



Trade name: Chloroformium

Substance number: 154100

Version: 3 / CH

Date revised: 30.12.10

Replaces Version: 2 / CH

Date of printing: 01.05.12

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

1.1. Product identifier

Chloroformium

Item-No. 15410000

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

2. Hazards identification ***

2.1. Classification of the substance or mixture

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

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

Carc. 2	H351
Acute Tox. 4	H302
STOT RE 2	H373
Skin Irrit. 2	H315

Classification in accordance with EC directives

Classification Carc.Cat.3, R40
Xn, R22-R48/20/22
Xi, R38

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms



Signal Word

Warning

Hazard statements ***

H351	Suspected of causing cancer.
H302	Harmful if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure:
H315	Causes skin irritation.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P270	Do not eat, drink or smoke when using this product.



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P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 P405 Store locked up.

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

R phrases

22 Harmful if swallowed.
 38 Irritating to skin.
 40 Limited evidence of a carcinogenic effect.
 48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

S phrases

36/37 Wear suitable protective clothing and gloves.

Hazardous component(s) to be indicated on label

contains Trichloromethane

3. Composition/information on ingredients**Hazardous ingredients****Trichloromethane**

CAS No.	67-66-3			
EINECS no.	200-663-8			
Concentration		>=	50	%
Classification	Carc.Cat.3, R40 Xn, R22-R48/20/22 Xi, R38			

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

Carc. 2	H351
Acute Tox. 4	H302
STOT RE 2	H373
STOT RE 2	H373
Skin Irrit. 2	H315

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

STOT RE 1	H373	>=	5
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4. First aid measures**4.1. Description of first aid measures****General information**

Remove affected person from danger area, lay him down. Remove contaminated, soaked clothing immediately and dispose of safely. Adhere to personal protective measures when giving first aid. Poisonous symptoms can first be observed after several hours, therefore medical observation for at



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least 48 hours is necessary.

After inhalation

Ensure supply of fresh air. If necessary, give oxygen. Seek medical advice immediately. Irregular breathing/no breathing: artificial respiration. If the patient is likely to become unconscious, place and transport in stable sideways position.

After skin contact

Wash off immediately with soap and water and rinse well. Take for medical treatment.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). By continuous complaints consult a physician.

After ingestion

Rinse out mouth and give plenty of water to drink. Ensure supply of fresh air. Summon a doctor immediately. Do not induce vomiting. Administer activated charcoal. Give a solution of sodium sulphate.

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

Irritating to respiratory system. CNS Disturbance, Narcosis

4.3. Indication of any immediate medical attention and special treatment needed**Hints for the physician / hazards**

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

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

Extinguishing measures to suit surroundings

5.2. Special hazards arising from the substance or mixture

Hydrogen chloride (HCl); Phosgene

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

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

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

Pick up with absorbent material (eg sand, kieselgur, acid binder, universal binder, sawdust). When picked up, treat material as prescribed under heading "Disposal". Ensure adequate ventilation.

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

Open and handle container with care. Provide good ventilation of working area (local exhaust ventilation if necessary). Provide good room ventilation even at ground level (vapours are heavier than air).



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Advice on protection against fire and explosion

The product is not combustible.

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

Provide solvent-resistant and impermeable floor. Provide floor trough without outlets. Use stainless steel containers. Do not use light metal drums. Use teflon-coated containers and pinings. Use viton-coated containers and pinings. Do not use containers and pinings made of traditionally synthetic materials.

Hints on storage assembly

Do not store with oxidizing agents.

Further information on storage conditions

Keep container tightly closed, cool and dry. Protect from heat and direct sunlight. Protect from light. Protect from exposure to air/oxygen.

8. Exposure controls/personal protection**8.1. Control parameters****Exposure limit values****Trichloromethane**

List	SUVA			
Type	MAK			
Value	2,5	mg/m ³	0,5	ppm(V)
Short term exposure limit	5	mg/m ³	1	ppm(V)
Maximum limit value: 4x15; Skin resorption / sensibilisation: H; Pregnancy group: C; Status: 2005;				

Ethanol

List	SUVA			
Type	MAK			
Value	960	mg/m ³	500	ppm(V)
Short term exposure limit	1920	mg/m ³	1000	ppm(V)
Maximum limit value: 4x15; Pregnancy group: C; Status: 2005;				

8.2. Exposure controls**General protective and hygiene measures**

Keep away from food-stuffs, beverages and feed-stocks. Remove contaminated, soaked clothing immediately and dispose of safely. Store work clothing separately. Wash hands before breaks and after work. Use barrier skin cream. Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. Do not eat or drink during work time.

Respiratory protection

Breathing apparatus in the event of aerosol or mist formation. Gas filterAX.

Hand protection

Protective gloves
 Appropriate Material Fluoro carbon rubber - FKM
 Material thickness 0.4 mm
 Not suitable: gloves of natural latex
 Not suitable: PVC gloves
 Not suitable: leather gloves
 Not suitable: gloves made of thick material
 Not suitable: gloves of polychloroprene
 Not suitable: gloves of nitrile rubber - NBR
 Not suitable: gloves of butyl rubber - Butyl

Eye protection

Tightly fitting safety glasses



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Body protection

Solvent-resistant protective clothing

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

Form	Liquid		
Colour	colourless		
Odour	ether-like		
Melting point			
Value	-63		°C
method	DIN 51761		
Boiling point			
Value	61		°C
method	DIN 51761		
Flash point			
Remarks	Not applicable		
Vapour pressure			
Value	213		hPa
Temperature	20	°C	
method	DIN 51754		
Density			
Value	1.483		g/cm ³
Temperature	20	°C	
method	DIN 51757		
Solubility in water			
Value	12		g/l
Temperature	20	°C	
Octanol/water partition coefficient (log Pow)			
log Pow	2		
Viscosity			
dynamic			
Value	0.56		mPa.s
Temperature	20	°C	
method	DIN 51550		

9.2. Other information**Other information**

The product is not dangerous for explosions.

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

To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

Reactions with alkalis. Partly very violent reactions with bases and numerous organic classes of substances such as alcohols and amines. Reactions with alkali metals. Reactions with metals in powder form.

10.6. Hazardous decomposition products



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Hydrogen chloride (HCl), Phosgene

11. Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

Species	rat		
LD50		908	mg/kg

Acute dermal toxicity

Species	rat		
LD50		75	mg/kg

Acute inhalational toxicity

Species	rat		
LC50		48	ppm(V)
Duration of exposure		4	h

Skin corrosion/irritation

Remarks	Irritating effects on the skin and mucous membrane.
Remarks	Danger of resorption through the skin.

Serious eye damage/irritation

Remarks	slightly irritating (Eye)
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Sensitization

Remarks	No sensitisation effect known.
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Subacute, subchronic, chronic toxicity

Remarks	Repeated absorption/exposure may cause disorder of liver and kidneys.
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Experience in practice

When inhaled in larger quantities, the solvent vapours cause a narcotic effect.

Other information

Carc. Cat. 3
Muta. Cat. 3
Repr. Cat. 3

12. Ecological information

12.1. Toxicity

Daphnia toxicity

Species	Daphnia magna		
EC50		79	mg/l
Duration of exposure		48	h

Algae toxicity

Species	Scenedesmus quadricauda		
IC50		1100	mg/l
Duration of exposure		8	d

Bacteria toxicity

Species	Pseudomonas putida		
EC5		125	mg/l
Duration of exposure		16	h

12.3. Bioaccumulative potential

Octanol/water partition coefficient (log Pow)

log Pow	2
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12.5. Results of PBT and vPvB assessment

Evaluation of persistence and bioaccumulation potential

Due to the distribution coefficient n-octanol/water, accumulation in organisms is not possible.

12.6. Other adverse effects

General information / ecology

Harmful to aquatic organisms. 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.
Disposal in compliance with local and national regulations.
EWC waste code Should not be released into the sanitary sewer system.
In accordance with regulations for special waste, must be taken, after pretreatment, to an authorised special waste incineration plant.

Disposal recommendations for packaging

Dispose of as unused product.

14. Transport information

Land transport ADR/RID

14.1. UN number

UN 1888

14.2. UN proper shipping name

CHLOROFORM

14.3. Transport hazard class(es)

Class 6.1

Label 6.1

14.4. Packing group

Packing group III

Marine transport IMDG/GGVSee

14.1. UN number

UN 1888

14.2. UN proper shipping name

CHLOROFORM

14.3. Transport hazard class(es)

Class 6.1

14.4. Packing group

Packing group III

14.5. Environmental hazards

no

Air transport ICAO/IATA

14.1. UN number

UN 1888

14.2. UN proper shipping name

CHLOROFORM

14.3. Transport hazard class(es)

Class 6.1

14.4. Packing group



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Packing group

III

15. Regulatory information

16. Other information

R-phrases listed in chapter 3

22	Harmful if swallowed.
38	Irritating to skin.
40	Limited evidence of a carcinogenic effect.
48/20/22	Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

Hazard statements listed in chapter 3

H302	Harmful if swallowed.
H315	Causes skin irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure:

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.