



Trade name: Natrii chloricum /Unkrautvert.

Substance number: 066008

Version: 2 / CH

Date revised: 29.03.12

Replaces Version: 1 / CH

Date of printing: 29.03.12

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

1.1. Product identifier

Natrii chloricum /Unkrautvert.

Item-No. 06600800

1.3. Details of the supplier of the safety data sheet

Address

Hänseler AG
 Industriestrasse 35
 9101 Herisau
 Telephone no. 0041 (0)71 353 58 58
 E-mail address of person responsible for this SDS
 sdb@haenseler.ch

1.4. Emergency telephone number

Switzerland :145 / Abroad +41 (0)44 251 51 51

2. Hazards identification ***

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)	Ox. Sol. 1	H271
	Acute Tox. 4	H302
	Aquatic Chronic 2	H411

Classification in accordance with EC directives

Classification	O, R9
	Xn, R22
	N, R51/53

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms ***



Signal Word ***

Danger

Hazard statements ***

H271	May cause fire or explosion; strong oxidiser.
H302	Harmful if swallowed.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P220	Keep/Store away from clothing/.../combustible materials.
P273	Avoid release to the environment.
P306+P360	IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty



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P371+P380+P375 of water before removing clothes.
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

Labelling in accordance with EC directives 1999/45/EC and 67/548/EEC

The product is classified and labelled in accordance with EC directives/the relevant national laws.

Hazard symbols

Harmful



Oxidizing



Dangerous for the environment

R phrases

9 Explosive when mixed with combustible material.

22 Harmful if swallowed.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S phrases

2 Keep out of the reach of children.

13 Keep away from food, drink and animal feedingstuffs.

17 Keep away from combustible material.

46 If swallowed, seek medical advice immediately and show this container or label.

61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Hazardous component(s) to be indicated on label

contains Sodium chlorate

3. Composition/information on ingredients**Chemical characterization**

substances

Hazardous ingredients**Sodium chlorate**

CAS No.	7775-09-9			
EINECS no.	231-887-4			
Concentration		>=	50	%
Classification	Xn, R22 O, R9 N, R51/53			

Classification (Regulation (EC) No. 1272/2008)

Ox. Sol. 1	H271
Acute Tox. 4	H302
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4. First aid measures**4.1. Description of first aid measures****General information**



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Remove contaminated clothing immediately and dispose of safely. Adhere to personal protective measures when giving first aid.

After inhalation

Ensure supply of fresh air. If necessary, give oxygen. Heat. In the event of symptoms take medical treatment.

After skin contact

Wash off immediately with soap and water and rinse well. Consult a doctor if skin irritation persists.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Begin with medical treatment.

After ingestion

Rinse out mouth and give plenty of water to drink. Induce vomiting if patient is conscious, seek medical advice.

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

Irritation of mucosa, Nausea, Dizziness, Gastrointestinal complaints, Cyanosis

5. Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Carbon dioxide, Water spray jet, Extinguish greater fire with water spray or alcohol-resistant foam.

Non Suitable extinguishing media

Dry powder

5.2. Special hazards arising from the substance or mixture

Chlorine (Cl₂); Oxygen

5.3. Advice for firefighters**Special protective equipment for fire-fighting**

Use self-contained breathing apparatus.

6. Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep away unprotected persons.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

Take up mechanically and collect in suitable container for disposal. Flush away residues with hot water.

7. Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Keep container tightly closed. Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid dust formation. Dust deposits that cannot be avoided must be taken up regularly.

Advice on protection against fire and explosion

Substance/product in the dry state promotes fires. Keep away from sources of ignition - refrain from smoking.

7.2. Conditions for safe storage, including any incompatibilities



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Requirements for storage rooms and vessels

Keep in a cool place.

Hints on storage assembly

Do not store with combustible materials. Keep away from reducing agents. Do not store with acids.

Further information on storage conditions

Protect from heat and direct sunlight. Keep container tightly closed and dry in a cool, well-ventilated place. Protect from atmospheric moisture and water. Product is hygroscopic.

8. Exposure controls/personal protection**8.2. Exposure controls****Exposure controls**

See chapter 7. No measures exceeding the ones mentioned are necessary.

General protective and hygiene measures

Keep away from food-stuffs, beverages and feed-stocks. At work do not eat, drink, smoke or take drugs. Wash hands before breaks and after work. Hold eye wash fountain available. Do not inhale dust/fumes/mist.

Respiratory protection

Breathing apparatus in the event of aerosol, mist or fume formation. Particle filter P2

Hand protection

Protective gloves

Appropriate Material	Natural Latex		
Material thickness	0.5	mm	
Penetrating time	> 8	h	
Appropriate Material	Polychloroprene		
Material thickness	0.5	mm	
Penetrating time	> 8	h	
Appropriate Material	nitrile rubber - NBR		
Material thickness	0.35	mm	
Penetrating time	> 8	h	
Appropriate Material	Butyl rubber - Butyl		
Material thickness	0.5	mm	
Penetrating time	> 8	h	
Appropriate Material	Fluoro carbon rubber - FKM		
Material thickness	0.4	mm	
Penetrating time	> 8	h	
Appropriate Material	PVC		
Material thickness	0.5	mm	
Penetrating time	> 8	h	

Eye protection

Tightly fitting safety glasses

Body protection

Protective clothing; rubber boots

9. Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Form	crystalline
Colour	colourless
Odour	odourless
Melting point	



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Value	248	to	261	°C
method	DIN 51761			

Boiling point

Remarks Not determined

Flash point

Remarks Not applicable

Flammability

Not ignitable

Danger of fire if contact with combustible materials.

Density

Value	2.49	g/cm ³
method	DIN 51757	

Solubility in water

Value	715	g/l
Temperature	20	°C

Thermal decomposition

Value	300	°C
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Efflux time

Remarks Not applicable

9.2. Other information**Other information**

The product is dangerous for explosions.

10. Stability and reactivity**10.4. Conditions to avoid**

To avoid thermal decomposition, do not overheat.

Thermal decomposition

Value	300	°C
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10.5. Incompatible materials

Do not store with combustible materials. Reactions with metals in powder form. Violent reaction with organic compounds like wood, paper, grease. Reaction with ammonium compounds, Reactions with acids. Reactions with reducing agents. Reactions with sulphur and sulfides, phosphorus. Incompatible with: combustible substances

10.6. Hazardous decomposition products

Chlorine compounds, Oxygen

Other information

shock-sensitive. friction-sensitive

11. Toxicological information**11.1. Information on toxicological effects****Acute oral toxicity**

Species	rat		
LD50	1200		mg/kg

Acute dermal toxicity

Species	rabbit
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LD50 > 10000 mg/kg

Acute inhalational toxicitySpecies rat
LC50 > 7 mg/l
Duration of exposure 4 h**Skin corrosion/irritation**

Remarks Irritating effects on the skin and mucous membrane.

Serious eye damage/irritation

Remarks Irritates the eyes.

Sensitization

Remarks No sensitisation effect known.

Subacute, subchronic, chronic toxicityRemarks Repeated absorption/exposure may cause disorder of the kidneys.
Remarks Change of blood count possible.**12. Ecological information *******12.1. Toxicity****Fish toxicity**Species rainbow trout (Oncorhynchus mykiss)
LC50 1750 mg/l
Duration of exposure 96 hSpecies Fathead minnow (Pimephales promelas)
LC50 13500 mg/l
Duration of exposure 96 h**Daphnia toxicity**Species Daphnia magna
EC50 1093 mg/l
Duration of exposure 24 h**Algae toxicity**IC50 133 mg/l
Duration of exposure 72 h**12.6. Other adverse effects****General information / ecology**

Do not allow it to reach ground water, water bodies or sewage system. Hazard for drinking water supplies.

13. Disposal considerations**13.1. Waste treatment methods****Disposal recommendations for the product**EWC waste code No not dispose with rubbish.
EWC waste code Should not be released into the sanitary sewer system.
In accordance with regulations for special waste, must be taken, to an underground disposal site.**Disposal recommendations for packaging**

Disposal in compliance with local and national regulations.

14. Transport information**Land transport ADR/RID**



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14.1. UN number

UN 1495

14.2. UN proper shipping name

SODIUM CHLORATE

14.3. Transport hazard class(es)

Class 5.1

Label 5.1

14.4. Packing group

Packing group II

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS

Marine transport IMDG/GGVSee**14.1. UN number**

UN 1495

14.2. UN proper shipping name

SODIUM CHLORATE

14.3. Transport hazard class(es)

Class 5.1

14.4. Packing group

Packing group II

Environmental labelling ENVIRONMENTALLY HAZARDOUS

Air transport ICAO/IATA**14.1. UN number**

UN 1495

14.2. UN proper shipping name

SODIUM CHLORATE

14.3. Transport hazard class(es)

Class 5.1

14.4. Packing group

Packing group II

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS

15. Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations Switzerland**Swiss Toxicity Class 3
SFOPH T no. G-2072**15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out.

16. Other information**R-phrases listed in chapter 3**22 Harmful if swallowed.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
9 Explosive when mixed with combustible material.**Hazard statements listed in chapter 3**H271 May cause fire or explosion; strong oxidiser.
H302 Harmful if swallowed.



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H411

Toxic to aquatic life with long lasting effects.

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.