

Trade name: Acid nitricum 65%

Substance number: 204500

Version: 3 / CH

Date revised: 14.12.2016

Replaces Version: 2 / CH

Print date: 14.12.16

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

1.1. Product identifier

Acid nitricum 65%

Item No. 20450000

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

Use of the substance/preparation

Oxidizing agents, Chemical

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 sdb@haenseler.ch

person responsible
for this SDS

1.4. Emergency telephone number

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

SECTION 2: Hazards identification ***

2.1. Classification of the substance or mixture

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

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

Skin Corr. 1A H314

Eye Dam. 1 H318

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008
For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms ***



Signal word

Danger

Hazard statements ***

H314 Causes severe skin burns and eye damage.

Precautionary statements ***

P264.1 Wash hands thoroughly after handling.

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

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER or doctor.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains Nitric acid

SECTION 3: Composition/information on ingredients *****Hazardous ingredients (Regulation (EC) No. 1272/2008) *******Nitric acid**

CAS No.	7697-37-2
EINECS no.	231-714-2
Registration no.	01-2119487297-23-XXXX
Concentration	>= 50 < 65 %
Classification (Regulation (EC) No. 1272/2008)	
	Ox. Liq. 3 H272
	Skin Corr. 1A H314

Concentration limits (Regulation (EC) No. 1272/2008)

Skin Corr. 1A	H314	>= 20
Ox. Liq. 3	H272	>= 65
Skin Corr. 1B	H314	>= 5 < 20

CLP Regulation (EC) No 1272/2008, Annex VI, Note B

DSD Directive 67/548/EEC, Annex I, Note B

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Remove contaminated, soaked clothing immediately and dispose of safely. Summon a doctor immediately. If the patient is likely to become unconscious, place and transport in stable sideways position. Keep warm, calm and covered up.

After inhalation

Remove the casualty into fresh air and keep him calm. If the patient is likely to become unconscious, place and transport in stable sideways position. Keep warm and at rest. Ensure supply of fresh air. Summon a doctor immediately.

After skin contact

Summon a doctor immediately. Wash off immediately with soap and water and rinse well. Consult a doctor if skin irritation persists. Remove contaminated, soaked clothing immediately and dispose of safely.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Summon a doctor immediately.

After ingestion

Do not allow to drink liquids. Do NOT induce vomiting. If swallowed, rinse mouth with water (only if the person is conscious). Summon a doctor immediately. Rinse out mouth and give plenty of water to drink.

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

Irritating to respiratory system. Irritation of mucosa, Chemical burn, if swallowed: bleeding vomiting, Death, In the foreground the local effect stays at first, characterized by a quickly in the depth moving damage of the tissue.

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

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Hints for the physician / treatment

Keep under medical supervision for at least 48 hours.

Hints for the physician / hazards

Risk of pulmonary oedema

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

Water, Carbon dioxide

5.2. Special hazards arising from the substance or mixtureIn case of combustion evolution of dangerous gases possible. Nitrogen oxides (NO_x); The product is not combustible.**5.3. Advice for firefighters****Special protective equipment for fire-fighting**

Use self-contained breathing apparatus. Wear full protective suit.

Other information

Cool endangered containers with water spray jet. Suppress vapours with water spray jet.

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

Use personal protective clothing. Keep people away and stay on the upwind side. Do not inhale vapours. Ensure adequate ventilation. Wear protective equipment. Avoid contact with skin, eyes and clothing.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Dilute with lot of water.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (eg sand, kieselguhr, universal binder). Dispose of absorbed material in accordance with the regulations. Ensure adequate ventilation. Rinse away rest with plenty of water.

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

Keep container tightly closed. Provide suitable exhaust ventilation at processing machines. Avoid formation of aerosols. When diluting, always stir product into water. Observe emission limit.

Advice on protection against fire and explosion

The product is not combustible. No special measures required.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Suitable material: stainless steel. Use glass containers. plastic materials. Suitable materials: Use PVC containers. Suitable materials: Polyethylene/Polypropylene.

Hints on storage assembly

Do not store together with: Alkalis, Alkalies, Keep away from flammable substances. Do not store together with: Oxidizing substances

Further information on storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from heat. Keep away

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from sources of ignition.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

Nitric acid

List	SUVA			
Type	MAK			
Value	5	mg/m ³	2	ppm(V)
Short term exposure limit	5	mg/m ³	2	ppm(V)
Status: 2014				

8.2. Exposure controls

General protective and hygiene measures

Keep away from food-stuffs, beverages and feed-stocks. Wash hands before breaks and after work. Remove contaminated, soaked clothing immediately and dispose of safely. Avoid contact with skin and eyes. Hold eye wash fountain available. Do not inhale gases/vapours/aerosols. At work do not eat, drink, smoke or take drugs. Observe the usual precautions for handling chemicals.

Respiratory protection

Breathing apparatus in the event of aerosol or mist formation. Breathing apparatus in the event of vapours. Short term: filter apparatus, Filter B; Gas filter E.

Hand protection

Gloves (acid-resistant)
Breakthrough time > 8 h
Not suitable: rubber gloves
Not suitable: leather gloves
Not suitable: gloves made of thick material

Eye protection

Safety glasses with side protection shield; Face shield; Do not wear contact lenses

Body protection

Acid-resistant protective clothing; protective overalls; Protective shoes

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	liquid
Colour	colourless to slightly yellow
Odour	pungent
pH value	
Value	< 1
Temperature	20 °C
Method	ISO 1148
Melting point	
Value	appr. -18.8 to -23 °C
Initial boiling point and boiling range	
Value	104 to 120.4 °C
Flash point	
Value	°C
Remarks	Not applicable

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Flammability (solid, gas)

Not self inflammable

Vapour pressure

Value	8.5	to	20	hPa
Temperature	20	°C		

Vapour density

Value appr. 2

Density

Value	1.386	to	1.396	g/cm ³
Remarks	Relative Density according specification			

Solubility in water

Remarks Completely miscible

Partition coefficient: n-octanol/water

log Pow -0.21

Viscosity**dynamic**

Value 0.75 mPa.s

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

To avoid thermal decomposition, do not overheat. Protect from light. Protect from warmth.

10.5. Incompatible materials

Reducing agents, Alkalies, Bases, Gives off hydrogen disulfide (H₂S) in contact with moisture.
 Reactions with metals in powder form. Corrosive to metals. Metals, Reacts violently with: Reducing agents, Bases, organic substances, Reactions with metals in powder form. Exothermic reaction with: Water

10.6. Hazardous decomposition productsnitrous oxides (NO_x)**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute inhalational toxicity**

ATE	2.4004	mg/l
Administration/Form	Vapors	
Method	calculated value (Regulation (EC) No. 1272/2008)	

Acute inhalative toxicity (Components)**Nitric acid**

Species	rat	
LC50	1.56	mg/l
Duration of exposure	4	h
Administration/Form	Vapors	
Remarks	Inhalation may lead to the formation of oedemas in the respiratory tract.	

Skin corrosion/irritation

evaluation	strongly corrosive
Remarks	Corrosive action on the skin and mucous membrane.

Serious eye damage/irritation

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evaluation strongly corrosive
Remarks Influence of the product with the eyes can lead to blindness.

Sensitization

Remarks No sensitisation effect known.

Experience in practice

After Swallowing: burns in mouth, throat, oesophagus and gastrointestinal tract. Risk of perforation in the oesophagus and stomach. vomiting. inhalation. Causes burns.

SECTION 12: Ecological information *****12.1. Toxicity****Fish toxicity (Components)****Nitric acid**

Species	rainbow trout (Oncorhynchus mykiss)	
LC50	12.5	mg/l
Duration of exposure	96	h
Source	IUCLID	

Daphnia toxicity (Components)**Nitric acid**

Species	Daphnia magna	
EC50	180	mg/l
Duration of exposure	48	h
Source	IUCLID	

12.3. Bioaccumulative potential**Partition coefficient: n-octanol/water**

log Pow	-0.21
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12.6. Other adverse effects**General information / ecology**

Neutralization is normally necessary before waste water is discharged into water treatment plants. The product causes changes in the pH value in the test system. The result relates to the unneutralized sample.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations for the product**

Disposal in compliance with local and national regulations.

Disposal recommendations for packaging

Dispose of as unused product.

SECTION 14: Transport information *****Land transport ADR/RID *******14.1. UN number**

UN 2031

14.2. UN proper shipping name

NITRIC ACID, Solution

14.3. Transport hazard class(es)

Class	8	
Label	8	5.1

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14.4. Packing group

Packing group	II
Limited Quantity	1 I
Transport category	2
Tunnel restriction code	E

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

UN 2031

14.2. UN proper shipping name

NITRIC ACID, Solution

14.3. Transport hazard class(es)

Class 8

14.4. Packing group

Packing group II

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

UN 2031

14.2. UN proper shipping name

NITRIC ACID, Solution

14.3. Transport hazard class(es)

Class 8

14.4. Packing group

Packing group II

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Water Hazard Class (Germany)**Water Hazard Class WGK 1
(Germany)

Identification number 414

Remarks Classification according to Annex 2 VwVwS

SECTION 16: Other information**Hazard statements listed in Chapter 3**H272 May intensify fire; oxidiser.
H314 Causes severe skin burns and eye damage.**CLP categories listed in Chapter 3**Ox. Liq. 3 Oxidising liquid, Category 3
Skin Corr. 1A Skin corrosion, Category 1A**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.