

Safety Data Sheet

according to Regulation (EC) No 1907/2006



CHLORISOL

Print date: 26.02.2014

Product code: 11386-0001

Page 1 of 7

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

1.1. Product identifier

CHLORISOL

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

Use of the substance/mixture

Various

1.3. Details of the supplier of the safety data sheet

Company name: pro Kühlsole GmbH
Street: Am Langen Graben 37
Place: D-52353 Düren
Telephone: +49 2421 59196-0
Telefax: +49 2421 59196-10
Responsible for the safety data sheet: sds@gbk-ingelheim.de

1.4. Emergency telephone number: Emergency telephone :+49 (0) 6132 / 84463 (GBK GmbH, Ingelheim)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Indications of danger: Xi - Irritant
R phrases:
Irritating to eyes.

GHS classification

Hazard categories:
Serious eye damage/eye irritation: Eye Irrit. 2
Hazard Statements:
Causes serious eye irritation.

2.2. Label elements

Signal word: Warning
Pictograms: GHS07



Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

High risk of slipping due to leakage/spillage of product.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Safety Data Sheet

according to Regulation (EC) No 1907/2006



CHLORISOL

Print date: 26.02.2014

Product code: 11386-0001

Page 2 of 7

Chemical characterization

Aqueous solution

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
233-140-8	calcium chloride	25 - 50 %
10043-52-4	Xi - Irritant R36	
017-013-00-2	Eye Irrit. 2; H319	

Full text of R and H phrases: see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately. In the event of persistent symptoms receive medical treatment.

After inhalation

Move to fresh air in case of accidental inhalation of vapours. In the event of symptoms refer for medical treatment.

After contact with skin

Wash off immediately with soap and plenty of water. Consult a doctor if skin irritation persists.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical treatment by eye specialist.

After ingestion

Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse out mouth and give plenty of water to drink. Consult a physician.

4.2. Most important symptoms and effects, both acute and delayed

Prolonged skin contact may cause irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

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

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, dry chemical, carbon dioxide (CO₂), water-spray.

Product itself does not burn. Use fire fighting measures that suit the environment and products stored

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Chlorine (Cl₂), Hydrogen chloride (HCl).

5.3. Advice for firefighters

Suppress gases/vapours/mists with water spray jet. Cool containers at risk with water spray jet. Use breathing apparatus with independent air supply. Wear full protective suit.

Safety Data Sheet

according to Regulation (EC) No 1907/2006



CHLORISOL

Print date: 26.02.2014

Product code: 11386-0001

Page 3 of 7

Additional information

Collect contaminated fire-fighting water, avoid any release into the sewerage. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

In case of vapour formation use respirator. Ensure adequate ventilation. Avoid contact with eyes, skin or mucous membrane. Use personal protective clothing.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
Shovel into suitable container for disposal.

6.4. Reference to other sections

Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Do not inhale vapour/aerosol.. In case of insufficient ventilation, especially in confined areas. Use only in thoroughly ventilated areas. Avoid contact with eyes, skin or mucous membrane.

Advice on protection against fire and explosion

No special precautions required. The product is not combustible.

Further information on handling

Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a dry, cool and well-ventilated place.
Keep only in original container.

Advice on storage compatibility

Keep away from food, drink and animal feeding stuffs.

Further information on storage conditions

Protect from frost.

7.3. Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls



Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Wash hands before breaks and immediately after handling the product. When using, do not eat, drink

Safety Data Sheet

according to Regulation (EC) No 1907/2006



CHLORISOL

Print date: 26.02.2014

Product code: 11386-0001

Page 4 of 7

or smoke. Avoid contact with skin, eyes and clothing. Take off immediately all contaminated clothing.

Eye/face protection

Tightly fitting goggles (EN 166).
Eye wash bottle with pure water (EN 15154).

Hand protection

Chemical-resistant gloves (EN 374). Suitable materials also for extended, direct contact (recommended: protection index 6, corresponding to a permeation rate > 480 minutes according to EN 374): Nitrile rubber, butyl rubber.
Follow the recommendations of the glove manufacturer for breakthrough properties especially for workplace conditions involving mechanical stress and contact duration.

Skin protection

Long sleeved clothing (EN 368).

Respiratory protection

No personal respiratory protective equipment normally required.
Breathing apparatus in the event of aerosol or mist formation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Colourless, clear
Odour:	characteristic

Test method

pH-Value (at 20 °C):	8 - 9
----------------------	-------

Changes in the physical state

Melting point:	n.a.
Initial boiling point and boiling range:	approx. 100 °C
Flash point:	n.a.
Vapour pressure: (at 20 °C)	23 hPa
Density (at 20 °C):	approx. 1,35 g/cm ³
Water solubility: (at 20 °C)	Completely miscible
Explosive properties	The product is not explosive
Oxidizing properties	The product is not self-igniting

9.2. Other information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Keep from freezing.

Safety Data Sheet

according to Regulation (EC) No 1907/2006



CHLORISOL

Print date: 26.02.2014

Product code: 11386-0001

Page 5 of 7

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products

Calcium oxide, Chlorine (Cl₂), Hydrogen chloride (HCl).

Further information

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

Acute toxicity

CAS No	Chemical name	Exposure routes	Method	Dose	Species	Source
10043-52-4	calcium chloride	oral	LD50	1000 mg/kg	Rat	

Irritation and corrosivity

Causes serious eye irritation.

Sensitising effects

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

Severe effects after repeated or prolonged exposure

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

No data available.

CAS No	Chemical name	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
10043-52-4	calcium chloride	Acute fish toxicity	LC50	13400 mg/l	96 h	Gambusia affinis	
		Acute algae toxicity	ErC50	3130 mg/l		Scenedesmus subspicatus	
		Acute crustacea toxicity	EC50	144 mg/l	48 h	Daphnia magna	

12.2. Persistence and degradability

Not determined.

12.3. Bioaccumulative potential

Not determined.

12.4. Mobility in soil

Not determined.

Safety Data Sheet

according to Regulation (EC) No 1907/2006



CHLORISOL

Print date: 26.02.2014

Product code: 11386-0001

Page 6 of 7

12.5. Results of PBT and vPvB assessment

Not determined.

12.6. Other adverse effects

Low hazard to waters.

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Should not be disposed of with household waste. Do not flush into surface water or sanitary sewer system. Where possible recycling is preferred to disposal. The waste code number must be agreed with the disposer / manufacturer / competent authority.

Waste disposal number of waste from residues/unused products

160508 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded organic chemicals consisting of or containing dangerous substances
Classified as hazardous waste.

Waste disposal number of contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal. Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Packaging that cannot be cleaned should be disposed of like the product.
Cleaning agent: Water

SECTION 14: Transport information

Land transport (ADR/RID); Marine transport (IMDG); Air transport (ICAO); Inland waterways transport (ADN)

14.1. UN number:

No hazardous material as defined by the transport regulations.

14.2. UN proper shipping name:

No hazardous material as defined by the transport regulations.

14.3. Transport hazard class(es):

No hazardous material as defined by the transport regulations.

14.4. Packing group:

No hazardous material as defined by the transport regulations.

14.5. Environmental hazards

No hazardous material as defined by the transport regulations.

14.6. Special precautions for user

No hazardous material as defined by the transport regulations.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No hazardous material as defined by the transport regulations.

SECTION 15: Regulatory information

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

EU regulatory information

1999/13/EC (VOC): 0 %

National regulatory information

Safety Data Sheet

according to Regulation (EC) No 1907/2006



CHLORISOL

Print date: 26.02.2014

Product code: 11386-0001

Page 7 of 7

Employment restrictions:

Observe employment restrictions for young people.

Water contaminating class (D):

1 - slightly water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

Changes in chapter: 4, 8, 14, 15

Abbreviations and acronyms

EC Directives: acts of the European Union, part of the secondary Union law

CAS-Nr.: Chemical Abstracts Service

TRGS 510: Technical Rules for Hazardous Substances "storage of hazardous materials in portable tanks"

TRGS 900: Technical Rules for Hazardous Substances "workplace exposure limits"

EN 374: Standard for protective gloves (gloves for protection against chemicals and micro-organisms)

EN 166: European safety standards for eye and face protection (requirements)

STOT: Specific target organ toxicity

AVV: European Waste Catalogue

VOC: Volatile organic compound

GHS: Globally Harmonized System of Classification, Labelling and Packaging of Chemicals

ADR: Agreement concerning the international carriage of Dangerous goods by Road

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail

IMDG-Code: International Maritime Code for Dangerous Goods

ADN: sea and inland waterway transport

ICAO: International Civil Aviation Organization

MARPOL 73/78: International Convention for the Prevention of Pollution From Ships

IBC-Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

n.a. - not applicable

Full text of R phrases referred to under Sections 2 and 3

36 Irritating to eyes.

Full text of H statements referred to under Sections 2 and 3

H319 Causes serious eye irritation.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)