

Genopure Buffer Set

Version	Revision Date:	Date of last issue: 03.08.2014
1.6	18.02.2015	Date of first issue: 09.08.2013

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

1.1 Product identifier

Commercial Product Name : Genopure Buffer Set
Mat.-No./ Genisys-No. : 04634772001

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

Recommended restrictions : For professional users only.
on use

1.3 Details of the supplier of the safety data sheet

Company : Roche Diagnostics Deutschland GmbH
-
Sandhoferstrasse 116
68305 Mannheim
E-mail address : mannheim.umweltschutz@roche.com
Telephone : +496217590
Telefax : +496217592890
Responsible Department : +49(0)621-759-2012+49(0)621-759-4848+49(0)8856-60-2629

1.4 Emergency telephone number

In case of emergencies: : Central Works Security +49(0)621-759-2203
Roche Diagnostics GmbH
Centre for detoxification: : Mainz +49(0)6131-19240
Munich +49(0)89-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product is a kit consisting of individual ingredients. The classification of the ingredients can be obtained from section 3. Section Label elements contains the resulting labelling for the kit.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**
P280 Wear eye protection/ face protection.
P280 Wear protective gloves.
Response:

Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

P337 + P313

If eye irritation persists: Get medical advice/attention.

P362 + P364

Take off contaminated clothing and wash it before reuse.

2.3 Other hazards

See SECTION 3

SECTION 3: Composition/information on ingredients

Suspension Buffer

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

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

Not a hazardous substance or mixture.

Hazardous components

Remarks : No hazardous ingredients

RNase A

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

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

Not a hazardous substance or mixture.

Hazardous components

Remarks : No hazardous ingredients

Lysis Buffer

Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2

H315: Causes skin irritation.

Eye irritation, Category 2

H319: Causes serious eye irritation.

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

Irritant

R36/38: Irritating to eyes and skin.

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
sodium dodecyl sul- phate	151-21-3 205-788-1	F; R11 Xn; R21/22 Xi; R36/37/38	Flam. Sol. 1; H228 Acute Tox. 4; H302 Acute Tox. 3; H311 Skin Irrit. 2; H315 Eye Irrit. 2; H319	>= 1 - < 2,5

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

			STOT SE 3; H335 Aquatic Chronic 2; H411	
sodium hydroxide	1310-73-2 215-185-5	C; R35	Met. Corr. 1; H290 Skin Corr. 1A; H314	>= 0,5 - < 1

For explanation of abbreviations see section 16.

Neutralization Buffer

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

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

Not a hazardous substance or mixture.

Hazardous components

Remarks : No hazardous ingredients

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : Move to fresh air.
If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

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 : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : No information available.

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Prevent further leakage or spillage if safe to do so.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Treat recovered material as described in the section "Disposal considerations".

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

- Advice on safe handling : Do not breathe vapours/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.
- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Hygiene measures : When using do not eat or drink. When using do not smoke.
Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.
- Further information on storage conditions : See label, package insert or internal guidelines
- Storage class (TRGS 510) : 12, Non Combustible Liquids
- Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

- Specific use(s) : Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Suspension Buffer

Contains no substances with occupational exposure limit values.

RNase A

Contains no substances with occupational exposure limit values.

Lysis Buffer

Contains no substances with occupational exposure limit values.

Neutralization Buffer

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment

- Eye protection : Eye wash bottle with pure water

Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Hand protection

Material : Protective gloves

Remarks : The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. This recommendation is only valid for the product mentioned in the safety data sheet and provided by us and for the application specified by us. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Suspension Buffer

Appearance : liquid

Colour : colourless

Odour : none

Odour Threshold : No data available

pH : 8,0

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : does not flash

Evaporation rate : No data available

Flammability (solid, gas) : Does not sustain combustion.

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : No data available

Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

Density : No data available
Solubility(ies)
Water solubility : completely miscible
Partition coefficient: n-octanol/water : No data available
Ignition temperature : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Explosive properties : No data available
Oxidizing properties : The substance or mixture is not classified as oxidizing.

RNase A

Appearance : solid
Colour : white, light yellow
Odour : none
Odour Threshold : No data available
pH : No data available
Melting point/range : No data available
Boiling point/boiling range : No data available
Flash point : does not flash
Evaporation rate : No data available
Flammability (solid, gas) : Sustains combustion
Upper explosion limit : No data available
Lower explosion limit : No data available
Vapour pressure : No data available
Relative vapour density : No data available
Relative density : No data available
Density : No data available
Solubility(ies)
Water solubility : soluble
Partition coefficient: n-octanol/water : No data available
Ignition temperature : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Explosive properties : No data available
Oxidizing properties : The substance or mixture is not classified as oxidizing.

Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

Lysis Buffer

Appearance	: liquid
Colour	: colourless
Odour	: none
Odour Threshold	: No data available
pH	: > 10,0
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: does not flash
Evaporation rate	: No data available
Flammability (solid, gas)	: Does not sustain combustion.
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: No data available
Solubility(ies)	
Water solubility	: completely miscible
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

Neutralization Buffer

Appearance	: liquid
Colour	: colourless
Odour	: none
Odour Threshold	: No data available
pH	: 5,1
Melting point/range	: No data available

Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

Boiling point/boiling range	: No data available
Flash point	: does not flash
Evaporation rate	: No data available
Flammability (solid, gas)	: Does not sustain combustion.
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: No data available
Solubility(ies)	
Water solubility	: completely miscible
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Explosive properties	: No data available
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

9.2 Other information

Suspension Buffer

No data available

RNase A

No data available

Lysis Buffer

No data available

Neutralization Buffer

No data available

Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Reacts with the following substances:
Gives off hydrogen by reaction with metals.
Reacts violently with peroxides.
Acids
Alkaline earth metals
Strong oxidizing agents

No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid : Exposure to moisture

10.5 Incompatible materials

Materials to avoid : Acids
Peroxides
Halogenated compounds
Metals
Alkaline earth metals
Aluminium
Zinc
Tin
Strong oxidizing agents

10.6 Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Suspension Buffer

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

RNase A

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Lysis Buffer

Acute toxicity

Not classified based on available information.

Components:

sodium dodecyl sulphate:

Acute oral toxicity : LD50 Oral (Rat): 1.288 mg/kg

Acute inhalation toxicity : LC50 (Rat): >3900 mg/m³

Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

Exposure time: 1 h

Acute dermal toxicity : LD50 Dermal (Rabbit): 580 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Components:

sodium dodecyl sulphate:

Result: Irritating to skin.

sodium hydroxide:

Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:

sodium dodecyl sulphate:

Result: Irritating to eyes.

sodium hydroxide:

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Components:

sodium hydroxide:

Genotoxicity in vitro : Test Type: Ames test
Result: negative

Carcinogenicity

Not classified based on available information.

Components:

sodium dodecyl sulphate:

Remarks: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Not classified based on available information.

Components:

sodium hydroxide:

Effects on fertility :
Remarks: No data available

STOT - single exposure

Not classified based on available information.

Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

Components:

sodium dodecyl sulphate:

Assessment: May cause respiratory irritation.

sodium hydroxide:

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Not classified based on available information.

Components:

sodium hydroxide:

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration toxicity

Not classified based on available information.

Neutralization Buffer

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

SECTION 12: Ecological information

12.1 Toxicity

Suspension Buffer

Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

No data available

RNase A

No data available

Lysis Buffer

Components:

sodium dodecyl sulphate:

- Toxicity to fish : LC0 (Leuciscus idus (Golden orfe)): 26 mg/l
LC50 (Lepomis macrochirus (Bluegill sunfish)): 4,5 mg/l
Exposure time: 96 h
LC50 (Oncorhynchus mykiss (rainbow trout)): 3,6 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 6 mg/l
Exposure time: 48 h
- Toxicity to bacteria : EC50 (Photobacterium phosphoreum): 0,46 mg/l
Exposure time: 0,5 h

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to the environment : No data available

sodium hydroxide:

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 45,4 mg/l
Exposure time: 96 h
LC50 (Leuciscus idus (Golden orfe)): ca. 7 mg/l
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 40,38 mg/l
Exposure time: 48 h
- Ecotoxicology Assessment
Acute aquatic toxicity : This product has no known ecotoxicological effects.
- Chronic aquatic toxicity : This product has no known ecotoxicological effects.
- Toxicity Data on Soil : Not expected to adsorb on soil.
- Other organisms relevant to the environment : No data available

Neutralization Buffer

No data available

12.2 Persistence and degradability

Suspension Buffer

No data available

RNase A

Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

No data available

Lysis Buffer

Components:

sodium dodecyl sulphate:

Biodegradability : Biodegradation: 90 %
Exposure time: 28 d
Method: OECD Test Guideline 301
Remarks: Readily biodegradable, according to appropriate OECD test.

Neutralization Buffer

No data available

12.3 Bioaccumulative potential

Suspension Buffer

No data available

RNase A

No data available

Lysis Buffer

Components:

sodium dodecyl sulphate:

Bioaccumulation : Species: Cyprinus carpio (Carp)
Exposure time: 3 d
Bioconcentration factor (BCF): 3,9 - 5,3

Partition coefficient: n-octanol/water : log Pow: 1,6

Neutralization Buffer

No data available

12.4 Mobility in soil

Suspension Buffer

No data available

RNase A

No data available

Lysis Buffer

No data available

Neutralization Buffer

No data available

12.5 Results of PBT and vPvB assessment

Suspension Buffer

Not relevant

RNase A

Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

Not relevant

Lysis Buffer

Not relevant

Neutralization Buffer

Not relevant

12.6 Other adverse effects

Suspension Buffer

No data available

RNase A

No data available

Lysis Buffer

Components:

sodium dodecyl sulphate:

Additional ecological information : Remarks: No data available

Neutralization Buffer

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
Can be disposed as waste water, when in compliance with local regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number

ADR : UN 1824

IMDG : UN 1824

IATA : UN 1824

14.2 UN proper shipping name

ADR : Sodium hydroxide solution

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

IMDG : Sodium hydroxide solution

IATA : Sodium hydroxide solution

14.3 Transport hazard class(es)

ADR : 8

IMDG : 8

IATA : 8

14.4 Packing group

ADR

Packing group : III

Classification Code : C5

Labels : 8

Tunnel restriction code : E

IMDG

Packing group : III

Labels : 8

EmS Code : F-A, S-B

IATA

Packing instruction (cargo aircraft) : 856

Packing instruction (passenger aircraft) : 852

Packing instruction (LQ) : Y841

Packing group : III

Labels : Corrosives

14.5 Environmental hazards

ADR

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

Remarks : Not dangerous goods in the meaning of ADR/RID, ADN, IMDG-Code, ICAO/IATA-DGR

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

Remarks : Not applicable

SECTION 15: Regulatory information

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

Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances
Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

Not applicable

Water contaminating class (Germany) : WGK 1 slightly water endangering

Suspension Buffer

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

RNase A

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Lysis Buffer

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**
P264 Wash skin thoroughly after handling.
P280 Wear eye protection/ face protection.
P280 Wear protective gloves.
Response:
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Neutralization Buffer

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

Genopure Buffer Set

Version
1.6

Revision Date:
18.02.2015

Date of last issue: 03.08.2014
Date of first issue: 09.08.2013

SECTION 16: Other information

Full text of R-Phrases

R11 : Highly flammable.
R21/22 : Harmful in contact with skin and if swallowed.
R35 : Causes severe burns.
R36/37/38 : Irritating to eyes, respiratory system and skin.

Full text of H-Statements

H228 : Flammable solid.
H290 : May be corrosive to metals.
H302 : Harmful if swallowed.
H311 : Toxic in contact with skin.
H314 : Causes severe skin burns and eye damage.
H315 : Causes skin irritation.
H319 : Causes serious eye irritation.
H335 : May cause respiratory irritation.
H411 : Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity
Aquatic Chronic : Chronic aquatic toxicity
Eye Irrit. : Eye irritation
Flam. Sol. : Flammable solids
Met. Corr. : Corrosive to metals
Skin Corr. : Skin corrosion
Skin Irrit. : Skin irritation
STOT SE : Specific target organ toxicity - single exposure

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

DE / EN