



Trade name: Tetrachloraethylenum

Substance number: 156700

Version: 2 / CH

Date revised: 01.05.12

Replaces Version: 1 / CH

Date of printing: 01.05.12

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

1.1. Product identifier

Tetrachloraethylenum

Item-No. 15670000

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

Aquatic Chronic 2 H411

Classification in accordance with EC directives

Classification Carc.Cat.3, R40

N, R51/53

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms ***



Signal Word ***

Warning

Hazard statements ***

H411 Toxic to aquatic life with long lasting effects.

H351 Suspected of causing cancer.

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





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Harmful

Dangerous for the
environment**R phrases**

40	Limited evidence of a carcinogenic effect.
51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S phrases

23.3	Do not breathe vapour.
36/37	Wear suitable protective clothing and gloves.
61	Avoid release to the environment. Refer to special instructions/Safety data sheets.

Hazardous component(s) to be indicated on label

contains	Tetrachloroethylene
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3. Composition/information on ingredients**Hazardous ingredients****Tetrachloroethylene**

CAS No.	127-18-4			
EINECS no.	204-825-9			
Concentration		>=	50	%
Classification	Carc.Cat.3, R40 N, R51/53			

Classification (Regulation (EC) No. 1272/2008)			
	Carc. 2	H351	
	Aquatic Chronic 2	H411	

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

Remove affected person from danger area. Remove contaminated, soaked clothing immediately and dispose of safely. Poisonous symptoms can first be observed after several hours, therefore medical observation for at least 48 hours is necessary.

After inhalation

Ensure supply of fresh air. If necessary, give oxygen. Seek medical advice immediately. If the patient is likely to become unconscious, place and transport in stable sideways position.

After skin contact

In case of contact with skin wash off immediately with plenty of water. Take for medical treatment.

After eye contact

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

After ingestion

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

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

Headache, Dizziness, Shortness of breath, Nausea, Gastrointestinal complaints, Narcosis

5. Firefighting measures



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5.1. Extinguishing media

Suitable extinguishing media

Extinguishing measures to suit surroundings

5.2. Special hazards arising from the substance or mixture

In the event of fire the following can be released: Phosgene; Hydrogen chloride (HCl); Chlorine (Cl₂)

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.

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 allow to enter drains or waterways. Suppress gases/vapours/mists with water spray jet. Prevent spread over a wide area (e.g. by containment or oil barriers). Advise water authority if spillage has entered water course or drainage system.

6.3. Methods and material for containment and cleaning up

Send in suitable containers for recovery or disposal. Pick up rest with absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). 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

Provide good ventilation of working area (local exhaust ventilation if necessary). Provide good room ventilation even at ground level (vapours are heavier than air). Open and handle container with care. Avoid formation of aerosols. Transfer and handle only in enclosed systems.

Advice on protection against fire and explosion

The product is not combustible.

7.2. Conditions for safe storage, including any incompatibilities

Recommended storage temperature

Value	15	25	°C
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Requirements for storage rooms and vessels

Provide solvent-resistant and impermeable floor. Use steel or stainless steel containers. Use aluminium containers. Provide floor trough without outlets. Unsuitable material: plastic materials

Hints on storage assembly

Do not store with combustible materials.

Further information on storage conditions

Keep container in a well-ventilated place. Keep container tightly closed. Protect from atmospheric moisture and water. Protect from heat and direct sunlight. Protect from light. Keep in a cool place

8. Exposure controls/personal protection



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8.1. Control parameters

Exposure limit values

Tetrachloroethylene

List	SUVA			
Type	MAK			
Value	345	mg/m ³	50	ppm(V)
Short term exposure limit	690	mg/m ³	100	ppm(V)
Maximum limit value: 4x15; Skin resorption / sensibilisation: H; Pregnancy group: D; Status: 2005;				
Remarks: B				

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. Avoid contact with eyes and skin. At work do not eat, drink, smoke or take drugs. Do not inhale gases/vapours/aerosols.

Respiratory protection

Breathing apparatus in the event of aerosol or mist formation.

Hand protection

Gloves (solvent-resistant)	
Appropriate Material	Fluoro carbon rubber - FKM
Material thickness	0.4 mm
Penetrating time	>= 8 h
Gloves (solvent-resistant)	
Appropriate Material	Polyvinyl alcohol
Penetrating time	>= 8 h
Not suitable: rubber gloves	
Not suitable: PVC gloves	
Not suitable	
Butyl rubber - Butyl	

Eye protection

Safety glasses

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	-23 °C
method	DIN 51761
Boiling point	
Value	120 to 122 °C
method	DIN 51761
Flash point	
Value	°C
Remarks	Not applicable
Vapour pressure	



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Value	1.9		kPa
Temperature	20	°C	

Density

Value	1.619		g/cm ³
method	DIN 51757		

Solubility in water

Value	0.2		g/l
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Octanol/water partition coefficient (log Pow)

log Pow	>	3	
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Viscosity**dynamic**

Value	appr. 0.9		mPa.s
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

Avoid contact with: concentrated oxygen, NO₂, Reactions with oxygen. Reactions with alkali metals. Reactions with metals in powder form.

10.6. Hazardous decomposition products

Hydrogen chloride (HCl), Phosgene, Carbon monoxide, Chlorine, Chlorine compounds

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

Species	rat		
LD50	2629		mg/kg

Acute dermal toxicity

Species	rat		
LD50	>	2000	mg/kg

Acute inhalational toxicity

Species	rat		
LC50	42.4		mg/l
Duration of exposure	4	h	

Skin corrosion/irritation

Remarks	Irritates the mucous membrane.
Remarks	Repeated and prolonged skin contact may lead to defatting and irritation of the skin.

Serious eye damage/irritation

Remarks	Irritates the eyes.
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Sensitization

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

Remarks Chronic intensive skin contact may cause dermatitis.

Carcinogenicity

Remarks Suspicion about carcinogenic effect.

Experience in practice

Liver and Kidney damage is possible. Can be absorbed through skin.

12. Ecological information *****12.1. Toxicity****Fish toxicity**Species rainbow trout (*Oncorhynchus mykiss*)
5 mg/l**Daphnia toxicity**Species Daphnia magna
EC50 22 mg/l
Duration of exposure 48 hSpecies Daphnia magna
LC50 14 mg/l
Duration of exposure 96 h**Bacteria toxicity**Species Pseudomonas putida
EC10 45 mg/l
Duration of exposure 18 h**12.2. Persistence and degradability****Biodegradability**Value 11 %
Duration of test 28 d
valuation not readily degradable**12.3. Bioaccumulative potential****Octanol/water partition coefficient (log Pow)**

log Pow > 3

12.6. Other adverse effects**General information / ecology**

Toxic for aquatic organisms. Do not allow it to reach soil, 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**

Disposal in compliance with local and national regulations.

Disposal recommendations for packaging

Dispose of as unused product.

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



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14.1. UN number

UN 1897

14.2. UN proper shipping name

TETRACHLOROETHYLENE

14.3. Transport hazard class(es)

Class 6.1

Label 6.1

14.4. Packing group

Packing group III

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS

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

UN 1897

14.2. UN proper shipping name

TETRACHLOROETHYLENE

14.3. Transport hazard class(es)

Class 6.1

14.4. Packing group

Packing group III

14.5. Environmental hazards

Marine Pollutant

Environmental labelling ENVIRONMENTALLY HAZARDOUS

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

UN 1897

14.2. UN proper shipping name

TETRACHLOROETHYLENE

14.3. Transport hazard class(es)

Class 6.1

14.4. Packing group

Packing group III

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS

15. Regulatory information**16. Other information****R-phrases listed in chapter 3**

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Limited evidence of a carcinogenic effect.

51/53

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

Hazard statements listed in chapter 3

H351

Suspected of causing cancer.

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.