according to Regulation (EC) No. 1907/2006

# **Carsystem Spray Plus**

Version Revision Date: Date of last issue: 09.06.2023 3.0 DE / EN 03.11.2023 Date of first issue: 01.07.2022

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

1.1 Product identifier

Trade name : Carsystem Spray Plus

Product code : 135.597

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

Use of the Sub- : Body filler/stopper

stance/Mixture

Recommended restrictions

on use

: Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Company : JASA AG

Müslistrasse 43 8957 Spreitenbach

Schweiz

info@jasa-ag.ch, www.jasa-ag.ch

Telephone : +41 (0)44 431 60 70 Telefax : +41 (0)44 432 63 17

Responsible Department : Productmanagement, Tel: +41 (0)44 431 60 70, sds@jasa-ag.ch

1.4 Emergency telephone

Telephone : Tox Info Suisse (STIZ), Tel: 145

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#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2 H225: Highly flammable liquid and vapor.

Skin irritation, Category 2 H315: Causes skin irritation.

Eye irritation, Category 2 H319: Causes serious eye irritation.

Skin sensitization, Category 1 H317: May cause an allergic skin reaction.

Reproductive toxicity, Category 2 H361d: Suspected of damaging the unborn child.

Specific target organ toxicity - repeated

exposure, Category 1

H372: Causes damage to organs through pro-

longed or repeated exposure.

#### 2.2 Label elements

#### Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms







Signal Word : Danger

Hazard Statements : H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.H319 Causes serious eye irritation.

H361d Suspected of damaging the unborn child.

H372 Causes damage to organs through prolonged or re-

peated exposure.

Precautionary Statements : Prevention:

P201 Obtain special instructions before use.

P210 Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking. P260 Do not breathe dust / mist / vapours.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/face protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/

attention.

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## Storage:

P405 Store locked up.

#### Disposal:

P501 Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

#### Hazardous ingredients which must be listed on the label:

styrene cobalt bis(2-ethylhexanoate) maleic anhydride

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

Chemical nature : Mixture

contains Resin

Components

Chamical name	CACNo	Classification	Consontration
Chemical name	CAS-No.	Classification	Concentration
	EC-No.		(% w/w)
	Index-No.		
	Registration number		
styrene	100-42-5	Flam. Liq. 3; H226	>= 10 - < 20
	202-851-5	Acute Tox. 4; H332	
	601-026-00-0	Skin Irrit. 2; H315	
	01-2119457861-32	Eye Irrit. 2; H319	
		Repr. 2; H361d	
		STOT SE 3; H335	
		(Respiratory system)	
		STOT RE 1; H372	
		(hearing organs)	
		Asp. Tox. 1; H304	
		Aquatic Chronic 3;	
		H412	

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		Acute toxicity esti- mate	
		Acute inhalation tox- icity (vapor): 11,8 mg/l	
ethyl acetate	141-78-6 205-500-4 607-022-00-5 01-2119475103-46	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 (Central nervous system) EUH066	>= 1 - < 10
cobalt bis(2-ethylhexanoate)	136-52-7 205-250-6 01-2119524678-29	Eye Irrit. 2; H319 Skin Sens. 1A; H317 Repr. 1B; H360FD Aquatic Acute 1; H400 Aquatic Chronic 3; H412	>= 0,025 - < 0,1
		M-Factor (Acute aquatic toxicity): 1	
maleic anhydride	108-31-6 203-571-6 607-096-00-9 01-2119472428-31	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Resp. Sens. 1; H334 Skin Sens. 1A; H317 STOT RE 1; H372 (Respiratory system) EUH071	>= 0,001 - < 0,1
		specific concentration limit Skin Sens. 1A; H317 >= 0,001 %	
		Acute toxicity esti- mate	
		Acute oral toxicity: 1.090 mg/kg	
Substances with a workplace expo-	sure limit :		
Talc	14807-96-6 238-877-9		>= 20 - < 30

For explanation of abbreviations see section 16.

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#### **SECTION 4: First aid measures**

#### 4.1 Description of first-aid measures

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

Move out of dangerous area.

Take off contaminated clothing and shoes immediately.

Do not leave the victim unattended.

Symptoms of poisoning may appear several hours later. Show this material safety data sheet to the doctor in attend-

ance.

Protection of first-aiders : First Aid responders should pay attention to self-protection

and use the recommended protective clothing

If inhaled : Move to fresh air.

Keep patient warm and at rest.

If breathing is irregular or stopped, administer artificial respira-

tion.

Call a physician immediately.

In case of skin contact : Wash off immediately with soap and plenty of water while

removing all contaminated clothes and shoes. Call a physician if irritation develops or persists.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.

Keep eye wide open while rinsing.

If easy to do, remove contact lens, if worn.

Consult a physician.

If swallowed : Rinse mouth with water.

Do NOT induce vomiting. Call a physician immediately.

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

Risks : Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye irritation.

Suspected of damaging the unborn child.

Causes damage to organs through prolonged or repeated

exposure.

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

Treatment : Treat symptomatically.

Keep under medical supervision for at least 48 hours.

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#### **SECTION 5: Firefighting measures**

5.1 Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO2)

Dry powder Water spray jet

Alcohol-resistant foam

Unsuitable extinguishing

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire

fighting

Build-up of dangerous/toxic fumes possible in cases of

fire/high temperature.

Hazardous combustion prod: :

ucts

Hazardous decomposition products due to incomplete com-

bustion

Carbon monoxide, carbon dioxide and unburned hydrocar-

bons (smoke).

5.3 Advice for firefighters

Special protective equipment:

for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

Further information : Use water spray to cool unopened containers.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear personal protective equipment.

Evacuate personnel to safe areas.

Ensure adequate ventilation, especially in confined areas.

Remove all sources of ignition.

Do not smoke.

Avoid contact with skin, eyes and clothing. Sweep up to prevent slipping hazard.

In the case of vapor formation use a respirator with an ap-

proved filter.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.

Local authorities should be advised if significant spillages

cannot be contained.

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

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

Do not flush with water.

#### 6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13.

#### **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

Advice on safe handling : Keep container closed when not in use.

Provide sufficient air exchange and/or exhaust in work rooms.

Wear personal protective equipment. Avoid contact with skin and eyes.

Avoid the inhalation of dust, particulates, spray or mist arising

from the application of this mixture. Avoid inhalation of dust from sanding.

Advice on protection against

fire and explosion

Vapors may form explosive mixtures with air. Keep away from open flames, hot surfaces and sources of ignition. Do not

smoke. Take measures to prevent the build up of electrostatic

charge. Use explosion-proof equipment.

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

Requirements for storage

areas and containers

: Store in original container. Keep containers tightly closed in a

dry, cool and well-ventilated place.

Further information on stor-

age conditions

Keep away from heat and sources of ignition. Protect from

moisture. Keep away from direct sunlight. Do not store at temperatures above 30 °C / 86 °F.

Advice on common storage

Incompatible with oxidizing agents. Keep away from food and drink.

Storage class (TRGS 510) : 3

7.3 Specific end use(s)

Specific use(s) : No data available

# **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

#### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form	Control parameters	Basis
		of exposure)		

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Barium sulphate	7727-43-7	AGW (Inhalable fraction)	10 mg/m3	DE TRGS 900	
	Peak-limit category: 2;(II)				
			s compliance with the OEL ar	nd biological	
	tolerance valu		of harming the unborn child		
		AGW (Alveolate fraction)	1,25 mg/m3	DE TRGS 900	
	Peak-limit cat	/		1 000	
			s compliance with the OEL ar	nd biological	
	tolerance valu	ues, there is no risk o	of harming the unborn child		
Talc	14807-96-6	AGW (Inhalable fraction)	10 mg/m3	DE TRGS 900	
	Peak-limit cat	egory: 2;(II)			
			s compliance with the OEL are of harming the unborn child	nd biological	
		AGW (Alveolate	1,25 mg/m3	DE TRGS	
		fraction)	1,=595	900	
	Peak-limit cat	/	1	1	
			s compliance with the OEL ar	nd biological	
			of harming the unborn child	9	
		TWA (Respirable	0,1 mg/m3	2004/37/EC	
		dust)			
	Further inform	nation: Carcinogens	or mutagens		
styrene	100-42-5	AGW	20 ppm	DE TRGS	
			86 mg/m3	900	
	Peak-limit category: 2;(II)				
			s compliance with the OEL ar of harming the unborn child	nd biological	
Titanium dioxide	13463-67-7	AGW (Inhalable	10 mg/m3	DE TRGS	
		fraction)	(Titanium dioxide)	900	
	Peak-limit cat		,	1	
	Further inform	nation: When there is	s compliance with the OEL ar	nd biological	
			of harming the unborn child	· ·	
		AGW (Alveolate	1,25 mg/m3	DE TRGS	
		fraction)	(Titanium dioxide)	900	
	Peak-limit cat	egory: 2;(II)			
			s compliance with the OEL are of harming the unborn child	nd biological	
ethyl acetate	141-78-6	STEL	400 ppm 1.468 mg/m3	2017/164/EU	
	Further inform	nation: Indicative	11 100 111g/1110		
	T Graner miletin	TWA	200 ppm	2017/164/EU	
			734 mg/m3	2017/101/20	
	Further inform	nation: Indicative	101g,c		
		AGW	200 ppm	DE TRGS	
			730 mg/m3	900	
	Peak-limit cat	egory: 2:(I)			
	Further inform	nation: When there is	s compliance with the OEL ar	nd biological	
			of harming the unborn child		
maleic anhydride	108-31-6	AGW (Vapour	0,02 ppm	DE TRGS	
		and aerosols)	0,081 mg/m3	900	

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Peak-limit category: 1; =2.5=(I)
Further information: In well-found cases also a momentary value can be es-
tablished, that never can be exceeded. This substance will be indicated by = =
in combination with an exceeding value., When there is compliance with the
OEL and biological tolerance values, there is no risk of harming the unborn
child, Substance sensitizing through the skin and respiratory system

## **Biological occupational exposure limits**

Substance name	CAS-No.	Control parameters	Sampling time	Basis
styrene	100-42-5	mandelic acid + phenylglyoxylic acid: 600 mg/g Creatinine (Urine)	In case of long- term exposure: after more than one shift, Immedi- ately after expo- sure or after work- ing hours	TRGS 903

## Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Routes of expo- sure	Potential health effects	Value
styrene	Workers	Dermal	Long-term systemic effects, Chronic effects	406 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects, Chronic effects	85 mg/m3
	Workers	Inhalation	Acute systemic effects, Chronic effects	289 mg/m3
	Workers	Inhalation	Acute local effects, Short-term exposure	306 mg/m3
	Consumers	Oral	Long-term systemic effects, Chronic effects	2,1 mg/kg bw/day
	Consumers	Dermal	Long-term systemic effects, Chronic effects	343 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects, Chronic effects	10,2 mg/m3
	Consumers	Inhalation	Acute systemic ef- fects, Short-term exposure	174,25 mg/m3
	Consumers	Inhalation	Acute local effects, Short-term exposure	182,75 mg/m3
ethyl acetate	Workers	Inhalation	Long-term systemic effects, Long-term local effects	734 mg/m3
	Workers	Inhalation	Acute systemic ef- fects, Acute local effects	1468 mg/m3
	Workers	Skin contact	Long-term systemic effects	63 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic	367 mg/m3

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			effects, Long-term local effects	
	Consumers	Inhalation	Acute systemic effects, Acute local effects	734 mg/m3
	Consumers	Skin contact	Long-term systemic effects	37 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	4,5 mg/kg bw/day
cobalt bis(2- ethylhexanoate)	Workers	Inhalation	Long-term local ef- fects	0,2351 mg/m3
	Consumers	Inhalation	Long-term local ef- fects	0,037 mg/m3
	Consumers	Oral	Long-term systemic effects	0,175 mg/kg bw/day
maleic anhydride	Workers	Inhalation	Long-term systemic effects	0,081 mg/m3
	Workers	Inhalation	Acute systemic effects	0,2 mg/m3

# Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
styrene	Fresh water	0,028 mg/l
	Sea water	0,014 mg/l
	Fresh water sediment	0,614 mg/kg dry
		weight (d.w.)
	Sea sediment	0,307 mg/kg dry
		weight (d.w.)
	Soil	0,2 mg/kg dry
		weight (d.w.)
	Sewage treatment plant (STP)	5 mg/l
ethyl acetate	Fresh water	0,24 mg/l
	Sea water	0,024 mg/l
	Fresh water sediment	1,15 mg/kg dry
		weight (d.w.)
	Sea sediment	0,115 mg/kg dry
		weight (d.w.)
	Sewage treatment plant (STP)	650 mg/l
	Soil	0,148 mg/kg dry
		weight (d.w.)
	Oral (Secondary Poisoning)	200 mg/kg food
cobalt bis(2-ethylhexanoate)	Fresh water	0,00106 mg/l
	Sea water	0,00236 mg/l
	Sewage treatment plant (STP)	0,37 mg/l
	Fresh water sediment	53,8 mg/kg dry
		weight (d.w.)
	Sea sediment	69,8 mg/kg dry
		weight (d.w.)
	Soil	10,9 mg/kg dry
		weight (d.w.)
maleic anhydride	Fresh water	0,038 mg/l
	Sea water	0,004 mg/l

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Fresh water sediment	0,296 mg/kg dry weight (d.w.)
Sea sediment	0,03 mg/kg dry weight (d.w.)
Soil	0,037 mg/kg dry weight (d.w.)
Sewage treatment plant (STP)	44,6 mg/l

#### 8.2 Exposure controls

#### Personal protective equipment

Eye/face protection : Safety glasses with side-shields conforming to EN166

Hand protection

Material : Fluorinated rubber

Break through time : > 480 min
Glove thickness : >= 0,4 mm
Directive : DIN EN 374
Protective index : Class 6

Remarks : Gloves should be discarded and replaced if there is any indi-

cation of degradation or chemical breakthrough. The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Preventive skin protection Butyl gloves are not suitable. Nitrile gloves are not suitable.

Avoid natural rubber gloves.

Skin and body protection : Please wear suitable protective clothing, e.g. made of cotton

or heat-resistant synthetic fibres.

Long sleeved clothing

Respiratory protection : Apply technical measures to comply with the occupational

exposure limits.

If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment

should be used.

Dry sanding, flame cutting and/or welding of the cured materi-

al will give rise to dust and/or hazardous fumes.

Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release

(dust).

Filter type : Combined particulates and organic vapor type (A-P)

Protective measures : Ensure that eye flushing systems and safety showers are

located close to the working place.

Avoid contact with the skin and the eyes.

Use only with adequate ventilation.

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# **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

Physical state liquid

Color gray

Odor characteristic

Melting point/freezing point not determined

Boiling point/boiling range >= 77 °C (1.013 hPa)

Upper explosion limit / Upper :

6,1 %(V)

flammability limit Literary value styrene

Lower explosion limit / Lower : 1,1 %(V)

flammability limit

Literary value styrene

Flash point < 21 °C

Autoignition temperature : >= 460 °C (1.013 hPa)

pΗ Not applicable substance/mixture is non-soluble (in water)

Viscosity

Viscosity, dynamic not determined

Viscosity, kinematic not determined

Solubility(ies)

Water solubility immiscible

Partition coefficient: n-

octanol/water

No data available

6,67 hPa (20 °C) Vapor pressure

Literary value styrene

Density ca. 1,8 g/cm3 (20 °C)

9.2 Other information

**Explosives** Not explosive

In use, may form flammable/explosive vapor-air mixture.

Self-ignition not auto-flammable

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#### **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

No decomposition if used as directed.

#### 10.2 Chemical stability

No decomposition if stored and applied as directed.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : Avoid radical-forming starting agents, peroxides and reactive

metals.

Polymerization can occur. Polymerization is a highly exothermic reaction and may generate sufficient heat to cause ther-

mal decomposition and/or rupture containers.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

Strong sunlight for prolonged periods.

10.5 Incompatible materials

Materials to avoid : Strong acids and oxidizing agents

polymerization initiators

Copper Copper alloys

Brass

#### 10.6 Hazardous decomposition products

Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.

#### **SECTION 11: Toxicological information**

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### **Acute toxicity**

Not classified based on available information.

**Product:** 

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l

Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

**Components:** 

styrene:

Acute oral toxicity : LD50 Oral (Rat): 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 11,8 mg/l

Exposure time: 4 h
Test atmosphere: vapor

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Acute dermal toxicity : LD50 Dermal (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

ethyl acetate:

Acute oral toxicity : LD50 Oral (Rat): 4.934 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC0 (Rat): 22,5 mg/l, > 6000 ppm

Exposure time: 6 h
Test atmosphere: vapor

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 Dermal (Rabbit): > 20.000 mg/kg

cobalt bis(2-ethylhexanoate):

Acute oral toxicity : LD50 (Rat): 3.129 mg/kg

Method: OECD Test Guideline 425

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

maleic anhydride:

Acute oral toxicity : LD50 Oral (Rat): 1.090 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 4,35 mg/l

Exposure time: 1 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 Dermal (Rabbit): 2.620 mg/kg

Talc:

Acute oral toxicity : LD50 Oral (Rat): 5.000 mg/kg

Method: OECD Test Guideline 423

Acute inhalation toxicity : Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 Dermal (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

Skin corrosion/irritation

Causes skin irritation.

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**Components:** 

styrene:

Species : Rabbit Result : irritating

Serious eye damage/eye irritation

Causes serious eye irritation.

**Components:** 

styrene:

Species : Rabbit Result : irritating

cobalt bis(2-ethylhexanoate):

Result : Moderate eye irritation

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available information.

**Components:** 

styrene:

Species : Guinea pig

Result : Does not cause skin sensitization.

cobalt bis(2-ethylhexanoate):

Routes of exposure : Skin contact

Result : The product is a skin sensitizer, sub-category 1A.

maleic anhydride:

Result : The product is a skin sensitizer, sub-category 1A.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Suspected of damaging the unborn child.

**Components:** 

styrene:

according to Regulation (EC) No. 1907/2006

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Reproductive toxicity - As-

sessment

: Suspected of damaging the unborn child., Some evidence of adverse effects on development, based on animal experi-

ments.

cobalt bis(2-ethylhexanoate):

Reproductive toxicity - As-

sessment

Clear evidence of adverse effects on sexual function and fertility, based on animal experiments., Clear evidence of adverse effects on development, based on animal experiments.

STOT-single exposure

Not classified based on available information.

**Components:** 

styrene:

Assessment : May cause respiratory irritation.

STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure.

**Components:** 

styrene:

Routes of exposure : Inhalation
Target Organs : hearing organs

Assessment : Causes damage to organs through prolonged or repeated

exposure.

maleic anhydride:

Routes of exposure : Inhalation

Target Organs : Respiratory system

Assessment : Causes damage to organs through prolonged or repeated

exposure.

**Aspiration toxicity** 

Not classified based on available information.

Components:

styrene:

May be fatal if swallowed and enters airways.

11.2 Information on other hazards

**Endocrine disrupting properties** 

**Product:** 

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation

according to Regulation (EC) No. 1907/2006

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(EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

#### Components:

styrene:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 4,02 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 4,7 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Selenastrum capricornutum (green algae)): 4,9 mg/l

Exposure time: 72 h

EC10 (Selenastrum capricornutum (green algae)): 0,28 mg/l

Exposure time: 96 h

Toxicity to microorganisms : EC50 (Natural microorganism): ca. 500 mg/l

Method: OECD Test Guideline 209

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 1,01 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

**Ecotoxicology Assessment** 

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

ethyl acetate:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 230 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 610 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

NOEC (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to microorganisms : NOEC (Pseudomonas putida): 650 mg/l

Exposure time: 16 h

Toxicity to fish (Chronic tox-

icity)

NOEC: > 9,65 mg/l Exposure time: 32 d

according to Regulation (EC) No. 1907/2006

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Species: Pimephales promelas (fathead minnow)

Method: OECD Test Guideline 210

Toxicity to daphnia and other : aquatic invertebrates (Chron-

NOEC: 2,4 mg/l Exposure time: 21 d

ic toxicity)

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

cobalt bis(2-ethylhexanoate):

Toxicity to fish LC50 (Fish): 0,8 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia dubia (Water flea)): 0,61 mg/l

Exposure time: 48 h

M-Factor (Acute aquatic tox-

icity)

1

Toxicity to microorganisms EC10 (Bacteria): 3.73 mg/l

Exposure time: 3 h

Toxicity to fish (Chronic tox-

icity)

NOEC: 0,21 mg/l End point: mortality

Exposure time: 34 d

Species: Pimephales promelas (fathead minnow)

**Ecotoxicology Assessment** 

Harmful to aquatic life with long lasting effects. Chronic aquatic toxicity

maleic anhydride:

Toxicity to fish LC50 (Lepomis macrochirus (Bluegill sunfish)): 75 mg/l

> Exposure time: 96 h Method: EPA-660/3-75-00

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 37,9 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 65,78

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to daphnia and other

aquatic invertebrates (Chron-

NOEC: 10 mg/l Exposure time: 21 d

ic toxicity)

Species: Daphnia magna (Water flea)

**Ecotoxicology Assessment** 

Chronic aquatic toxicity This product has no known ecotoxicological effects.

according to Regulation (EC) No. 1907/2006

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#### 12.2 Persistence and degradability

**Components:** 

styrene:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 70,9 % Exposure time: 28 d

ethyl acetate:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 79 %

Related to: Biochemical oxygen demand

Exposure time: 20 d

Method: OECD Test Guideline 301D

maleic anhydride:

Biodegradability : Result: Readily biodegradable.

Biodegradation: > 90 % Exposure time: 225 d

Method: OECD Test Guideline 301B

#### 12.3 Bioaccumulative potential

**Components:** 

styrene:

Partition coefficient: n-

octanol/water

log Pow: 2,96 (25 °C)

ethyl acetate:

Partition coefficient: n-

octanol/water

log Pow: 0,68 (25 °C)

cobalt bis(2-ethylhexanoate):

Partition coefficient: n-

: log Pow: 2,96 (20 °C)

octanol/water pH: 7

maleic anhydride:

Partition coefficient: n-

: log Pow: -2,61 (20 °C)

octanol/water

Talc:

Partition coefficient: n- : log Pow: -9,4 (25 °C)

octanol/water pH: 7

12.4 Mobility in soil

No data available

according to Regulation (EC) No. 1907/2006

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#### 12.5 Results of PBT and vPvB assessment

#### **Product:**

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

#### 12.6 Endocrine disrupting properties

#### **Product:**

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

#### 12.7 Other adverse effects

#### **Product:**

Additional ecological infor-

mation

: No data available

#### Global warming potential

Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) of the United Nations Framework Convention on Climate Change (UNFCCC)

#### **Components:**

#### dodecamethylcyclohexasiloxane:

20-year global warming potential: 0,51 100-year global warming potential: 0,142 500-year global warming potential: 0,04

Atmospheric lifetime: 0,011 yr Radiative efficiency: 0,086 Wm2ppb

Further information: Miscellaneous compounds

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : Do not dispose of with domestic refuse.

Do not empty into drains, dispose of this material and its con-

tainer at hazardous or special waste collection point.

Dispose of in accordance with local regulations.

Dispose of wastes in an approved waste disposal facility.

Send to a licensed waste management company.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

Store containers and offer for recycling of material when in

according to Regulation (EC) No. 1907/2006

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accordance with the local regulations.

Packaging that is not properly emptied must be disposed of as

the unused product.

Dispose of in accordance with local regulations.

Waste Code : The following Waste Codes are only suggestions:

07 02 08, other still bottoms and reaction residues

## **SECTION 14: Transport information**

#### 14.1 UN number or ID number

ADN : UN 1866
ADR : UN 1866
RID : UN 1866
IMDG : UN 1866
IATA : UN 1866

#### 14.2 UN proper shipping name

ADN : RESIN SOLUTION
ADR : RESIN SOLUTION
RID : RESIN SOLUTION
IMDG : RESIN SOLUTION
IATA : Resin solution

#### 14.3 Transport hazard class(es)

Class Subsidiary risks

ADN : 3
ADR : 3
RID : 3
IMDG : 3
IATA : 3

#### 14.4 Packing group

#### ADN

Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3

#### **ADR**

Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3

according to Regulation (EC) No. 1907/2006

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Tunnel restriction code : (D/E)

RID

Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3

**IMDG** 

Packing group : II
Labels : 3
EmS Code : F-E, <u>S-E</u>

IATA (Cargo)

Packing instruction (cargo : 364

aircraft)

Packing instruction (LQ) : Y341
Packing group : II

Labels : Flammable Liquids

IATA (Passenger)

Packing instruction (passen: 353

ger aircraft)

Packing instruction (LQ) : Y341
Packing group : II

Labels : Flammable Liquids

14.5 Environmental hazards

**ADN** 

Environmentally hazardous : no

ADR

Environmentally hazardous : no

RID

Environmentally hazardous : no

**IMDG** 

Marine pollutant : no

#### 14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

#### **SECTION 15: Regulatory information**

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, Conditions of restriction for the following entries should be considered:

according to Regulation (EC) No. 1907/2006

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mixtures and articles (Annex XVII) Number on list 75, 3

> If you intend to use this product as tattoo ink, please contact your ven-

dor.

REACH - Candidate List of Substances of Very High

Concern for Authorization (Article 59).

Not applicable

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (recast)

Not applicable

REACH - List of substances subject to authorisation

(Annex XIV)

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

P5c

FLAMMABLE LIQUIDS

ny)

Water hazard class (Germa- : WGK 2 obviously hazardous to water

Classification according to AwSV, Annex 1 (5.2)

Volatile organic compounds Directive 2004/42/EC

> Volatile organic compounds (VOC) content: < 250 g/l VOC content for the product in a ready to use condition.

#### Other regulations:

The product is subject to the supply restrictions of the Ordinance on the Prohibition of Chemicals.

Take note of Law on the protection of mothers at work, in education and in studies (Maternity Protection Act - MuSchG).

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

#### **15.2 Chemical Safety Assessment**

A chemical safety assessment according to (EC) regulation 1907/2006 (REACH) has not been carried out for this product.

#### **SECTION 16: Other information**

#### **Full text of H-Statements**

H225 Highly flammable liquid and vapor.

# **Carsystem Spray Plus**

2017/164/EU / TWA

DE TRGS 900 / AGW

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	11000	
	H226	: Flammable liquid and vapor.
	H302	: Harmful if swallowed.
	H304	: May be fatal if swallowed and enters airways.
	H314	: Causes severe skin burns and eye damage.
	H315	: Causes skin irritation.
	H317	: May cause an allergic skin reaction.
	H318	: Causes serious eye damage.
	H319	: Causes serious eye irritation.
	H332	: Harmful if inhaled.
	H334	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	H335	: May cause respiratory irritation.
	H336	: May cause drowsiness or dizziness.
	H360FD	: May damage fertility. May damage the unborn child.
	H361d	: Suspected of damaging the unborn child.
	H372	: Causes damage to organs through prolonged or repeated exposure if inhaled.
	H372	: Causes damage to organs through prolonged or repeated
	11100	exposure.
	H400	: Very toxic to aquatic life.
	H412	: Harmful to aquatic life with long lasting effects.
	EUH066	: Repeated exposure may cause skin dryness or cracking.
	EUH071	: Corrosive to the respiratory tract.
	Full text of other abbreviation	ns
	Acute Tox.	: Acute toxicity
	Aquatic Acute	: Short-term (acute) aquatic hazard
	Aquatic Chronic	: Long-term (chronic) aquatic hazard
	Asp. Tox.	: Aspiration hazard
	Eye Dam.	: Serious eye damage
	Eye Irrit.	: Eye irritation
	Flam. Liq.	: Flammable liquids
	Repr.	: Reproductive toxicity
	Resp. Sens.	: Respiratory sensitization
	Skin Corr.	: Skin corrosion
	Skin Irrit.	: Skin irritation
	Skin Sens.	: Skin sensitization
	STOT RE	: Specific target organ toxicity - repeated exposure
	STOT SE	: Specific target organ toxicity - single exposure
	2004/37/EC	: Europe. Directive 2004/37/EC on the protection of workers
		from the risks related to exposure to carcinogens or mutagens at work
	2017/164/EU	: Europe. Commission Directive 2017/164/EU establishing a
		fourth list of indicative occupational exposure limit values
	DE TRGS 900	: Germany. TRGS 900 - Occupational exposure limit values.
	TRGS 903	: c - Biological limit values
	2004/37/EC / TWA	: Long term exposure limit
	2017/164/EU / STEL	: Short term exposure limit
	2017/161/ELL/TM/A	· Limit Value aight hours

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by

Limit Value - eight hours

Time Weighted Average

according to Regulation (EC) No. 1907/2006

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Road: AIIC - Australian Inventory of Industrial Chemicals: ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance: PICCS - Philippines Inventory of Chemicals and Chemical Substances: (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

#### Classification of the mixture:

# Flam. Liq. 2 H225 Based on product data or assessment Skin Irrit. 2 H315 Calculation method Eye Irrit. 2 H319 Calculation method Skin Sens. 1 H317 Calculation method Repr. 2 H361d Calculation method

H372

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Classification procedure:

Calculation method

DE / EN

STOT RE 1

according to Regulation (EC) No. 1907/2006

## **CHP Härter**

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

1.1 Product identifier

Trade name : CHP Härter

Product code : 147.473

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

Use of the Sub- : Curing chemical

stance/Mixture

Recommended restrictions :

on use

: Industrial use, professional use

1.3 Details of the supplier of the safety data sheet

Company : JASA AG

Müslistrasse 43 8957 Spreitenbach

Schweiz

info@jasa-ag.ch, www.jasa-ag.ch

Telephone : +41 (0)44 431 60 70 Telefax : +41 (0)44 432 63 17

Responsible Department : Productmanagement, Tel: +41 (0)44 431 60 70, sds@jasa-ag.ch

1.4 Emergency telephone

Telephone : Tox Info Suisse (STIZ), Tel: 145

according to Regulation (EC) No. 1907/2006

#### **CHP Härter**

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#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2 H225: Highly flammable liquid and vapor.

Organic peroxides, Type D H242: Heating may cause a fire.

Skin corrosion, Sub-category 1B H314: Causes severe skin burns and eye damage.

Serious eye damage, Category 1 H318: Causes serious eye damage.

Reproductive toxicity, Category 2 H361d: Suspected of damaging the unborn child.

Specific target organ toxicity - single exposure, Category 3, Central nervous

system

H336: May cause drowsiness or dizziness.

Specific target organ toxicity - single exposure, Category 3, Respiratory system

H335: May cause respiratory irritation.

#### 2.2 Label elements

#### Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms :









Signal Word : Danger

Hazard Statements : H225 Highly flammable liquid and vapor.

H242 Heating may cause a fire.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.
 H361d Suspected of damaging the unborn child.

Supplemental Hazard

Statements

EUH066

Repeated exposure may cause skin

dryness or cracking.

**Precautionary Statements** 

P101 If medical advice is needed, have product container or

label at hand.

P102 Keep out of reach of children.

Prevention:

P210 Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking.

P220 Keep/Store away from clothing/ strong acids, bases, heavy metal salts and other reducing substances /combustible

according to Regulation (EC) No. 1907/2006

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#### materials.

P234 Keep only in original packaging.

P271 Use only outdoors or in a well-ventilated area.

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

#### Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

#### Storage:

P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.

#### Disposal:

P501 Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

#### Hazardous ingredients which must be listed on the label:

ethyl acetate 4-hydroxy-4-methylpentan-2-one cvclohexanone, peroxide

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

Components

- Compensions			
Chemical name	CAS-No.	Classification	Concentration
	EC-No.		(% w/w)
	Index-No.		
	Registration number		

according to Regulation (EC) No. 1907/2006

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ethyl acetate	141-78-6 205-500-4 607-022-00-5 01-2119475103-46	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 (Central nervous system) EUH066	>= 50 - < 70
4-hydroxy-4-methylpentan-2-one	123-42-2 204-626-7 603-016-00-1 01-2119473975-21	Flam. Liq. 3; H226 Eye Irrit. 2; H319 Repr. 2; H361d STOT SE 3; H335 (Respiratory system) ————————————————————————————————————	>= 20 - < 30
cyclohexanone, peroxide	12262-58-7 235-527-7 617-010-00-1 01-2120762253-58	Org. Perox. A; H240 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT SE 3; H335 (Respiratory system)  specific concentration limit STOT SE 3; H335 >= 5 % STOT SE 3; H335 >= 5 % Acute toxicity estimate  Acute oral toxicity: 1.242 mg/kg	>= 10 - < 20

For explanation of abbreviations see section 16.

#### **SECTION 4: First aid measures**

## 4.1 Description of first-aid measures

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

Move out of dangerous area.

Take off contaminated clothing and shoes immediately. Show this material safety data sheet to the doctor in attend-

ance.

First aider needs to protect himself.

according to Regulation (EC) No. 1907/2006

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If inhaled Move to fresh air.

Get medical attention.

In case of skin contact Take off contaminated clothing and shoes immediately.

Wash off immediately with plenty of water.

Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficul-

ty.

In case of eye contact Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.

Keep eye wide open while rinsing.

Remove contact lenses. Protect unharmed eye. Call a physician immediately.

If swallowed Clean mouth with water and drink afterwards plenty of water.

> Do NOT induce vomiting. Call a physician immediately. Take victim immediately to hospital.

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

Risks Causes serious eye damage.

May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of damaging the unborn child.

Causes severe burns.

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

Treatment : Treat symptomatically.

#### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media Carbon dioxide (CO2)

Dry powder Water spray jet

Alcohol-resistant foam

Unsuitable extinguishing

media

High volume water jet

#### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire

fighting

Hazardous decomposition products formed under fire condi-

Hazardous combustion prod: :

ucts

Carbon monoxide, carbon dioxide and unburned hydrocar-

bons (smoke).

according to Regulation (EC) No. 1907/2006

#### **CHP Härter**

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#### 5.3 Advice for firefighters

Special protective equipment :

for fire-fighters

Wear self-contained breathing apparatus and protective suit. Exposure to decomposition products may be a hazard to

health.

Further information : Use water spray to cool unopened containers.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear personal protective equipment.

Evacuate personnel to safe areas. Remove all sources of ignition.

Do not smoke.

Ensure adequate ventilation.

Avoid contact with skin, eyes and clothing.

Wear respiratory protection.

#### 6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.

If the product contaminates rivers and lakes or drains inform

respective authorities.

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

Methods for cleaning up : Soak up with inert absorbent material and dispose of as haz-

ardous waste.

Sweep up and shovel into suitable containers for disposal. Contact with incompatible substances can cause decomposi-

tion at or below SADT.

#### 6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13.

#### **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

Technical measures : Ensure that eyewash stations and safety showers are close to

the workstation location.

Advice on safe handling : Wear personal protective equipment.

Keep away from heat and sources of ignition.

Handle and open container with care. Keep container tightly closed and dry.

Never return unused material to storage receptacle.

according to Regulation (EC) No. 1907/2006

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Risk of decomposition.

Prevent contamination with readily oxidizable materials and

polymerization accelerators.

In case of insufficient ventilation, wear suitable respiratory

equipment.

Do not breathe vapors/dust. Avoid formation of aerosol. Avoid contact with eyes.

Advice on protection against

fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Keep away from direct sunlight. Avoid shock and friction. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Vapors may form

explosive mixtures with air.

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

Requirements for storage areas and containers

Store in original container. Store in cool place. Store between 41 and 77 °F in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Store away from other

materials.

Advice on common storage

Keep away from strong acids, bases, heavy metal salts and

other reducing substances.

Keep away from food, drink and animal feedingstuffs.

Organic peroxides

Storage class (TRGS 510) 5.2

7.3 Specific end use(s)

Specific use(s) No data available

> The rules which cover amongst other things the requirement for ventilation, protective clothing, personal protective equipment etc. can be obtained from the National Occupational

Health and Safety Board.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

#### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
ethyl acetate	141-78-6	STEL	400 ppm	2017/164/EU
			1.468 mg/m3	
	Further information: Indicative			
		TWA	200 ppm	2017/164/EU
			734 mg/m3	
	Further information: Indicative			
		AGW	200 ppm	DE TRGS
			730 mg/m3	900

according to Regulation (EC) No. 1907/2006

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	Peak-limit category: 2;(I)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
4-hydroxy-4- methylpentan-2- one	123-42-2	AGW	20 ppm 96 mg/m3	DE TRGS 900
	Peak-limit category: 2;(I) Further information: Skin absorption			

# Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Routes of expo- sure	Potential health effects	Value
ethyl acetate	Workers	Inhalation	Long-term systemic effects, Long-term local effects	734 mg/m3
	Workers	Inhalation	Acute systemic effects, Acute local effects	1468 mg/m3
	Workers	Skin contact	Long-term systemic effects	63 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects, Long-term local effects	367 mg/m3
	Consumers	Inhalation	Acute systemic effects, Acute local effects	734 mg/m3
	Consumers	Skin contact	Long-term systemic effects	37 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	4,5 mg/kg bw/day
4-hydroxy-4- methylpentan-2-one	Workers	Inhalation	Long-term systemic effects	59,2 mg/m3
	Workers	Inhalation	Acute local effects	240 mg/m3
	Workers	Skin contact	Long-term systemic effects	840 mg/kg
	Consumers	Inhalation	Long-term systemic effects	10,4 mg/m3
	Consumers	Skin contact	Long-term systemic effects	60 mg/kg
	Consumers	Oral	Long-term systemic effects	3 mg/kg

## Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

	, , , , , ,	,
Substance name	Environmental Compartment	Value
ethyl acetate	Fresh water	0,24 mg/l
	Sea water	0,024 mg/l
	Fresh water sediment	1,15 mg/kg dry weight (d.w.)
	Sea sediment	0,115 mg/kg dry weight (d.w.)
	Sewage treatment plant (STP)	650 mg/l
	Soil	0,148 mg/kg dry

according to Regulation (EC) No. 1907/2006

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		weight (d.w.)
	Oral (Secondary Poisoning)	200 mg/kg food
4-hydroxy-4-methylpentan-2-one	Fresh water	2 mg/l
	Sea water	0,2 mg/l
	Sewage treatment plant (STP)	10 mg/l
	Fresh water sediment	9,06 mg/kg
	Sea sediment	0,91 mg/kg
	Soil	0,63 mg/kg

#### 8.2 Exposure controls

## Personal protective equipment

Eye/face protection : Safety glasses with side-shields conforming to EN166

Hand protection

Material : Neoprene Directive : DIN EN 374

Material : Nitrile rubber Directive : DIN EN 374

Remarks : Gloves should be discarded and replaced if there is any indi-

cation of degradation or chemical breakthrough. The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different

from one producer to the other.

Skin and body protection : Please wear suitable protective clothing, e.g. made of cotton

or heat-resistant synthetic fibres.

Long sleeved clothing

Respiratory protection : Apply technical measures to comply with the occupational

exposure limits.

When workers are facing concentrations above the exposure

limit they must use appropriate certified respirators.

In case of inadequate ventilation wear respiratory protection.

Filter type : Combined particulates and organic vapor type (A-P)

Protective measures : Ensure that eye flushing systems and safety showers are

located close to the working place. Avoid contact with the skin and the eyes. Use only with adequate ventilation.

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

Physical state : liquid

according to Regulation (EC) No. 1907/2006

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Color : colorless

Odor : characteristic

Melting point/range : not determined

Boiling point/boiling range : 77 °C

Upper explosion limit / Upper

flammability limit

11,5 %(V)

Lower explosion limit / Lower :

flammability limit

1,4 %(V)

Flash point : -4 °C

Self-Accelerating decomposi-

tion temperature (SADT)

50 °C

pH : 4-6

Concentration: 10 %

Viscosity

Viscosity, dynamic : not determined

Viscosity, kinematic : No data available

Solubility(ies)

Water solubility : partly miscible

Partition coefficient: n-

octanol/water

No data available

Vapor pressure : not determined

Density : ca. 1 g/cm3 (20 °C)

9.2 Other information

Oxidizing properties : Organic peroxide

Sustains combustion

Organic peroxides : Peroxide content: 10 %

The substance or mixture is an organic peroxide classified as

type D.

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

No decomposition if used as directed.

according to Regulation (EC) No. 1907/2006

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#### 10.2 Chemical stability

No decomposition if stored and applied as directed.

Decomposes on heating.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : Risk of decomposition.

Reacts violently in contact with acids, amines, driers, polymer-

ization accelerators and easily oxidized materials.

10.4 Conditions to avoid

Conditions to avoid : Do not expose to temperatures above: > 25 °C

Extremes of temperature and direct sunlight. Keep away from heat and sources of ignition.

Contact with incompatible substances can cause decomposi-

tion at or below SADT.

10.5 Incompatible materials

Materials to avoid : Accelerators, strong acids and bases, heavy metals and

heavy metal salts, reducing agents

Rust Iron Copper

#### 10.6 Hazardous decomposition products

Irritant, caustic, flammable, noxious/toxic gases and vapours can develop in the case of fire and

decomposition
Carbon oxides

#### **SECTION 11: Toxicological information**

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### **Acute toxicity**

Not classified based on available information.

**Product:** 

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

Components:

ethyl acetate:

Acute oral toxicity : LD50 Oral (Rat): 4.934 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC0 (Rat): 22,5 mg/l, > 6000 ppm

Exposure time: 6 h
Test atmosphere: vapor

Assessment: The substance or mixture has no acute inhala-

tion toxicity

according to Regulation (EC) No. 1907/2006

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Acute dermal toxicity : LD50 Dermal (Rabbit): > 20.000 mg/kg

4-hydroxy-4-methylpentan-2-one:

Acute oral toxicity : LD50 Oral (Rat): 3.002 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC0 (Rat): >= 7,6 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD0 (Rat): > 1.875 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

cyclohexanone, peroxide:

Acute oral toxicity : LD50 Oral (Rat): 1.242 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Skin corrosion/irritation

Causes severe burns.

**Components:** 

ethyl acetate:

Result : Repeated exposure may cause skin dryness or cracking.

cyclohexanone, peroxide:

Species : Rabbit
Result : Corrosive
Remarks : Category 1B

Serious eye damage/eye irritation

Causes serious eye damage.

**Components:** 

cyclohexanone, peroxide:

Species : Rabbit

Result : Irreversible effects on the eye

according to Regulation (EC) No. 1907/2006

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#### Respiratory or skin sensitization

#### Skin sensitization

Not classified based on available information.

#### Respiratory sensitization

Not classified based on available information.

#### Germ cell mutagenicity

Not classified based on available information.

#### Carcinogenicity

Not classified based on available information.

#### Reproductive toxicity

Suspected of damaging the unborn child.

#### **Components:**

#### 4-hydroxy-4-methylpentan-2-one:

Reproductive toxicity - Assessment

Some evidence of adverse effects on development, based on

animal experiments.

#### STOT-single exposure

May cause respiratory irritation.

May cause drowsiness or dizziness.

#### **Components:**

#### 4-hydroxy-4-methylpentan-2-one:

Assessment : May cause respiratory irritation.

#### cyclohexanone, peroxide:

Assessment : May cause respiratory irritation.

#### STOT-repeated exposure

Not classified based on available information.

# **Aspiration toxicity**

Not classified based on available information.

#### 11.2 Information on other hazards

#### **Endocrine disrupting properties**

#### **Product:**

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

according to Regulation (EC) No. 1907/2006

#### **CHP Härter**

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## **SECTION 12: Ecological information**

#### 12.1 Toxicity

#### **Components:**

ethyl acetate:

LC50 (Pimephales promelas (fathead minnow)): 230 mg/l Toxicity to fish

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 610 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

NOEC (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to microorganisms NOEC (Pseudomonas putida): 650 mg/l

Exposure time: 16 h

Toxicity to fish (Chronic tox-

icity)

NOEC: > 9.65 mg/lExposure time: 32 d

Species: Pimephales promelas (fathead minnow)

Method: OECD Test Guideline 210

Toxicity to daphnia and other

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 2,4 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Method: OECD Test Guideline 211

#### 4-hydroxy-4-methylpentan-2-one:

Toxicity to fish LC50 (Oryzias latipes (Orange-red killifish)): > 100 mg/l

> End point: mortality Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 1.000 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): >

1.000 mg/l

End point: Growth rate Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 100 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

according to Regulation (EC) No. 1907/2006

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cyclohexanone, peroxide:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 48 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to microorganisms : EC50 (Bacteria): 11,1 mg/l

Exposure time: 0,5 h

**Ecotoxicology Assessment** 

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

12.2 Persistence and degradability

**Components:** 

ethyl acetate:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 79 %

Related to: Biochemical oxygen demand

Exposure time: 20 d

Method: OECD Test Guideline 301D

4-hydroxy-4-methylpentan-2-one:

Biodegradability : Result: rapidly biodegradable

Biodegradation: 98,51 % Exposure time: 28 d

Method: OECD Test Guideline 301A

12.3 Bioaccumulative potential

**Components:** 

ethyl acetate:

Partition coefficient: n-

log Pow: 0,68 (25 °C)

octanol/water

4-hydroxy-4-methylpentan-2-one:

Partition coefficient: n-

octanol/water

: log Pow: -0,09 (20 °C)

cyclohexanone, peroxide:

Partition coefficient: n-

: Pow: 1,2 (29 °C)

octanol/water

12.4 Mobility in soil

No data available

according to Regulation (EC) No. 1907/2006

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#### 12.5 Results of PBT and vPvB assessment

**Product:** 

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

#### 12.6 Endocrine disrupting properties

**Product:** 

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

12.7 Other adverse effects

**Product:** 

Additional ecological infor-

mation

: No data available

## **SECTION 13: Disposal considerations**

13.1 Waste treatment methods

Product : Do not mix waste streams during collection.

Do not dispose of with domestic refuse.

Do not empty into drains, dispose of this material and its con-

tainer at hazardous or special waste collection point. Dispose of in accordance with local regulations.

Contaminated packaging : Packaging that is not properly emptied must be disposed of as

the unused product.

Dispose of in accordance with local regulations.

Waste Code : The following Waste Codes are only suggestions:

16 05 06, laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chem-

icals

16 09 03, peroxides, for example hydrogen peroxide

#### **SECTION 14: Transport information**

#### 14.1 UN number or ID number

**ADN** : UN 3105 **ADR** : UN 3105

according to Regulation (EC) No. 1907/2006

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 RID
 : UN 3105

 IMDG
 : UN 3105

 IATA
 : UN 3105

14.2 UN proper shipping name

**ADN** : ORGANIC PEROXIDE TYPE D, LIQUID

(cyclohexanone, peroxide)

**ADR** : ORGANIC PEROXIDE TYPE D, LIQUID

(cyclohexanone, peroxide)

RID : ORGANIC PEROXIDE TYPE D, LIQUID

(cyclohexanone, peroxide)

**IMDG** : ORGANIC PEROXIDE TYPE D, LIQUID

(cyclohexanone, peroxide)

IATA : Organic peroxide type D, liquid

(cyclohexanone, peroxide)

14.3 Transport hazard class(es)

Class Subsidiary risks

ADN : 5.2
ADR : 5.2
RID : 5.2
IMDG : 5.2

IATA : 5.2 HEAT

14.4 Packing group

ADN

Packing group : Not assigned by regulation

Classification Code : P1 Labels : 5.2

**ADR** 

Packing group : Not assigned by regulation

Classification Code : P1 Labels : 5.2 Tunnel restriction code : (D)

RID

Packing group : Not assigned by regulation

Classification Code : P1 Hazard Identification Number : 539 Labels : 5.2

**IMDG** 

Packing group : Not assigned by regulation

Labels : 5.2 EmS Code : F-J, S-R

IATA (Cargo)

according to Regulation (EC) No. 1907/2006

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Packing instruction (cargo

aircraft)

Not assigned by regulation

Packing group Organic Peroxides, Keep Away From Heat Labels

570

IATA (Passenger)

Packing instruction (passen-

ger aircraft)

570

Packing group

Not assigned by regulation

Labels Organic Peroxides, Keep Away From Heat

14.5 Environmental hazards

**ADN** 

Environmentally hazardous no

**ADR** 

Environmentally hazardous no

Environmentally hazardous no

**IMDG** 

Marine pollutant no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

#### **SECTION 15: Regulatory information**

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

Conditions of restriction for the following entries should be considered: Number on list 75, 3

If you intend to use this product as tattoo ink, please contact your ven-

dor.

REACH - Candidate List of Substances of Very High

Concern for Authorization (Article 59).

Not applicable

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Not applicable

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollu-

according to Regulation (EC) No. 1907/2006

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tants (recast)

REACH - List of substances subject to authorisation : Not applicable

(Annex XIV)

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving

dangerous substances.

Water hazard class (Germa:

WGK 2 obviously hazardous to water

PEROXIDES

SELF-REACTIVE SUBSTANCES

AND MIXTURES and ORGANIC

ny) Classification according to AwSV, Annex 1 (5.2)

Other regulations:

BG-Merkblatt M001 beachten (German regulatory requirements) BGV B4 organische Peroxide. (German regulatory requirements)

Gefahrengruppe nach § 3 BGV B4: III (German regulatory requirements)

The product is subject to the supply restrictions of the Ordinance on the Prohibition of Chemicals.

 $\S$  5Abs. 4b : Derogation according to the Ordinance on the Prohibition of Chemicals (ChemVerbotsV)

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

The product is subject to the supply restrictions of the Ordinance on the Prohibition of Chemicals.

Take note of Law on the protection of mothers at work, in education and in studies (Maternity Protection Act - MuSchG).

#### 15.2 Chemical Safety Assessment

A chemical safety assessment according to (EC) regulation 1907/2006 (REACH) has not been carried out for this product.

#### **SECTION 16: Other information**

#### **Full text of H-Statements**

H336

H225 Highly flammable liquid and vapor. H226 Flammable liquid and vapor. H240 Heating may cause an explosion. H302 Harmful if swallowed. H314 Causes severe skin burns and eve damage. H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

May cause drowsiness or dizziness.

according to Regulation (EC) No. 1907/2006

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H361d : Suspected of damaging the unborn child.

EUH066 : Repeated exposure may cause skin dryness or cracking.

#### Full text of other abbreviations

Acute Tox. : Acute toxicity

Eye Dam. : Serious eye damage

Eye Irrit. : Eye irritation
Flam. Liq. : Flammable liquids
Org. Perox. : Organic peroxides
Repr. : Reproductive toxicity
Skin Corr. : Skin corrosion

STOT SE : Specific target organ toxicity - single exposure

2017/164/EU : Europe. Commission Directive 2017/164/EU establishing a

fourth list of indicative occupational exposure limit values

DE TRGS 900 : Germany. TRGS 900 - Occupational exposure limit values.

2017/164/EU / STEL : Short term exposure limit 2017/164/EU / TWA : Limit Value - eight hours DE TRGS 900 / AGW : Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response: GHS - Globally Harmonized System: GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

according to Regulation (EC) No. 1907/2006

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	Classification of the r	nixture:	Classification procedure:
	Flam. Liq. 2	H225	Based on product data or assessment
	Org. Perox. D	H242	Based on product data or assessment
	Skin Corr. 1B	H314	Calculation method
	Eye Dam. 1	H318	Calculation method
	Repr. 2	H361d	Calculation method
	STOT SE 3	H336	Calculation method
	STOT SE 3	H335	Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

DE / EN