

## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 29.10.2020

Version: 1.01

Revision: 21.04.2020

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

#### 1.1 Product identifier

**Trade name:** SONAX Industrial & Assembly Cleaner

**Article number:** 04843000

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

##### Sector of Use

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

**Product category** PC35 Washing and cleaning products (including solvent based products)

#### Application of the substance / the mixture

Cleaning agent/ Cleaner

Industrial cleaner

#### 1.3 Details of the supplier of the safety data sheet

##### Manufacturer/Supplier:

SONAX GmbH

Münchener Straße 75

D-86633 Neuburg (Donau)

Tel.: ++49 (0)8431/53-0

#### Further information obtainable from:

Product safety

E-mail: [erp@sonax.de](mailto:erp@sonax.de)

Phone: + +49 (0) 8431 53 217

#### 1.4 Emergency telephone number: Emergency Phone Munich Tel.: +49 (0)89 19240

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008

Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

#### 2.2 Label elements

##### Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

##### Hazard pictograms



GHS02 GHS07 GHS09

##### Signal word Danger

##### Hazard-determining components of labelling:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

propan-2-ol

cyclohexane

n-hexane

##### Hazard statements

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

##### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

(Contd. on page 2)

GB

## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 29.10.2020

Version: 1.01

Revision: 21.04.2020

**Trade name: SONAX Industrial & Assembly Cleaner**

(Contd. of page 1)

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P211 Do not spray on an open flame or other ignition source.
- P251 Do not pierce or burn, even after use.
- P261 Avoid breathing spray.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/eye protection.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### Additional information:

Buildup of explosive mixtures possible without sufficient ventilation.

### 2.3 Other hazards

### Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Description: Preparation of propellant and solvents

### Dangerous components:

EC No 921-024-6 Reg.nr.: 01-2119475514-35-xxxx	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane Alternative CAS number: 64742-49-0 ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	50 - <75%
CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25-xxxx	propan-2-ol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	15 - <20%
CAS: 110-82-7 EINECS: 203-806-2 Reg.nr.: 01-2119463273-41-xxxx	cyclohexane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	5 - <10%
CAS: 124-38-9 EINECS: 204-696-9	carbon dioxide ⚠ Press. Gas (Ref. Liq.), H281	3 - <5%
CAS: 110-54-3 EINECS: 203-777-6 Reg.nr.: 01-2119480412-44-xxxx	n-hexane ⚠ Flam. Liq. 2, H225; ⚠ Repr. 2, H361f; STOT RE 2, H373; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336 Specific concentration limit: STOT RE 2; H373: C ≥ 5 %	1 - <3%

### Regulation (EC) No 648/2004 on detergents / Labelling for contents

aliphatic hydrocarbons	≥30%
------------------------	------

### Additional information:

Any entry in the EC-column that begins with the number "9" is a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance. See Section 15 for additional CAS number information for the substance.

For the wording of the listed hazard phrases refer to section 16.

### Hydrocarbon mixture:

Benzene content &lt; 0.1%

n-Hexane is a part of the hydrocarbon mixture.

Cyclohexane is a part of the hydrocarbon mixture.

GB

(Contd. on page 3)

**Safety data sheet**  
**according to 1907/2006/EC, Article 31**

Printing date 29.10.2020

Version: 1.01

Revision: 21.04.2020

**Trade name: SONAX Industrial & Assembly Cleaner**

(Contd. of page 2)

**SECTION 4: First aid measures****4.1 Description of first aid measures****General information:***Take affected persons out of danger area and lay down.**Remove soiled clothing***After inhalation:***Supply fresh air.**In the event of irritation of the respiratory tract, dizziness, nausea or unconsciousness, call medical assistance immediately.***After skin contact:***Wash the areas of skin affected with water and a mild detergent.**If symptoms persist consult doctor.***After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.***After swallowing:** *Do not induce vomiting; call for medical help immediately.***4.2 Most important symptoms and effects, both acute and delayed***Headache**Dizziness**Nausea**Drowsiness**Skin irritation**Eye irritation***4.3 Indication of any immediate medical attention and special treatment needed***Treatment in accordance with the doctor's assessment of the patient's condition. Symptomatic treatment.***SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing agents:***Foam**Carbon dioxide**Fire-extinguishing powder**Water haze***For safety reasons unsuitable extinguishing agents:** *Water with full jet***5.2 Special hazards arising from the substance or mixture***Can form explosive gas-air mixtures.**In case of fire, the following can be released:**Carbon monoxide (CO)**Carbon dioxide (CO<sub>2</sub>)***5.3 Advice for firefighters****Protective equipment:***Do not inhale explosion gases or combustion gases.**Wear fully protective suit.**Do not enter the hazardous area without a self-contained breathing apparatus.**See Section 8 for information on personal protection equipment.***Additional information***Cool endangered receptacles with water spray.**Collect contaminated fire fighting water separately. It must not enter the sewage system.***SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures***Keep away from ignition sources.**Ensure adequate ventilation**Wear protective equipment. Keep unprotected persons away.***6.2 Environmental precautions:***Do not allow to penetrate the ground/soil.**Inform respective authorities in case of seepage into water course or sewage system.**Do not allow to enter sewers/ surface or ground water.*

(Contd. on page 4)

GB

## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 29.10.2020

Version: 1.01

Revision: 21.04.2020

**Trade name: SONAX Industrial & Assembly Cleaner**

(Contd. of page 3)

### 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

### 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Buildup of explosive mixtures possible without sufficient ventilation.

**Information about fire - and explosion protection:**



Keep ignition sources away - Do not smoke.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray onto a naked flame or any incandescent material.

Highly volatile, flammable constituents are released during processing.

Protect against electrostatic charges.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage:**

**Requirements to be met by storerooms and receptacles:**

Provide solvent resistant, sealed floor.

Observe official regulations on storing packagings with pressurised containers.

**Information about storage in one common storage facility:** Store away from foodstuffs.

**Further information about storage conditions:**

Store receptacle in a well ventilated area.

Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.

Protect from heat and direct sunlight.

Recommended storage temperature: 20 °C.

**7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with limit values that require monitoring at the workplace:**

**CAS: 67-63-0 propan-2-ol**

WEL (Great Britain)	Short-term value: 1250 mg/m <sup>3</sup> , 500 ppm
	Long-term value: 999 mg/m <sup>3</sup> , 400 ppm

**CAS: 110-82-7 cyclohexane**

WEL (Great Britain)	Short-term value: 1050 mg/m <sup>3</sup> , 300 ppm
	Long-term value: 350 mg/m <sup>3</sup> , 100 ppm
IOELV (EU)	Long-term value: 700 mg/m <sup>3</sup> , 200 ppm

**CAS: 124-38-9 carbon dioxide**

WEL (Great Britain)	Short-term value: 27400 mg/m <sup>3</sup> , 15000 ppm
	Long-term value: 9150 mg/m <sup>3</sup> , 5000 ppm
IOELV (EU)	Long-term value: 9000 mg/m <sup>3</sup> , 5000 ppm

**CAS: 110-54-3 n-hexane**

WEL (Great Britain)	Long-term value: 72 mg/m <sup>3</sup> , 20 ppm
IOELV (EU)	Long-term value: 72 mg/m <sup>3</sup> , 20 ppm

**Regulatory information** WEL (Great Britain): EH40/2011

(Contd. on page 5)

## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 29.10.2020

Version: 1.01

Revision: 21.04.2020

**Trade name: SONAX Industrial & Assembly Cleaner**

(Contd. of page 4)

### DNELs

#### Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Oral	DNEL	699 mg/kg bw/day (consumer) (chronic exposure / systemic effects)
Dermal	DNEL	699 mg/kg bw/day (consumer) (chronic exposure / systemic effects)
		773 mg/kg bw/day (worker) (chronic exposure / systemic effects)
Inhalative	DNEL	608 mg/m <sup>3</sup> (consumer) (chronic exposure / systemic effects)
		2035 mg/m <sup>3</sup> (worker) (chronic exposure / systemic effects)

#### CAS: 67-63-0 propan-2-ol

Oral	DNEL	26 mg/kg (consumer) (chronic effects (1d))
Dermal	DNEL	319 mg/kg (consumer) (chronic effects (1d))
		888 mg/kg (worker) (chronic effects (1d))
Inhalative	DNEL	89 mg/m <sup>3</sup> (consumer) (chronic effects)
		500 mg/m <sup>3</sup> (worker) (chronic effects)

### PNECs

#### CAS: 67-63-0 propan-2-ol

PNEC	140.9 mg/l (sporadic release)
	2251 mg/l (STP)
	140.9 mg/l (water (fresh water))
	140.9 mg/l (water (sea water))
PNEC	28 mg/kg (gro)
	552 mg/kg (sediment)

**Additional information:** The lists valid during the making were used as basis.

### 8.2 Exposure controls

#### Suitable technical control devices

Ensure good ventilation. This can be achieved by localised extraction or general ventilation. If this is not sufficient to keep the concentration below the occupational exposure limit, suitable breathing protection is to be worn.

#### Personal protective equipment:

##### General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

##### Respiratory protection:

If the occupational exposure limit is exceeded:

The following breathing protection is recommended:

Respiratory filter for organic gases and vapours (Type A)

Identification colour: Brown

[DIN EN 14387]

**Protection of hands:** Protective gloves

##### Material of gloves

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

[EN 374]

**Penetration time of glove material** Value for the permeation: Level 6 (≥480min)

##### Eye protection:

Safety glasses

[EN 166]

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### General Information

##### Appearance:

**Form:** Aerosol

(Contd. on page 6)

GB

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.10.2020

Version: 1.01

Revision: 21.04.2020

**Trade name: SONAX Industrial & Assembly Cleaner**

(Contd. of page 5)

<b>Colour:</b>	Colourless
<b>Odour:</b>	Solvent-like
<b>Odour threshold:</b>	Not determined.
<b>pH-value:</b>	Not applicable.
<b>Change in condition</b>	
<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	60 - 120 °C (Active ingredient data )
<b>Flash point:</b>	< -5 °C (Active ingredient data )
<b>Flammability (solid, gas):</b>	Not applicable.
<b>Decomposition temperature:</b>	Not determined.
<b>Auto-ignition temperature:</b>	Not determined.
<b>Explosive properties:</b>	Not determined.
<b>Explosion limits:</b>	
<b>Lower:</b>	2 Vol% (propan-2-ol data) Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane:
<b>Upper:</b>	0,6 Vol.% 12 Vol% (propan-2-ol data) 8,0 Vol.% (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane)
<b>Vapour pressure:</b>	Not determined.
<b>Density at 20 °C:</b>	0.72 - 0.74 g/cm <sup>3</sup> (Active ingredient data )
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Evaporation rate</b>	Not applicable.
<b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
<b>Partition coefficient: n-octanol/water:</b>	Not determined.
<b>Viscosity:</b>	
<b>Flow time at 20 °C</b>	10 - 15 s (DIN EN ISO 2431/4mm) (Active ingredient data )
<b>Kinematic:</b>	< 20.5 mm <sup>2</sup> /s (Daten Wirkstoff)
<b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

**10.1 Reactivity** No dangerous reactions known.

**10.2 Chemical stability** Stable under normal conditions.

**10.3 Possibility of hazardous reactions** Develops readily flammable gases/fumes.

**10.4 Conditions to avoid**

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

An increase in pressure may lead to bursting.

Keep ignition sources away - Do not smoke.

See Section 7 for information on safe handling.

**10.5 Incompatible materials:**

strong oxidizing agents

strong acids

**10.6 Hazardous decomposition products:** No dangerous decomposition products known.

GB

(Contd. on page 7)



## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 29.10.2020

Version: 1.01

Revision: 21.04.2020

Trade name: SONAX Industrial &amp; Assembly Cleaner

(Contd. of page 6)

### SECTION 11: Toxicological information

**11.1 Information on toxicological effects** There are no toxicological findings on this mixture.

**Acute toxicity** Based on available data, the classification criteria are not met.

**LD/LC50 values relevant for classification:**

**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**

Oral	LD50	>5000 mg/kg (rat) (OECD 401)
Dermal	LD50	>2000 mg/kg (rat) (OECD 402)
Inhalative	LC50 / 4h	>20 mg/l (rat) (OECD 403)

**CAS: 67-63-0 propan-2-ol**

Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	13900 mg/kg (rabbit)
Inhalative	LC50 / 6 h	>25 mg/l (rat) (OECD 403)

**CAS: 110-82-7 cyclohexane**

Oral	LD50	>5000 mg/kg (rabbit)
Dermal	LD50	> 2000 mg/kg (rabbit)
Inhalative	LC50 / 4h	>32880 mg/m <sup>3</sup> (rat)

**CAS: 110-54-3 n-hexane**

Oral	LD50	3200 mg/kg (rat)
Dermal	LD50	3350 mg/kg (rabbit)
Inhalative	LC50/4d	172 mg/l (rat)

**Primary irritant effect:**

**Skin corrosion/irritation**

Causes skin irritation.

**Serious eye damage/irritation**

Causes serious eye irritation.

**Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Contains n-hexane!

On the basis of the available data, the classification criteria are not complied with (Conventional Method).

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

**Carcinogenicity** Based on available data, the classification criteria are not met.

**Reproductive toxicity** Based on available data, the classification criteria are not met.

**STOT-single exposure**

May cause drowsiness or dizziness.

**STOT-repeated exposure** Based on available data, the classification criteria are not met.

**Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

**12.1 Toxicity**

Product is considered to be harmful to aquatic organisms. May have long-term harmful effects in aquatic environments.

**Aquatic toxicity:**

**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**

LL50 / 96h	11.4 mg/l (Oncorhynchus mykiss) (OECD 203)
EL50 / 48h	3 mg/l (Daphnia magna) (OECD 202)
EL50 / 72h	30 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
LOEC	0.32 mg/l (Daphnia magna) (21d)
NOELR 72 h	3 mg/l (Pseudokirchneriella subcapitata)
NOEC / 21 d	0.17 mg/l (Daphnia magna)

(Contd. on page 8)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.10.2020

Version: 1.01

Revision: 21.04.2020

Trade name: SONAX Industrial &amp; Assembly Cleaner

(Contd. of page 7)

**CAS: 67-63-0 propan-2-ol**

LC50 / 96h	9640 mg/l (Pimephales promelas)
LC50 / 24h	9714 mg/l (daphnia)
EC50	>100 mg/l (bacteria)
EC50 / 72h	>100 mg/l (algae)

**CAS: 110-82-7 cyclohexane**

LC50 / 96h	4.53 mg/l (Pimephales promelas)
EC50 / 48h	2.4 mg/l (Daphnia magna)
EC50 / 72h	3.4 mg/l (Pseudokirchneriella subcapitata)

**CAS: 110-54-3 n-hexane**

LL50 / 96h	12.51 mg/l (Oncorhynchus mykiss)
EL50 / 48h	21.85 mg/l (Daphnia magna)

**12.2 Persistence and degradability****Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**

Biodegradation 81 % (28d)

**CAS: 67-63-0 propan-2-ol**

Biodegradation 53 %

**CAS: 110-54-3 n-hexane**

Biodegradation 83 % (10d (ECHA))

**12.3 Bioaccumulative potential****CAS: 110-82-7 cyclohexane**

log Kow 3.44 log Kow (pH: 7, 25°C)

**CAS: 110-54-3 n-hexane**

log Kow 4 log Kow (pH: 7, 20°C)

**12.4 Mobility in soil**

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt; 5% n-hexane:

Highly volatile, will partition rapidly to air.

**Additional ecological information:****General notes:** The product may not be released into the environment without control.**12.5 Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects** No further relevant information available.**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

Waste classified as hazardous according to Annex III to Directive 2008/98/EC.

**Recommendation** Waste must be disposed of while observing the local, official regulations.**European waste catalogue**

Disposal / product + Disposal / contaminated packaging

15 01 10\* packaging containing residues of or contaminated by hazardous substances

**SECTION 14: Transport information****14.1 UN-Number**

ADR, IMDG, IATA

UN1950

**14.2 UN proper shipping name**

ADR

1950 AEROSOLS

IMDG

AEROSOLS

IATA

AEROSOLS, flammable

(Contd. on page 9)

GB



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.10.2020

Version: 1.01

Revision: 21.04.2020

Trade name: SONAX Industrial &amp; Assembly Cleaner

(Contd. of page 8)

**14.3 Transport hazard class(es)****ADR**

**Class** 2 5F Gases.  
**Label** 2.1

**IMDG, IATA**

**Class** 2.1  
**Label** 2.1

**14.4 Packing group**

**ADR, IMDG, IATA** Void

**14.5 Environmental hazards:**

**Marine pollutant:** Yes  
 absent due to package size =<5l

**14.6 Special precautions for user**

see Sections 6-8  
 Warning: Gases.

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

**Transport/Additional information:****ADR**

**Limited quantities (LQ)** 1L  
**Transport category** 2  
**Tunnel restriction code** D

**UN "Model Regulation":** UN 1950 AEROSOLS, 2.1

### SECTION 15: Regulatory information

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

The following substance(s) in this product is (are) identified by CAS number either in countries not subject to the REACH regulation or in regulations not yet updated with the new naming convention for hydrocarbon solvents.

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane: CAS 64742-49-0

**European Directives:**

EC/1907/2006 (REACH)

EC/1272/2008 (CLP)

EC/648/2004

**National regulations:****Information about limitation of use:**

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

(Contd. on page 10)

## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 29.10.2020

Version: 1.01

Revision: 21.04.2020

**Trade name: SONAX Industrial & Assembly Cleaner**

(Contd. of page 9)

### Relevant phrases

H225 Highly flammable liquid and vapour.  
H281 Contains refrigerated gas; may cause cryogenic burns or injury.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H361f Suspected of damaging fertility.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.

### Classification according to Regulation (EC) No 1272/2008

Aerosols	On basis of test data
Skin corrosion/irritation Serious eye damage/eye irritation Specific target organ toxicity (single exposure) Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

### Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
 NOEL = No Observed Effect Level  
 NOEC = No Observed Effect Concentration  
 LC = Lethal Concentration  
 EC50 = half maximal effective concentration  
 log POW = Octanol / water partition coefficient  
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
 ATE: acute toxicity estimate  
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 DNEL: Derived No-Effect Level (REACH)  
 PNEC: Predicted No-Effect Concentration (REACH)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 IOELV = indicative occupational exposure limit values  
 Aerosol 1: Aerosols – Category 1  
 Press. Gas (Ref. Liq.): Gases under pressure – Refrigerated liquefied gas  
 Flam. Liq. 2: Flammable liquids – Category 2  
 Skin Irrit. 2: Skin corrosion/irritation – Category 2  
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
 Repr. 2: Reproductive toxicity – Category 2  
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2  
 Asp. Tox. 1: Aspiration hazard – Category 1  
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1  
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1  
 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

**Version history and indication of changes:** Replaces version 1.00.