(s) 35

Causes severe burns.

S-phrase(s) 26-36/37/39-45

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. 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.

SAFETY DATA SHEET – Annex
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Catalogue No. 100452
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EXPOSURE SCENARIO 1 (Industrial use)

1. Industrial use (Reagent for analysis, Chemical production)

Sectors of end-use

SU 3 Industrial uses: Uses of substances as such or in preparations at industrial sites
SU 9 Manufacture of fine chemicals
SU 10 Formulation [mixing] of preparations and/ or re-packaging (excluding alloys)

Chemical product category

PC 19 Intermediate
PC 21 Laboratory chemicals

Process categories

PROC 1 Use in closed process, no likelihood of exposure
PROC 2 Use in closed, continuous process with occasional controlled exposure
PROC 3 Use in closed batch process (synthesis or formulation)
PROC 4 Use in batch and other process (synthesis) where opportunity for exposure arises
PROC 5 Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact)
PROC 8a Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities
PROC 8b Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities
PROC 9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC 10 Roller application or brushing
PROC 15 Use as laboratory reagent

Environmental Release Categories

ERC 1 Manufacture of substances
ERC 2 Formulation of preparations
ERC 4 Industrial use of processing aids in processes and products, not becoming part of articles
ERC 6a Industrial use resulting in manufacture of another substance (use of intermediates)
ERC 6b Industrial use of reactive processing aids

2. Contributing scenarios: Operational conditions and risk management measures

2.1 Contributing scenario controlling environmental exposure for: ERC1, ERC2, ERC4, ERC6a, ERC6b

Technical conditions and measures / Organizational measures

Water Solutions with low pH-value must be neutralized before discharge.

2.2 Contributing scenario controlling worker exposure for: PROC1

Product characteristics

Concentration of the Substance in Mixture/Article Covers the percentage of the substance in the product up to 100 %.
Physical Form (at time of use) Medium volatile liquid
Process Temperature < 31 °C

Frequency and duration of use

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Frequency of use 8 hours/day
Frequency of use 5 days/week

Other operational conditions affecting workers exposure

Outdoor / Indoor Indoor without local exhaust ventilation (LEV)

Conditions and measures related to personal protection, hygiene and health evaluation

Wear suitable gloves (tested to EN374), coverall and eye protection.

2.3 Contributing scenario controlling worker exposure for: PROC2, PROC3

Product characteristics

Concentration of the Substance in Mixture/Article Covers the percentage of the substance in the product up to 100 %.
Physical Form (at time of use) Medium volatile liquid
Process Temperature < 31 °C

Frequency and duration of use

Frequency of use 8 hours/day
Frequency of use 5 days/week

Other operational conditions affecting workers exposure

Outdoor / Indoor Indoor with local exhaust ventilation (LEV)

Conditions and measures related to personal protection, hygiene and health evaluation

Wear suitable gloves (tested to EN374), coverall and eye protection.

Wear respiratory protection. Effectiveness (of a measure): 90 %

2.4 Contributing scenario controlling worker exposure for: PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC10, PROC15

Product characteristics

Concentration of the Substance in Mixture/Article Covers the percentage of the substance in the product up to 100 %.
Physical Form (at time of use) Medium volatile liquid

Frequency and duration of use

Frequency of use 8 hours/day
Frequency of use 5 days/week

Other operational conditions affecting workers exposure

Outdoor / Indoor Indoor with local exhaust ventilation (LEV)

Conditions and measures related to personal protection, hygiene and health evaluation

Wear suitable gloves (tested to EN374), coverall and eye protection.

Wear respiratory protection. Effectiveness (of a measure): 95 %

3. Exposure estimation and reference to its source

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Environment

CS	Use descriptor	Msafe	Compartment	RCR	Exposure Assessment Method
2.1	ERC1, ERC2, ERC4, ERC6a, ERC6b		All compartments		Qualitative assessment

Workers

CS	Use descriptor	Exposure duration, route, effect	RCR	Exposure Assessment Method
2.2	PROC1	longterm, inhalative, local	0,02	MEASE
2.3	PROC2	longterm, inhalative, local	0,10	MEASE
2.3	PROC3	longterm, inhalative, local	0,25	MEASE
2.4	PROC4	longterm, inhalative, local	0,20	MEASE
2.4	PROC5	longterm, inhalative, local	0,50	MEASE
2.4	PROC8a	longterm, inhalative, local	< 1	MEASE
2.4	PROC8b	longterm, inhalative, local	0,59	MEASE
2.4	PROC9	longterm, inhalative, local	0,50	MEASE
2.4	PROC10	longterm, inhalative, local	< 1	MEASE
2.4	PROC15	longterm, inhalative, local	0,10	MEASE

The default parameters and -efficiencies of the applied exposure assessment model were used for the calculation (unless stated differently).

For (other) local effects risk management measures are based on qualitative risk characterisation.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

Please refer to the following documents: ECHA Guidance on information requirements and chemical safety assessment Chapter R.12: Use descriptor system; ECHA Guidance for downstream users; ECHA Guidance on information requirements and chemical safety assessment Part D: Exposure Scenario Building, Part E: Risk Characterisation and Part G: Extending the SDS; VCI/Cefic REACH Practical Guides on Exposure Assessment and Communications in the Supply Chain; CEFIC Guidance Specific Environmental Release Categories (SPERCs).

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EXPOSURE SCENARIO 2 (Professional use)

1. Professional use (Reagent for analysis, Chemical production)

Sectors of end-use

SU 22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Chemical product category

PC21 Laboratory chemicals

Process categories

PROC15 Use as laboratory reagent

Environmental Release Categories

ERC2 Formulation of preparations

ERC6a Industrial use resulting in manufacture of another substance (use of intermediates)

ERC6b Industrial use of reactive processing aids

2. Contributing scenarios: Operational conditions and risk management measures

2.1 Contributing scenario controlling environmental exposure for: ERC1, ERC2, ERC4, ERC6a, ERC6b

Technical conditions and measures / Organizational measures

Water Solutions with low pH-value must be neutralized before discharge.

2.2 Contributing scenario controlling worker exposure for: PROC15

Product characteristics

Concentration of the Substance in Mixture/Article Covers the percentage of the substance in the product up to 100 %.
Physical Form (at time of use) Medium volatile liquid

Frequency and duration of use

Frequency of use 8 hours/day
Frequency of use 5 days/week

Other operational conditions affecting workers exposure

Outdoor / Indoor Indoor with local exhaust ventilation (LEV)

Conditions and measures related to personal protection, hygiene and health evaluation

Wear suitable gloves (tested to EN374), coverall and eye protection.

Wear respiratory protection. Effectiveness (of a measure): 80 %

3. Exposure estimation and reference to its source

Environment

CS	Use descriptor	Msafe	Compartment	RCR	Exposure Assessment Method
2.1	ERC1, ERC2, ERC4, ERC6a, ERC6b		All compartments		Qualitative assessment

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Workers

CS	Use descriptor	Exposure duration, route, effect	RCR	Exposure Assessment Method
2.2	PROC15	longterm, inhalative, local	< 1	MEASE

The default parameters and -efficiencies of the applied exposure assessment model were used for the calculation (unless stated differently).

For (other) local effects risk management measures are based on qualitative risk characterisation.

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

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