

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name:** ROTI®-STOCK 10 x TBS, ready-to-use, 0.2 µm filtered and steam sterilised**Article number:** 1060**Registration number Mixture** - Registration numbers of the components, see Chapter 3**1.2 Relevant identified uses of the substance or mixture and uses advised against****Application of the substance / the mixture**

Laboratory chemical

1.3 Details of the supplier of the safety data sheet**Manufacturer/Supplier:**

Carl Roth GmbH + Co. KG

Schoemperlenstraße 3-5

76185 Karlsruhe

Germany

Telefon: +49/(0)721 5606-0

Telefax: +49/(0)721 5606-149

E-Mail: sicherheit@carlroth.de

Further information obtainable from: Department Health, Safety and Environment**1.4 Emergency telephone number:**

Poison Centre Munich

Telefon +49/(0)89 19240

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

The product is not classified according to the CLP regulation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC Void

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 Void

Hazard pictograms Void

Signal word Void

Hazard statements Void

Additional information:

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2.3 Other hazards

All chemicals are potentially dangerous. They are therefore only be handled by specially trained personnel with the necessary care.

Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****3.2 Chemical characterisation: Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.

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Dangerous components:		
CAS: 77-86-1 EINECS: 201-064-4	trometamol  Xi R36/37/38  Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	3-<10%
CAS: 7647-01-0 EINECS: 231-595-7 Index Number: 017-002-00-2 Reg.nr.: 01-2119484862-27-XXXX	hydrogen chloride  T R23;  C R35  Met. Corr. 1, H290; Skin Corr. 1B, H314;  STOT SE 3, H335	0.3-<1%

Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures



4.1 Description of first aid measures

General information:

Remove any clothing soiled by the product.

After inhalation:

Supply fresh air; if there is any trouble seek medical help.

After skin contact:

Rinse with water

If skin irritation continues, consult a doctor.

After eye contact:

To be sure rinse opened eye under running water. If there is any trouble seek medical help.

After swallowing:

Rinse out mouth and drink a glass of water. Do not induce vomiting.

Seek medical treatment in case of complaints.

4.2 Most important symptoms and effects, both acute and delayed

Irritations

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 extinguishing agents:

Use fire extinguishing methods suitable to surrounding conditions.

 CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents:

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

5.2 Special hazards arising from the substance or mixture

In the event of fire development of hazardous combustion gases or vapours possible.

In case of fire, the following can be released:

 Nitrogen oxides (NO_x)

Hydrogen chloride (HCl)

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Carbon monoxide and carbon dioxide

5.3 Advice for firefighters**Protective equipment:**Wear self-contained respiratory protective device.
Wear fully protective suit.**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Do not breathe vapour/spray.

6.2 Environmental precautions

Do not allow to enter sewers/ground water or penetrate the soil.

6.3 Methods and material for containment and cleaning upAbsorb with liquid-binding material (e.g. Rotisorb® Art.-Nr. 1710.1).
Dispose of the material collected according to regulations.**6.4 Reference to other sections**See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.**SECTION 7: Handling and storage****7.1 Precautions for safe handling**Keep containers, equipment and working place clean.
No special precautions are necessary if used correctly.**Information about fire - and explosion protection:**

No special measures required.

7.2 Conditions for safe storage, including any incompatibilities**Storage:****Requirements to be met by storerooms and receptacles:**

No special requirements.

Information about storage in one common storage facility:

Store away from foodstuffs.

Further information about storage conditions:

None.

Recommended storage temperature:

15 - 25 °C

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection**Additional information about design of technical facilities:**

No further data; see item 7.

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8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:	
7647-01-0 hydrogen chloride	
WEL (Great Britain)	Short-term value: 8 mg/m ³ , 5 ppm Long-term value: 2 mg/m ³ , 1 ppm (gas and aerosol mists)
IOELV (EU)	Short-term value: 15 mg/m ³ , 10 ppm Long-term value: 8 mg/m ³ , 5 ppm

DNELs

Worker

Long-term exposure - local effects:		
7647-01-0 hydrogen chloride		
Inhalative	DNEL	8 mg/m ³ (worker)

Short-term exposure - local effects:		
7647-01-0 hydrogen chloride		
Inhalative	DNEL	15 mg/m ³ (worker)

PNECs	
7647-01-0 hydrogen chloride	
PNEC	0.036 mg/l (Marine water) 0.036 mg/l (Fresh Water) 0.045 mg/l (intermittent releases)

Additional information:

The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

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.

Respiratory protection:



Protection of hands:



Protective gloves

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The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of glovesNitrile, thickness: ≥ 0.11 mm

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.

Penetration time of glove materialValue for the permeation: Level ≥ 6

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

As protection from splashes gloves made of the following materials are suitable:Nitrile rubber, thickness: ≥ 0.11 mmValue for the permeation: Level ≥ 6 **Eye protection:**

Tightly sealed goggles

Body protection:

Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties**General Information****Appearance:**

Form:	Fluid
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	No information available.

pH-value at 20 °C:	7.4
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Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C

Flash point:	Not applicable.
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Flammability (solid, gaseous):	No information available
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Ignition temperature:	No information available
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Decomposition temperature:	No information available
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Self-igniting:	Product is not self-igniting.
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Danger of explosion:	Product does not present an explosion hazard.
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Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

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Oxidizing properties:	No information available.
Vapour pressure at 20 °C:	23 hPa
Density at 20 °C:	1.102 g/cm ³
Relative density	No Information available.
Vapour density	No information available
Evaporation rate	Not determined.
Solubility in / Miscibility with water:	Fully miscible.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No Information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

Oxidizing agents

10.4 Conditions to avoid

No Information available.

10.5 Incompatible materials:

No Information available.

10.6 Hazardous decomposition products:

In case of fire: see item 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:

77-86-1 trometamol

Oral | LD₅₀ | 5900 mg/kg (rat) (TOXNET)

Primary irritant effect:

on the skin:

No Information available.

on the eye:

No Information available.

after inhalation:

No Information available.

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Sensitisation:

No sensitising effects known.

CMR effects:**Germ cell mutagenicity:**

No Information available.

Carcinogenicity:

No Information available.

Reproductive toxicity:

No Information available.

Aspiration hazard:

No Information available.

Specific target organ toxicity - single exposure

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

Specific target organ toxicity - repeated exposure

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

Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

Further information:

The product should be handled with the care usual when dealing with chemicals.

SECTION 12: Ecological information

12.1 Toxicity**Aquatic toxicity:**

Quantitative data on the ecological effect of this product are not available.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

Ecotoxicological effects:**Remark:**

Do not allow to enter waters, waste water, or soil!

12.5 Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects**

No further relevant information available.

SECTION 13: Disposal considerations

Waste treatment methods**Recommendation**

The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.

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Uncleaned packaging:**Recommendation:**

Disposal according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

14.1 UN-Number	
ADR, ADN, IMDG, IATA	Void
14.2 UN proper shipping name	
ADR, ADN, IMDG, IATA	Void
14.3 Transport hazard class(es)	
ADR, ADN, IMDG, IATA Class	Void
14.4 Packing group	
ADR, IMDG, IATA	Void
14.5 Environmental hazards:	
Marine pollutant:	No
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
ADR Remarks:	Not subject to transport regulations.
UN "Model Regulation":	-

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**National regulations:****Information about limitation of use:** Employment restrictions concerning juveniles must be observed.**Breakdown regulations:****Waterhazard class:**

Water hazard class 1 (Self-assessment): slightly hazardous for water.

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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Relevant phrases

H290 May be corrosive to metals.
 H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.

R23 Toxic by inhalation.
 R35 Causes severe burns.
 R36/37/38 Irritating to eyes, respiratory system and skin.

Department issuing MSDS: Department: Health, Safety and Environment

Contact: Herr Heine

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 ICAO: International Civil Aviation Organisation
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
 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 Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 LD50*: Lethal Dose, 50 percent (Not relevant for classification)
 LD50*: Lethal Concentration, 50 percent (Not relevant for classification)
 Met. Corr. 1: Corrosive to metals, Hazard Category 1
 Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

*** Data compared to the previous version altered.**