CAM Ulta-Spray

Version		Revision Date:	Date of last issue: 12.08.2020
2.0	GB / EN	12.08.2020	Date of first issue: 16.08.2019

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

1.1 Product identifier

Trade name : CAM Ulta-Spray

Product code : 124.240

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

Use of the Sub-stance/Mixture : Body filler/stopper

Recommended restrictions on use : Reserved for industrial and professional use.

1.3 Details of the supplier / Importer of the safety data sheet

Importing Company : SYDNEY AUTOMOTIVE PAINTS & EQUIPMENT
UN IT 3A, 366 EDGAR ST Condell Park, NSW 2200
PH: 02 9772 9000 FAX: 02 9772 9001
EMAIL: reception@sape.com.au

Emergency telephone number: Poison Information Centre Call 13 11 26 (Australia)

Supplier Company : Vosschemie GmbH
Esinger Steinweg 50
25436 Uetersen Germany

info@vosschemie.de

Telephone : 04122 717 0
Telefax : 04122 717158

Responsible Department : Laboratory

sds@vosschemie.de

1.4 Emergency telephone number

Telephone : POISON INFORMATION CENTRE,
AUSTRALIA
13 11 26

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3	H226: Flammable liquid and vapour.
Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Reproductive toxicity, Category 2	H361d: Suspected of damaging the unborn child.
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335: May cause respiratory irritation.
Specific target organ toxicity - repeated exposure, Category 1	H372: Causes damage to organs through prolonged or repeated exposure.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Danger

Hazard statements :

H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skinreaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H361d Suspected of damaging the unborn child.
H372 Causes damage to organs through prolonged or repeated 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.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with wa-

ter for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

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 components 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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Mixture contains Resin

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
styrene	100-42-5 202-851-5 601-026-00-0 01-2119457861-32	Flam. Liq. 3; H226 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Repr. 2; H361d STOT SE 3; H335 STOT RE 1; H372 Asp. Tox. 1; H304 Aquatic Chronic 3; H412	>= 20 - < 25
cobalt bis(2-ethylhexanoate)	136-52-7 205-250-6 01-2119524678-29	Eye Irrit. 2; H319 Skin Sens. 1A; H317 Repr. 1B; H360F Aquatic Acute 1; H400 Aquatic Chronic 3; H412	>= 0.025 - < 0.1

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	>= 0.001 - < 0.1

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 advice 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 safety data sheet to the doctor in attendance.

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 respiration.
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.
May cause respiratory 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.

SECTION 5: Firefighting measures

Hazchem: •3Y

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 products : Hazardous decomposition products due to incomplete combustion
Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

5.3 Advice for firefighters

Special protective equipment for firefighters : 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 vapour formation use a respirator with an approved 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.

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 : Vapours 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 storage 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.

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 of exposure)	Control parameters	Basis
styrene	100-42-5	TWA	100 ppm 430 mg/m3	GB EH40
		STEL	250 ppm 1,080 mg/m3	GB EH40
Talc	14807-96-6	TWA (Respirable dust)	1 mg/m3	GB EH40
Further information	For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols, Talc is defined as the mineral talc together with other hydrous phyllosilicates including chlorite and carbonate materials which occur with it, but excluding amphibole asbestos and crystalline silica., The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'., Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.				
Barium sulphate	7727-43-7	TWA (inhalable dust)	10 mg/m3	GB EH40
Further information	For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature				

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		TWA (Respirable dust)	4 mg/m3	GB EH40
Further information	For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aero-sols, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are ex-posed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human res-piratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'., Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breat h-ing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.			
Titanium dioxide	13463-67-7	TWA (inhalable dust)	10 mg/m3	GB EH40
Further information	For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aero-sols, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are ex-posed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human res-piratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit -setting purposes termed 'inhalable' and 'respirable'., Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breat h-ing and is therefore available for deposition in the respiratory tract. Respirable			

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		TWA (Respirable dust)	4 mg/m3	GB EH40
Further information	For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'., Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breat hing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.			
cobalt bis(2-ethylhexanoate)	136-52-7	TWA	0.1 mg/m3 (Cobalt)	GB EH40
Further information	Substances that can cause occupational asthma (also known as asthmagens and respiratory sensitisers) can induce a state of specific airway hyper-responsiveness via an immunological irritant or other mechanism. Once the airways have become hyper-responsive, further exposure to the substance, sometimes even in tiny quantities, may cause respiratory symptoms. These symptoms can range in severity from a runny nose to asthma. Not all workers who are exposed to a sensitiser will become hyper-responsive and it is impossible to identify in advance those who are likely to become hyper-responsive. Substances that can cause occupational asthma should be distinguished from substances which may trigger the symptoms of asthma in people with pre- existing airway hyper-responsiveness, but which do not include the disease themselves. The latter substances are not classified as asthmagens or respiratory sensitisers. Further information can be found in the HSE publication Asthmagen? Critical assessments of the evidence for agents implicated in occupational asthma., Wherever it is reasonably practicable, exposure to substances that can cause occupational asthma should be prevented. Where this is not possible, the primary aim is to apply adequate standards of control to prevent workers from becoming hyper-responsive. For substances that can cause occupational asthma, COSHH requires that exposure be reduced to as low as is reasonably practicable. Activities giving rise to short-term peak concentrations should receive particular attention when risk			

	management is being considered. Health surveillance is appropriate for all employees exposed or liable to be exposed to a substance which may cause occupational asthma and there should be appropriate consultation with an occupational health professional over the degree of risk and level of surveillance., Capable of causing occupational asthma., Capable of causing cancer and/or heritable genetic damage., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used., Carcinogenic applies for cobalt dichloride and sulphate., The 'Sen' notation in the list of WELs has been assigned only to those substances which may cause occupational asthma in the categories shown in Table 1. It should be remembered that other substances not in these tables may cause occupational asthma. HSE's asthma web pages (www.hse.gov.uk/asthma) provide further information.			
maleic anhydride	108-31-6	TWA	1 mg/m3	GB EH40
Further information	Capable of causing occupational asthma.			
		STEL	3 mg/m3	GB EH40
Further information	Capable of causing occupational asthma.			

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

Substance name	End Use	Exposure routes	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	10.0 mg/m3
	Consumers	Inhalation	Acute systemic effects, Short-term exposure	174.25 mg/m3
	Consumers	Inhalation	Acute local effects, Short-term exposure	182.75 mg/m3
cobalt bis(2-ethylhexanoate)	Workers	Inhalation	Long-term local effects	0.2351 mg/m3
	Consumers	Inhalation	Long-term local effects	0.0037 mg/m3
	Consumers	Oral	Long-term systemic effects	0.175 mg/kg bw/day

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

Substance name	Environmental Compartment	Value
styrene	Fresh water	0.028 mg/l
	Marine water	0.014 mg/l
	Fresh water sediment	0.614 mg/kg dry weight (d.w.)
	Marine sediment	0.307 mg/kg dry weight (d.w.)
	Soil	0.2 mg/kg dry weight (d.w.)
	Sewage treatment plant	5 mg/l
cobalt bis(2-ethylhexanoate)	Fresh water	0.0006 mg/l
	Marine water	0.00236 mg/l
	Sewage treatment plant	0.37 mg/l
	Fresh water sediment	53.8 mg/kg dry weight (d.w.)
	Marine sediment	69.8 mg/kg dry weight (d.w.)
	Soil	10.9 mg/kg

8.2 Exposure controls

Personal protective equipment

Eye 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 indication 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 material 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 vapour 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

Appearance	:	paste
Colour	:	grey
Odour	:	characteristic
pH	:	not determined
Melting point/freezing point	:	not determined
Boiling point/boiling range	:	145 °C (1,013 hPa) Literary value styrene
Flash point	:	31 °C(1,013 hPa) Literary value styrene
Upper explosion limit / Upper flammability limit	:	6.1 %(V) Literary value styrene
Lower explosion limit / Lower flammability limit	:	1.1 %(V) Literary value styrene
Vapour pressure	:	6.67 hPa (20 °C) Literary value styrene
Density	:	ca. 1.7 g/cm3 (20 °C)
Solubility(ies)		

Water solubility	:	0.32 g/l Literary value styrene (25 °C) insoluble
Partition coefficient: n-octanol/water	:	not determined
Ignition temperature	:	490 °C (1,013 hPa) Literary value styrene
Viscosity		
Viscosity, dynamic	:	not determined
Viscosity, kinematic	:	not determined
Explosive properties	:	Not explosive In use, may form flammable/explosive vapour-air mixture.

9.2 Other information

No data available

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. Polymerisation can occur. Polymerisation is a highly exothermic reaction and may generate sufficient heat to cause thermal 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 polymerisation 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 toxicological effects

Acute toxicity

Not classified based on available information.

Product:

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l
Exposure time: 4 h
Test atmosphere: vapour
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: vapour

Acute dermal toxicity : LD50 Dermal (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402

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 inhalation toxicity

Acute dermal toxicity : LD50 Dermal (Rabbit): 2,620 mg/kg

Skin corrosion/irritation

Causes skin irritation.

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 sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

Components:

styrene:

Species : Guinea pig
Result : Does not cause skin sensitisation.

cobalt bis(2-ethylhexanoate):

Exposure routes : Skin contact
Result : The product is a skin sensitiser, sub-category 1A.

maleic anhydride:

Result : The product is a skin sensitiser, 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:

Reproductive toxicity - Assessment : Suspected of damaging the unborn child.

cobalt bis(2-ethylhexanoate):

Reproductive toxicity - Assessment : May damage fertility.

STOT - single exposure

May cause respiratory irritation.

Components:

styrene:

Assessment : May cause respiratory irritation.

STOT - repeated exposure

Causes damage to organs (ear) through prolonged or repeated exposure if inhaled.

Components:

styrene:

Exposure routes : Inhalation
Target Organs : ear
Assessment : Causes damage to organs through prolonged or repeated exposure.

maleic anhydride:

Exposure routes : 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.

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 : EC50 (Selenastrum capricornutum (green algae)): 4.9 mg/l

Exposure time: 72 h

Toxicity to microorganisms : EC50 (Natural microorganism): ca. 500 mg/l
Method: OECD Test Guideline 209

Toxicity to fish (Chronic toxicity) : No data available:

Toxicity to daphnia and other aquatic invertebrates (Chronic 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.

cobalt bis(2-ethylhexanoate):

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 48 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

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 0.144 mg/l
End point: Growth rate
Exposure time: 72 h

Toxicity to microorganisms : EC10 (Bacteria): 3.73 mg/l
Exposure time: 3 h

Toxicity to fish (Chronic toxicity) : NOEC: 0.21 mg/l
End point: mortality
Exposure time: 34 d
Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.0608 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

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

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 : EC50 (Daphnia magna (Water flea)): 42.81 mg/l

aquatic invertebrates		End point: Immobilization Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 74.35 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 10 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)

Ecotoxicology Assessment

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

12.2 Persistence and degradability

Components:

styrene:

Biodegradability	:	Biodegradation: 70.9 % Exposure time: 28 d Readily biodegradable.

maleic anhydride:

Biodegradability	:	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)

maleic anhydride:

Partition coefficient: n-octanol/water	:	log Pow: -2.61 (20 °C)

12.4 Mobility in soil

Components:

styrene:

Distribution among environmental compartments	:	log Koc: 2.55

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 Other adverse effects

Product:

Additional ecological information : No data available

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 container at hazardous or special waste collection point.
Dispose of in accordance with local regulations.
Dispose of wastes in an approved waste disposal facility.
Do not dispose of together with household waste.
Send to a licensed waste management company.
It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
Store containers and offer for recycling of material when in 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

ADN : UN 1866

ADR : UN 1866

RID : UN 1866

IMDG/ADG : 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)

ADN	:	3
ADR	:	3
RID	:	3
IMDG/ADG	:	3
IATA	:	3

14.4 Packing group

ADN

Packing group	:	III
Classification Code	:	F1
Hazard Identification Number	:	30
Labels	:	3

ADR

Packing group	:	III
Classification Code	:	F1
Hazard Identification Number	:	30
Labels	:	3
Tunnel restriction code	:	(D/E)

RID

Packing group	:	III
Classification Code	:	F1
Hazard Identification Number	:	30
Labels	:	3

IMDG/ADG

Packing group	:	III
Labels	:	3
EmS Code	:	F-E, S-E

IATA (Cargo)/ADG

Packing instruction (cargo aircraft)	:	366
Packing instruction (LQ)	:	Y344
Packing group	:	III
Labels	:	Class 3 - Flammable liquids

IATA (Passenger)

Packing instruction (passenger aircraft)	:	355
Packing instruction (LQ)	:	Y344
Packing group	:	III
Labels	:	Class 3 - Flammable liquids

14.5 Environmental hazards

ADN
Environmentally hazardous : no

ADR/ADG
Environmentally hazardous : no

RID
Environmentally hazardous : no

IMDG/ADG
Marine pollutant : no

Hazchem: •3Y

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

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 - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Conditions of restriction for the following entries should be considered: Number on list 3

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

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:

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.
All components of this product are listed on or exempt from the Australian Inventory of Chemical Substances (AICIS).

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

H226	:	Flammable liquid and vapour.
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.
H360F	:	May damage fertility.
H361d	:	Suspected of damaging the unborn child.
H372	:	Causes damage to organs through prolonged or repeated exposure.
H372	:	Causes damage to organs through prolonged or repeated exposure if inhaled.
H400	:	Very toxic to aquatic life.
H412	:	Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

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 sensitisation
Skin Corr.	:	Skin corrosion
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitisation
STOT RE	:	Specific target organ toxicity - repeated exposure
STOT SE	:	Specific target organ toxicity - single exposure
GB EH40	:	UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA	:	Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL	:	Short-term exposure limit (15-minute reference period)

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

Goods by Road; AICS - Australian Inventory of Chemical Substances; 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 Equip- ment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentra- tion; ICAO - International Civil A viation 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, E valuation, 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; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Sub- stances Control Act (United States); UN - United Nations; vP vB - Very Persistent and Very Bioac- cumulative

Further information

Classification of the mixture:		**Classification procedure:**
Flam. Liq. 3	H226	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
STOT SE 3	H335	Calculation method
STOT RE 1	H372	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 gui d- ance 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.

A. Förster & CO.KG.

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

Printing date 18.05.2019 V - 4 Revision: 28.01.2019

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

· **1.1 Product identifier**
· **Trade name: CHP HARDENER FOR CAM ULTRASPRAY**

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Application of the substance / the mixture** Hardening agent/ Curing agent

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**

Sydney Automotive Paint and Equipment
Unit A3, 366 Edgar Street
Condell Park
NSW 2200
Australia
Tel: +61 2 9772 9000
Email: reception@sape.com.au

· **Further information obtainable from:**
+49 (0)4122 3682
email: info@foerster-co.de

· **1.4 Emergency telephone number:**

Emergency telephone:	AU Poison Information Centre 13 11 26
General medical information:	+61 2 9772 9000 (Mon to Fri, 08:00-16:00 AEST)
Transport information:	+61 2 9772 9000 (Mon to Fri, 08:00-16:00 AEST)

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SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

GHS02 flame

Flam. Liq. 2	H225	Highly flammable liquid and vapour.
Org. Perox. D	H242	Heating may cause a fire.

GHS05 corrosion

Skin Corr. 1B	H314	Causes severe skin burns and eye damage.
Eye Dam. 1	H318	Causes serious eye damage.

GHS07

(Contd. on page 2)

Trade name: CHP HARDENER FOR CAM ULTRASPRAY

(Contd. of page 1)

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

· **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 GHS05 GHS07

· **Signal word** Danger

· **Hazard-determining components of labelling:**
cyclohexanone, peroxide
ethyl acetate
4-hydroxy-4-methylpentan-2-one
· **Hazard statements**
H225 Highly flammable liquid and vapour.
H242 Heating may cause a fire.
H314 Causes severe skin burns and eye damage.
H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.
· **Precautionary statements**
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P220 Keep apart from dirt, rust, chemicals, especially reducing substances, acids, alkaline solutions, amines and heavy metal compounds (such as accelerator, dessicative, metal soaps).
P234 Keep only in original container.
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/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P405 Store locked up.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**
Risk of serious damage to eyes.
Risk of fire on contact with combustible substances or other substances effective in promoting the decomposition reaction.
Fire propagating effect due to oxygen release.
Thermal decomposition with temperatures above 50 °C (SADT)
Pls. refer to section 10
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

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Trade name: CHP HARDENER FOR CAM ULTRASPRAY

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SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 141-78-6 EINECS: 205-500-4 Reg.nr.: 01-2119475103-46	ethyl acetate Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	50-100%
CAS: 123-42-2 EINECS: 204-626-7 Reg.nr.: 01-2119473975-21	4-hydroxy-4-methylpentan-2-one Flam. Liq. 3, H226; Eye Irrit. 2, H319; STOT SE 3, H335	10-25%
CAS: 131-11-3 EINECS: 205-011-6 Reg.nr.: 01-2119437229-36	dimethyl phthalate substance with a Community workplace exposure limit	10-25%
CAS: 12262-58-7 EINECS: 235-527-7	cyclohexanone, peroxide Org. Perox. A, H240; Skin Corr. 1B, H314; Acute Tox. 4, H302; STOT SE 3, H335	10-25%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Personal protection for the First Aider.
Take affected persons out of danger area and lay down.
In case of irregular breathing or respiratory arrest provide artificial respiration.
Immediately remove any clothing soiled by the product.
· **After inhalation:**
Remove person to fresh air and keep comfortable for breathing.
Supply fresh air or oxygen; call for doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
Call a doctor immediately.
· **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
Call a doctor immediately.
· **After swallowing:**
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
Call a doctor immediately.
· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media** **Hazchem:** 2WE
· **Suitable extinguishing agents:**
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
In case of fire, the product promotes combustion.

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May decompose explosively in absence of fire due to formation of vapour-air-mixture.

· ***5.3 Advice for firefighters***

· ***Protective equipment:***

Do not inhale explosion gases or combustion gases.
Wear self-contained respiratory protective device.
Wear fully protective suit.

· ***Additional information***

Remove undamaged containers from the danger zone.
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

· ***6.1 Personal precautions, protective equipment and emergency procedures***

Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Use suitable respiratory protective device in case of insufficient ventilation.
Avoid contact with the eyes and skin.
Keep away from ignition sources.
Pls. refer to section 10

· ***6.2 Environmental precautions:***

Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

· ***6.3 Methods and material for containment and cleaning up:***

Collect with an inert, non-combustible, absorbent material (i.e. sand, diatomaceous earth, acid binder, universal binder).
Do not seal receptacle gas tight.
Dispose contaminated material as waste according to item 13.
Pls. refer to section 10

· ***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***

Keep receptacles tightly sealed.
Open and handle receptacle with care.
Do not return unused material to original containers – decomposition hazard!
Restrict the quantity stored at the work place.
Resistant to inert materials only.
Do not mix with accelerators or reducing agents.
Suitable materials: Stainless steel (DIN 1.4571), PVC, polyethylene, glass-lined apparatus.
Keep apart from dirt, rust, chemicals, especially reducing substances, acids, alkaline solutions, amines and heavy metal compounds 8such as accelerator, dessicative, metal soaps). Avoid naked flames, sparks, other ignition sources and sunlight.
Weigh out and mix separately when processing polyester resins.
Avoid storage in containers with an airtight closure to prevent hazardous pressure build-up due to an eventual decomposition.
Avoid contact with the eyes and skin.
Ensure good ventilation/exhaustion at the workplace.
Do not inhale gases / fumes / aerosols.
Adhere to the workplace limit values and / or other threshold values.

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

Protect from heat.

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Trade name: CHP HÄRTER für SPRAY

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Keep ignition sources away - Do not smoke.
Prevent impact and friction.
Thermal decomposition with temperatures above 50 °C under formation of explosive vapours/gases
Avoid naked flames, sparks, other ignition sources and sunlight.
Protect against electrostatic charges.
Anti-explosion protection required
Fumes can combine with air to form an explosive mixture.
Fire propagating effect due to oxygen release.
Keep apart from incompatible substances, dirt and high temperatures.
Pls. refer to section 10

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Store only in the original receptacle.
Prevent any seepage into the ground.
Adhere to the provisions of the Law on Water Protection.
Use only receptacles specifically permitted for this substance/product.
· **Information about storage in one common storage facility:**
Keep apart from other chemicals, in particular from accelerators.
Store away from foodstuffs.
· **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
Protect from contamination.
Store receptacle in a well ventilated area.
Store under lock and key and out of the reach of children.
· **Maximum storage temperature:** +25 °C
· **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
141-78-6 ethyl acetate	
WEL (Great Britain)	Short-term value: 400 ppm Long-term value: 200 ppm
123-42-2 4-hydroxy-4-methylpentan-2-one	
WEL (Great Britain)	Short-term value: 362 mg/m³, 75 ppm Long-term value: 241 mg/m³, 50 ppm
131-11-3 dimethyl phthalate	
WEL (Great Britain)	Short-term value: 10 mg/m³ Long-term value: 5 mg/m³

· **DNELs**		
141-78-6 ethyl acetate		
Oral	Long-term exposure - systemic effects	4.5 mg/kg bw/day (general population)
Dermal	Long-term exposure - systemic effects	37 mg/kg bw/day (general population)
		63 mg/kg bw/day (worker)
Inhalative	Long-term exposure - systemic effects	367 mg/m³ (general population)
		734 mg/m³ (worker)
	Acute/short-term exposure - systemic effects	734 mg/m³ (general population)

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Trade name: CHP HÄRTER für SPRAY

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		1468 mg/m³ (worker)
	Acute/short-term exposure - local effects	734 mg/m³ (general population)
		1468 mg/m³ (worker)
	Long-term exposure - local effects	367 mg/m³ (general population)
		734 mg/m³ (worker)
123-42-2 4-hydroxy-4-methylpentan-2-one		
Oral	Long-term exposure - systemic effects	3.4 mg/kg bw/day (general population)
Dermal	Long-term exposure - systemic effects	3.4 mg/kg bw/day (general population)
		9.4 mg/kg bw/day (worker)
Inhalative	Long-term exposure - systemic effects	11.8 mg/m³ (general population)
		66.4 mg/m³ (worker)
	Acute/short-term exposure - local effects	120 mg/m³ (general population)
		240 mg/m³ (worker)
	Long-term exposure - local effects	11.8 mg/m³ (general population)
		66.4 mg/m³ (worker)
131-11-3 dimethyl phthalate		
Oral	Long-term exposure - systemic effects	25 mg/kg bw/day (general population)
Dermal	Long-term exposure - systemic effects	60 mg/kg bw/day (general population)
		100 mg/kg bw/day (worker)
Inhalative	Long-term exposure - systemic effects	87 mg/m³ (general population)
		294 mg/m³ (worker)

· **PNECs**

141-78-6 ethyl acetate	
PNEC aqua	0.26 mg/l (freshwater)
	0.026 mg/l (marine water)
	1.65 mg/l (intermittent releases)
PNEC sediment	1.25 mg/kg (freshwater)
	0.125 mg/kg (marine water)
PNEC STP	650 mg/l
PNEC soil	0.24 mg/kg (soil dw)
123-42-2 4-hydroxy-4-methylpentan-2-one	
PNEC aqua	2 mg/l (freshwater)
	0.2 mg/l (marine water)
PNEC sediment	9.06 mg/kg (freshwater)
	0.91 mg/kg (marine water)
PNEC STP	82 mg/l
PNEC soil	0.63 mg/kg (soil dw)
131-11-3 dimethyl phthalate	
PNEC aqua	0.192 mg/l (freshwater)
	0.0192 mg/l (marine water)
PNEC sediment	1403 mg/kg (freshwater)
PNEC STP	4 mg/l
PNEC soil	3.16 mg/kg (soil dw)

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

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· **8.2 Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Do not eat, drink, smoke or sniff while working.
Wash hands before breaks and at the end of work.
Immediately remove all soiled and contaminated clothing
Take off contaminated clothing.
Store protective clothing separately.
Avoid contact with the eyes and skin.
After contact with skin, wash immediately with plenty of soap and water.
Use skin protection cream for skin protection.
· **Respiratory protection:**
Ensure good ventilation/exhaustion at the workplace.
Adhere to the workplace limit values and / or other threshold values.
Use suitable respiratory protective device in case of insufficient ventilation.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Filter A/P2
· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
DIN EN 374
Butyl rubber, BR
Recommended thickness of the material: ≥ 0.5 mm
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
Value for the permeation: Level ≤ 3 (> 60 min.)
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**

Tightly sealed goggles

· **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**
· **General Information**
· **Appearance:**

Form:	Fluid
Colour:	Colourless
· **Odour:**	Like ketone

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Trade name: CHP HÄRTER für SPRAY

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· **pH-value:**	Slightly acidic
· **Change in condition**	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Not applicable
· **Flash point:**	-4 °C
· **Ignition temperature:**	Not applicable
· **Auto-ignition temperature:**	Pls. refer to section 10
· **Explosive properties:**	Pls. refer to section 10
· **Explosion limits:**	
Lower:	1.4 Vol %
Upper:	11.5 Vol %
· **Density at 20 °C:**	~ 1 g/cm³
· **Solubility in / Miscibility with water:**	Partly miscible.
· **9.2 Other information**	No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No decomposition if used according to specifications.
· **10.2 Chemical stability**
Resistant to inert materials only.
Suitable materials: Stainless steel (DIN 1.4571), PVC, polyethylene, glass-lined apparatus.
Thermal decomposition with temperatures above 50 °C (SADT)
· **10.3 Possibility of hazardous reactions**
Thermal decomposition or direct contact with numerous additives, such as reducing agents (i.e. amine accelerator), heavy metal compounds (in particular cobalt accelerators), acids and alkaline solutions, may lead to hazardous, autoaccelerating decomposition reactions, and possibly, to explosion or fire.
· **10.4 Conditions to avoid**
Avoid naked flames, sparks, other ignition sources and sunlight.
Protect from heat.
>25 °C
To avoid thermal decomposition do not overheat.
· **10.5 Incompatible materials:**
Keep apart from dirt, rust, chemicals, especially reducing substances, acids, alkaline solutions, amines and heavy metal compounds 8such as accelerator, dessicative, metal soaps)
Avoid any direct contact with accelerators.
Reacts with acids, alkalis and oxidising agents.
· **10.6 Hazardous decomposition products:**
Formation of various organic degradation products and inflammable and explosive vapours/gases upon decomposition.
Danger of forming toxic pyrolysis products.

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SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**		
Oral	ATE	4000 mg/kg (mix) (Calculation method)

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141-78-6 ethyl acetate		
Oral	LD50	5620 mg/kg (rat)
		4934 mg/kg (rabbit)
Dermal	LD 50	> 18000 mg/kg (rabbit)
Inhalative	LC50 /4h	56 mg/l (rat)
123-42-2 4-hydroxy-4-methylpentan-2-one		
Oral	LD50	3002 mg/kg (rat) (OECD 401)
Dermal	LD50	13630 mg/kg (rab)
	LD 50	> 1875 mg/kg (rat) (OECD 402)
Inhalative	LC 50 / 4h	> 7.6 mg/l (rat) (OECD 403)
	LC50 /4h	500-1900 mg/m³ (mouse)
131-11-3 dimethyl phthalate		
Oral	LD 50	>2400 mg/kg (rat)
Dermal	LD50	> 10000 mg/kg (rabbit)
Inhalative	LC50 /6h	9.3 mg/l
12262-58-7 cyclohexanone, peroxide		
Oral	LD50	880 mg/kg (mouse)
Dermal	LD 50	> 2000 mg/kg
Inhalative	LC 50 / 4h	> 5.0 mg/l (rat)
	LC0 /4h	5.0 mg/l (rat)

· **Primary irritant effect:**
· **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
· **Serious eye damage/irritation**
Causes serious eye damage.

· **Subacute to chronic toxicity:**		
123-42-2 4-hydroxy-4-methylpentan-2-one		
Oral	NOAEL	300 mg/kg (rat) (6 weeks, liver, kidney)
Inhalative	NOAEL	1.041 mg/l (rat) (6 weeks, liver, kidney)
	LOAEL	0.48 mg/l (human)
131-11-3 dimethyl phthalate		
Oral	NOAEL	1000 mg/kg (rat) (bw/day, 24 month)

· **Additional toxicological information:** Has a narcotising effect.
· **Acute effects (acute toxicity, irritation and corrosivity)**
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
· **Sensitisation** No sensitising effects known.
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**

· **Carcinogenicity**		
123-42-2 4-hydroxy-4-methylpentan-2-one		
Oral	NOAEL (carcinogenicity)	100 mg/kg (rat) (44 d)
Inhalative	NOAEL (carcinogenicity)	1.84 mg/l (rat)

· **Reproductive toxicity/Fertility**		
123-42-2 4-hydroxy-4-methylpentan-2-one		
Oral	NOAEL (fertility)	30-100 mg/kg (rat, parents) (OECD 422)
		300 mg/kg (rat, F1) (OECD 422)
Inhalative	NOAEL (fertility)	4.1 mg/l (rat, parents) (OECD 416)
		4.1 mg/l (rat, F1) (OECD 416)

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· **Reproductive toxicity/Teratogenicity**		
123-42-2 4-hydroxy-4-methylpentan-2-one		
Inhalative	NOAEL (teratogenicity)	4.1 mg/l (rat) (OECD 414)
131-11-3 dimethyl phthalate		
Oral	NOAEL (developmental toxicity)	3570 mg/kg (rat) (OECD 414)
	NOAEL (maternally)	840 mg/kg (rat) (OECD 414)

· **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 respiratory irritation. 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.

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SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
141-78-6 ethyl acetate	
EC10	3300 mg/l (bacteria) (48h)
EC50	3090 mg/l (daphnia magna) (24h, DIN 38412, Part 11)
EC50/48h	3300 mg/l (scenedesmus subspicatus)
LC50/96h	230 mg/l (pimephales promelas)
NOEC	> 100 mg/l (algae) (71h, OECD 201)
	< 9.65 mg/l (pimephales promelas) (OECD 212)
NOEC (aqua chron.)	2.4 mg/l (daphnia magna) (21d)
123-42-2 4-hydroxy-4-methylpentan-2-one	
EC50	9016 mg/l (daphnia) (24h, OECD 203)
EC50/48h	> 1000 mg/l (daphnia magna) (OECD 202)
EC50/72h	> 100 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
EC50/0.5h	17 mg/l (activated slugde)
LC50/96h	420 mg/l (Lepomis macrochirus)
	> 100 mg/l (Oryzias latipes) (OECD 203)
NOEC	100 mg/l (Pseudokirchneriella subcapitata) (OECD 201, 72h)
NOEC (aqua chron.)	> 100 mg/l (daphnia magna) (21 d)
NOEL	825 mg/l (pseudomonas putida)
TGK = toxicity threshold concentration	825 mg/l (pseudomonas putida) (16h, inhibition test)
131-11-3 dimethyl phthalate	
EC10/72h	193.09 mg/l (desmodesmus subspicatus)
EC50/48h	33 mg/l (daphnia magna)
EC50/72h	259.76 mg/l (desmodesmus subspicatus)
EC50/96h	39.9 mg/l (algae) (Raphidocelis subcapitata)
LC50/96h	50 mg/l (Lepomis macrochirus)
	39 mg/l (pimephales promelas)
NOEC	9.6 mg/l (daphnia magna) (21 d)
	11 mg/l (oncorhynchus mykiss) (102 d)
12262-58-7 cyclohexanone, peroxide	
EC50/0.5h	11.1 mg/l (activated slugde)

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LC50/96h	*48 mg/l (danio rerio)* *48 mg/l (piscis)*

· **12.2 Persistence and degradability**

141-78-6 ethyl acetate	
Biodegradation	*100 % (28d, OECD 301 D)*
123-42-2 4-hydroxy-4-methylpentan-2-one	
Biodegradation	*98.51 % (OECD 301A, 28d)*
131-11-3 dimethyl phthalate	
Biodegradation	*96-98 % (28d, OECD 301 E)*

· **12.3 Bioaccumulative potential**

141-78-6 ethyl acetate	
log Pow	*0.66 - 0.68 (25 °C)*
BCF	*30*
123-42-2 4-hydroxy-4-methylpentan-2-one	
log Kow	*1.03*
BCF	*0.5*
131-11-3 dimethyl phthalate	
log Kow	*1.56 (OECD 107)*
BCF	*57 (Lepomis macrochirus) (21 day, OECD 305)*
12262-58-7 cyclohexanone, peroxide	
log Kow	*3.02 (calculated)*

· **Behaviour in environmental systems:**

· **12.4 Mobility in soil**

123-42-2 4-hydroxy-4-methylpentan-2-one	
log Koc	*1.3*
Koc	*3.32*
131-11-3 dimethyl phthalate	
log Koc	*1.57*

· **Additional ecological information:**
· **General notes:** *Do not allow product to reach ground water, water course or sewage system.*
· **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**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Disposal must be made according to official regulations.
Dilute product with suitable inert liquid to a peroxide concentration below 10% and subsequently dispose of according to the refuse disposal act.
· **Waste disposal key:**
The waste codes given above are to be considered recommendations; because of regional and industrial sector specific features, application of different waste codes is possible.

· **European waste catalogue**	
16 05 06	*laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals*

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· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

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SECTION 14: Transport information

· **14.1 UN-Number**	
· **ADR, IMDG, IATA**	UN3105
· **14.2 UN proper shipping name**	
· **ADR**	3105 ORGANIC PEROXIDE TYPE D, LIQUID (Cyclohexanone, peroxide)
· **IMDG, IATA**	ORGANIC PEROXIDE TYPE D, LIQUID (Cyclohexanone, peroxide)
· **14.3 Transport hazard class(es)**	**Hazchem:** 2WE
· **ADR, IMDG, IATA**	
· **Class**	5.2 Organic peroxides.
· **14.4 Packing group**	-
· **ADR, IMDG, IATA**	Void
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Warning: Organic peroxides.
· **EMS Number:**	F-J,S-R
· **Stowage Category**	D
· **Stowage Code**	SW1 Protected from sources of heat.
· **Segregation Code**	SG35 Stow "separated from" acids. SG36 Stow "separated from" alkalis. SG72 See 7.2.6.3.2.
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	125 ml
· **Excepted quantities (EQ)**	Code: E0 Not permitted as Excepted Quantity
· **Tunnel restriction code**	D
· **IMDG**	
· **Limited quantities (LQ)**	125 ml
· **Excepted quantities (EQ)**	Code: E0 Not permitted as Excepted Quantity

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SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.
· **Seveso category** P6b SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES

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· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **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.

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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.

· **Relevant phrases**
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H240 Heating may cause an explosion.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.

· **Classification according to Regulation (EC) No 1272/2008** **Classification procedure**

Flam. Liq.2, H225	Bridging principle "Substantially similar mixtures"
Org. Perox.,H242	On basis of test data
Skin. Corr.1,H314	Calculation method
STOT SE 3,H335	Calculation method
STOT SE 3,H336	Calculation method

· **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)
ICAO: International Civil Aviation Organisation
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
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
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
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Org. Perox. A: Organic peroxides – Type A
Org. Perox. D: Organic peroxides – Type C/D
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· *** Data compared to the previous version altered.**