

Trade name: Aether

Substance number: 150600

Version: 7 / CH

Date revised: 21.01.2019

Replaces Version: 6 / CH

Print date: 01.10.19

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Aether

Item No. 15060000

1.3. Details of the supplier of the safety data sheet**Address/Manufacturer**Hänseler AG
Industriestrasse 35
9100 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)

Flam. Liq. 1 H224

Acute Tox. 4 H302

STOT SE 3 H336

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 ***

H224 Extremely flammable liquid and vapour.

H302 Harmful if swallowed.

H336 May cause drowsiness or dizziness.

Precautionary statements ***

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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

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P403+P233 comfortable for breathing.
 P501.3 Store in a well-ventilated place. Keep container tightly closed.
 Disposal in compliance with local and national regulations.

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

contains *** Diethyl ether

Supplemental information

EUH066 Repeated exposure may cause skin dryness or cracking.
 EUH019 May form explosive peroxides.

SECTION 3: Composition/information on ingredients *****Hazardous ingredients *******Diethyl ether**

CAS No.	60-29-7	
EINECS no.	200-467-2	
Registration no.	01-2119535785-29-XXXX	
Concentration	>= 66	%
Classification (Regulation (EC) No. 1272/2008)		
	Flam. Liq. 1	H224
	Acute Tox. 4	H302
	STOT SE 3	H336

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

Remove contaminated clothing immediately and dispose of safely. Summon a doctor immediately.

After inhalation

Ensure supply of fresh air. If necessary, give oxygen. Summon a doctor immediately. 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. Remove contaminated clothing.

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. Take medical treatment.

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

Irritation of mucosa, Nausea, Dizziness, Intoxication, Narcosis, respiratory moderation

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.

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

Water spray jet, Foam, Dry powder, Carbon dioxide

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Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Carbon monoxide (CO); Can build mixtures of gas and air which are capable of explosion. Vapours heavier than air.

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

Use self-contained breathing apparatus. Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses.

Other information

Cool endangered containers with water spray jet.

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

Wear protective equipment. Keep away from sources of ignition - No smoking. Keep away unprotected persons. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not inhale vapours.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. Advise water authority if spillage has entered water course or drainage system.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (eg sand, kieselguhr). Take up mechanically and collect in suitable container for disposal. Provide adequate ventilation.

6.4. Reference to other sections

Information regarding Safe handling, see Section 7. Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

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

Observe the usual precautions for handling chemicals. Avoid formation of aerosols. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Provide good ventilation of working area (local exhaust ventilation if necessary). Provide good room ventilation even at ground level (vapours are heavier than air). Avoid inhaling dusts/ billows/ steams.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Vapours can form an explosive mixture with air. Take action to prevent static discharges. Use explosion-proof equipment/fittings and non-sparking tools. Risk of explosion if the liquid enters the drains.

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

explosion proof. Provide solvent-resistant and impermeable floor. Use stainless steel containers. Use aluminium containers. Unsuitable material: plastic materials. rubber. Do not use zinc containers. Store away from sources of ignition and heat.

Hints on storage assembly

Do not store with oxidizing agents. Do not store with acids.

Storage classes

Storage class according to TRGS 510

3

Flammable liquid

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Storage category (Switzerland)

3

Flammable liquid

Further information on storage conditions

Keep container tightly closed, cool and dry. Protect from exposure to air/oxygen (peroxide formation).
Protect from light.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limit values****Diethyl ether**

List	SUVA			
Type	MAK			
Value	1200	mg/m ³	400	ppm(V)
Short term exposure limit	1200	mg/m ³	400	ppm(V)
Status: 2017; Remarks: ZNS, Geruch, OAWKT HU; NIOSH				

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

Wash hands before breaks and after work. Preventative skin protection. Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes. At work do not eat, drink, smoke or take drugs.

Respiratory protection

Self-contained breathing apparatus. Short term: filter apparatus, filter AX

Hand protection

Gloves	
Glove type	Gloves (multilayer) - PE/EVAL/PE (PE=Polyethylene, EVAL=Ethylene-vinyl-alcohol-copolymer)
Material thickness	0.5 mm
Breakthrough time	>= 8 h
Not suitable: rubber gloves	
Not suitable: PVC gloves	
Not suitable	
nitrile rubber - NBR	
Fluoro carbon rubber - FKM	
Butyl rubber - Butyl	

Eye protection

Tightly fitting safety glasses

Body protection

Solvent-resistant protective clothing

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

Form	liquid
Colour	colourless
Odour	sweetish
pH value	
Remarks	Not applicable
Melting point	
Value	-116.3 °C
Initial boiling point and boiling range	

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Value	35	°C
Flash point		
Value	-40	°C
Flammability (solid, gas)		
Flammable.		
Upper/lower flammability or explosive limits		
Lower explosion limit	1.7	%(V)
Upper explosion limit	36	%(V)
Vapour pressure		
Value	587	hPa
Temperature	20	°C
Vapour density		
Value	1.9	
Temperature	20	°C
Density		
Value	0.71	g/cm ³
Temperature	20	°C
Solubility in water		
Value	69	g/l
Temperature	20	°C
Ignition temperature		
Value	170	°C
Viscosity		
dynamic		
Value	0.23	mPa.s
Temperature	20	°C

9.2. Other information**Other information**

Forms explosive mixture with air are possible.

SECTION 10: Stability and reactivity**10.2. Chemical stability**

No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

Protect from exposure to air/oxygen (peroxide formation).

10.4. Conditions to avoid

Heat. Flames. Sparks. Protect from light. Protect from exposure to air/oxygen.

10.5. Incompatible materials

Violent reactions with air and oxidising agents.

10.6. Hazardous decomposition products

Flammable gases/vapours, Peroxides

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

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ATE 200 mg/kg
Method calculated value (Regulation (EC) No. 1272/2008)

Acute oral toxicity (Components)**Diethyl ether**

Species rat
LC50 200 to 2000 mg/kg

Acute inhalative toxicity (Components)**Diethyl ether**

Species rat
LC50 > 20 mg/l
Duration of exposure 4 h

Skin corrosion/irritation

evaluation slightly irritant
Remarks Repeated and prolonged skin contact may lead to defatting and irritation of the skin.

Serious eye damage/irritation

Remarks Not documented.

Sensitization

Remarks No sensitisation effect known.

Sensitization (Components)**Diethyl ether**

Species guinea pig
evaluation non-sensitizing

Mutagenicity

Remarks Not documented.

Reproductive toxicity

Remarks Not documented.

Carcinogenicity

Remarks Not documented.

Experience in practice

Inhalation causes narcotic effect/intoxication. Inhalation of vapours may lead to headache, drowsiness and dizziness. Possible risk of harm to the unborn child.

SECTION 12: Ecological information**12.1. Toxicity****Fish toxicity**

Species golden orfe (*Leuciscus idus*)
LC50 2840 mg/l
Duration of exposure 48 h
Species Fathead minnow (*Pimephales promelas*)
LC50 2600 mg/l
Duration of exposure 96 h

Fish toxicity (Components)**Diethyl ether**

Species golden orfe (*Leuciscus idus*)
LC50 > 100 mg/l
Duration of exposure 48 h

Daphnia toxicity

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Species	Daphnia magna	
EC50	165	mg/l
Duration of exposure	24	h

Daphnia toxicity (Components)**Diethyl ether**

Species	Daphnia magna	
EC50	> 100	mg/l
Duration of exposure	48	h

12.2. Persistence and degradability**Biodegradability**

evaluation	Slightly biodegradable
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12.6. Other adverse effects**General information / ecology**

Innocuous to aquatic organisms. Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

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	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
Tunnel restriction code	D/E		
14.1. UN number	1155	1155	1155
14.2. UN proper shipping name	DIETHYL ETHER (ETHYL ETHER)	DIETHYL ETHER (ETHYL ETHER)	DIETHYL ETHER (ETHYL ETHER)
14.3. Transport hazard class(es)	3	3	3
Label			
14.4. Packing group	I	I	I
Limited Quantity	0		
Transport category	1		

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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)

Remarks

Derivation of WGK according to Annex 1 No. 5.2 AwSV

SECTION 16: Other information**Hazard statements listed in Chapter 3**

H224 Extremely flammable liquid and vapour.

H302 Harmful if swallowed.

H336 May cause drowsiness or dizziness.

CLP categories listed in Chapter 3

Acute Tox. 4 Acute toxicity, Category 4

Flam. Liq. 1 Flammable liquid, Category 1

STOT SE 3 Specific target organ toxicity - single exposure, Category 3

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.