



SAFETY DATA SHEET

according to Regulation (EU) No. 453/2010

S&P Cleaner

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

1.1. Product identifier

Product code None.

Synonyms None.

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

Use of the Substance/Preparation Epoxy resin cleaner

1.3. Details of the supplier of the safety data sheet

Company/Undertaking Identification S&P Clever Reinforcement Company AG
Seewernstrasse 127
CH-6423 Seewen
Switzerland

+41 41 825 00 70 [8-17h]
info@sp-reinforcement.ch

1.4. Emergency telephone number STIZ (Tox-Zentrum) CH-Zürich : 145 / +41 44 251 51 51 [24h/7]

Issuing date 01.06.2013

Version 3

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 (GHS/CLP)

Skin corrosion/irritation, Cat. 2, H315
 Serious eye damage/eye irritation, Cat. 2, H319
 Reproductive toxicity, Cat. 2 (d), H361
 Specific target organ toxicity (repeated exposure), Cat. 2, H373
 Aspiration hazard, Cat. 1, H304
 Specific target organ toxicity (single exposure, narcotic effects), Cat. 3, H336
 Flammable liquids, Cat. 2, H225

Classification according to EU Directives 67/548/EEC or 1999/45/EC

F; R11
 Repr. Cat. 3; R63
 Xn; R65
 R67
 Xi; R36/38
 Xn; R48/20

Additional information

For the full text of the phrases mentioned in this Section, see Section 16.

2.2. Label elements



**Signal Word
 Hazard Statements**

Danger
 H225: Highly flammable liquid and vapour.
 H304: May be fatal if swallowed and enters airways.
 H315: Causes skin irritation.
 H319: Causes serious eye irritation.
 H336: May cause drowsiness or dizziness.
 H361d: Suspected of damaging the unborn child.
 H373: May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P201: Obtain special instructions before use.
 P210b: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 P260: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
 P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
 P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P314: Get medical advice/ attention if you feel unwell.

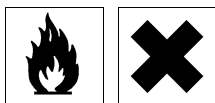
Additional advice

None.

GHS product identifier

Butanone, CAS-No. 78-93-3, EC-No. 201-159-0
 ethyl acetate, CAS-No. 141-78-6, EC-No. 205-500-4
 toluene, CAS-No. 108-88-3, EC-No. 203-625-9

Labelling according to Directives 67/548/EEC or 1999/45/EC



F - Highly flammable.
Xn - Harmful.

R-phrases(s)

R11: Highly flammable.
R63: Possible risk of harm to the unborn child.
R65: Harmful: may cause lung damage if swallowed.
R67: Vapours may cause drowsiness and dizziness.
R36/38: Irritating to eyes and skin.
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.

S-phrases(s)

S7/9: Keep container tightly closed and in a well-ventilated place.
S16: Keep away from sources of ignition - No smoking.
S24: Avoid contact with skin.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37: Wear suitable protective clothing and gloves.
S53: Avoid exposure - obtain special instructions before use.
S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Hazardous component(s) which must be listed on the label

Ethylmethylketon , CAS-No. 78-93-3, EC-No. 201-159-0
toluene, CAS-No. 108-88-3, EC-No. 203-625-9

2.3. Other hazards

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

3. Composition/information on ingredients

Chemical characterization

Solvent.

Components		CLP Classification	DSD/DPD Classification	Product identifier
Butanone	20% - 25%	Eye Irrit. 2 H319, STOT SE 3 H336, Flam. Liq. 2 H225, EUH066	F,Xi; R-11-36-66-67	CAS-No.: 78-93-3 EC-No.: 201-159-0 Index-No: 606-002-00-3
ethyl acetate	20% - 25%	Eye Irrit. 2 H319, STOT SE 3 H336, Flam. Liq. 2 H225, EUH066	F,Xi; R-11-36-66-67	CAS-No.: 141-78-6 EC-No.: 205-500-4 Index-No: 607-022-00-5
toluene	50% - 75%	Repr. 2 H361 (d), Asp. Tox. 1 H304, STOT RE 2 H373, Skin Irrit. 2 H315, STOT SE 3 H336, Flam. Liq. 2 H225	F,Xn; R-11-38-48/20-63-65-67	CAS-No.: 108-88-3 EC-No.: 203-625-9 Index-No: 601-021-00-3

For the full text of the phrases mentioned in this Section, see Section 16.

Hazardous impurities

None known.

4. First aid measures

4.1. Description of first aid measures

Inhalation	Move to fresh air. Consult a physician for severe cases.
Skin contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids. If easy to do, remove contact lens, if worn. Protect unharmed eye. Consult an ophthalmologist.
Ingestion	Rinse mouth. Do not induce vomiting without medical advice. If swallowed, seek medical advice immediately and show this container or label.

4.2. Most important symptoms and effects, both acute and delayed Risk of product entering the lungs on vomiting after ingestion. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

4.3. Indication of any immediate medical attention and special treatment needed None known.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use dry chemical, CO₂, water spray or alcohol foam.

Extinguishing media which must not be used for safety reasons High volume water jet.

5.2. Special hazards arising from the substance or mixture Burning produces irritant fumes. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Flash back possible over considerable distance. Highly flammable. Vapours are heavier than air and may spread along floors.

5.3. Advice for firefighters

Special protective equipment for firefighters Standard procedure for chemical fires. In case of fire and/or explosion do not breathe fumes. In the event of fire, wear self contained breathing apparatus.

Specific methods Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water mist may be used to cool closed containers.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel Keep people away from and upwind of spill/leak. Remove all sources of ignition. Use personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapours/dust. Vapours are heavier than air and may spread along floors.

Advice for emergency responders Ventilate the area. Use personal protective equipment. Do not breathe vapours/dust. Remove all sources of ignition. Pay attention to flashback. Vapours are heavier than air and may spread along floors.

6.2. Environmental precautions Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4. Reference to other sections See chapter 8 and 13.

7. Handling and storage

7.1. Precautions for safe handling Use only with adequate ventilation. Wear personal protective equipment. Ingestion, exposure to skin and eyes and inhalation of any generated vapours should be avoided. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Vapours are heavier than air and may spread along floors.

7.2. Conditions for safe storage, including any incompatibilities Keep out of reach of children. Store in a place accessible by authorized persons only. Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s) Use only in accordance with our recommendations.

8. Exposure controls/personal protection

8.1. Control parameters

Exposure limit(s) No data is available on the product itself.

Methyl ethyl ketone (CAS 78-93-3)

EU - Occupational Exposure (2000/39/EC) - First List of Indicative Occupational Exposure Limit Values - TWAs 200 ppm TWA
600 mg/m³ TWA

EU - Occupational Exposure (2000/39/EC) - First List of Indicative Occupational Exposure Limit Values - STELs 300 ppm STEL
900 mg/m³ STEL



United Kingdom - Workplace Exposure Limits (WELs) - STELs	300 ppm STEL
United Kingdom - Workplace Exposure Limits (WELs) - TWAs	899 mg/m ³ STEL
Ethyl acetate (CAS 141-78-6)	200 ppm TWA
United Kingdom - Workplace Exposure Limits (WELs) - STELs	600 mg/m ³ TWA
United Kingdom - Workplace Exposure Limits (WELs) - TWAs	400 ppm STEL
Toluene (CAS 108-88-3)	200 ppm TWA
EU - Occupational Exposure (2006/15/EC) - Second List of Indicative Occupational Exposure Limit Values - TWAs	50 ppm TWA
United Kingdom - Workplace Exposure Limits (WELs) - STELs	192 mg/m ³ TWA
United Kingdom - Workplace Exposure Limits (WELs) - TWAs	100 ppm STEL
United Kingdom - Workplace Exposure Limits (WELs) - STELs	384 mg/m ³ STEL
United Kingdom - Workplace Exposure Limits (WELs) - TWAs	50 ppm TWA
United Kingdom - Workplace Exposure Limits (WELs) - TWAs	191 mg/m ³ TWA

8.2. Exposure controls

Occupational exposure controls

General industrial hygiene practice. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.

Personal protection equipment

Respiratory protection

Breathing apparatus needed only when aerosol or mist is formed. In case of insufficient ventilation, wear suitable respiratory equipment. Respirator with combination filter for vapour/particulate. ABEK-P3-filter

Hand protection

Protective gloves complying with EN 374. Gloves made of VITON. Break through time: 4 h.

Eye protection

Safety glasses with side-shields conforming to EN 166. Eye wash bottle with pure water.

Skin and body protection

Long sleeved clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Thermal hazards

Keep product and empty container away from heat and sources of ignition.

Environmental exposure controls Prevent product from entering surface water or sewage.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid.
Colour	Colourless.
Odour	Solvent.
Odour Threshold	No information available.
pH:	not applicable
Melting point/range:	No information available.
Boiling point/range:	77 °C



Flash point:	< 23°C and boiling point > 35°C
Evaporation Rate:	No information available.
Flammability:	No information available.
Explosion limits:	1.2 - 11.5 Vol %
Vapour pressure:	No information available.
Vapor density:	No information available.
Relative density:	0.87
Water solubility:	completely soluble
Partition coefficient (n-octanol/water):	No information available.
Autoignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	No information available.
Combustion/explosion hazards:	Combustible liquid n.o.s.
Oxidizing properties:	None

9.2. Other information

General Product Characteristics No information available.

10. Stability and reactivity

10.1. Reactivity	Risk of ignition. May form explosive mixtures in air.
10.2. Chemical stability	Stable under recommended storage conditions. Risk of receptacle bursting.
10.3. Possibility of hazardous reactions	Vapours may form explosive mixture with air.
10.4. Conditions to avoid	Heat, flames and sparks. Burning produces obnoxious and toxic fumes. Take precautionary measures against static discharges.
10.5. Incompatible materials	Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.
10.6. Hazardous decomposition products	None under normal use.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity	<p>Methyl ethyl ketone (CAS 78-93-3) Inhalation LC50 Rat = 23500 mg/m³ 8 h (NLM_CIP)</p> <p>Ethyl acetate (CAS 141-78-6) Dermal LD50 Rabbit > 20 mL/kg (NLM_CIP) Oral LD50 Rat = 5620 mg/kg (IUCLID)</p> <p>Toluene (CAS 108-88-3) Dermal LD50 Rabbit = 8390 mg/kg (IUCLID) Inhalation LC50 Rat = 12.5 mg/L 4 h (IUCLID) Inhalation LC50 Rat > 26700 ppm 1 h (IUCLID) Oral LD50 Rat = 636 mg/kg (IUCLID)</p>
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Severe eye irritation.
Respiratory / Skin Sensitisation	None.
Carcinogenicity	Carcinogenicity classification not possible from current data.
Germ cell mutagenicity	Classification not possible from current data.
Reproductive toxicity	Suspected of damaging the unborn child. Classification not possible from current data.
Specific target organ toxicity (single exposure)	Vapours may cause drowsiness and dizziness.
Specific target organ toxicity (repeated exposure)	May cause damage to organs (Lungs.) through prolonged or repeated exposure.
Aspiration hazard	Aspiration hazard if swallowed - can enter lungs and cause damage.
Human experience	No data is available on the product itself.
Information on likely routes of exposure	Aspiration hazard
Symptoms related to the physical, chemical and toxicological characteristics	Drowsiness

12. Ecological information

12.1. Toxicity No data is available on the product itself.

Methyl ethyl ketone (CAS 78-93-3)

Ecotoxicity - Freshwater Fish - Acute Toxicity Data	96 h LC50 Pimephales promelas: 3130 - 3320 mg/L [flow-through]
Ecotoxicity - Water Flea - Acute Toxicity Data	48 h EC50 Daphnia magna: >520 mg/L
	48 h EC50 Daphnia magna: 5091 mg/L
	48 h EC50 Daphnia magna: 4025 - 6440 mg/L [Static]



Ethyl acetate (CAS 141-78-6)

Ecotoxicity - Freshwater Fish - Acute Toxicity Data

96 h LC50 Pimephales promelas: 220 - 250 mg/L [flow-through]

96 h LC50 Oncorhynchus mykiss: 484 mg/L [flow-through]

96 h LC50 Oncorhynchus mykiss: 352 - 500 mg/L [semi-static]

48 h EC50 Daphnia magna: 560 mg/L [Static]

Ecotoxicity - Water Flea - Acute Toxicity Data

Ecotoxicity - Freshwater Algae - Acute Toxicity Data

48 h EC50 Desmodesmus subspicatus: 3300 mg/L

Toluene (CAS 108-88-3)

Ecotoxicity - Water Flea - Acute Toxicity Data

48 h EC50 Daphnia magna: 5.46 - 9.83 mg/L [Static]

48 h EC50 Daphnia magna: 11.5 mg/L

12.2. Persistence and degradability

No data is available on the product itself.

12.3. Bioaccumulative potential

No data is available on the product itself.

12.4. Mobility in soil

No data is available on the product itself.

12.5. Results of PBT and vPvB assessment

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

12.6. Other adverse effects

water contaminating (WGK-D : 2 – self estimation).

13. Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products

Do not empty into drains or dispose with household waste. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. European Waste catalogue code (EWC-code): 14 06 03.

Contaminated packaging

Dispose of as unused product. Empty containers should be taken for local recycling, recovery or waste disposal.

14. Transport information

ADR/RID

Proper shipping name FLAMMABLE LIQUID, N.O.S., MIXTURE (toluene)

UN No 1993.

Class 3.

Packing group II.

ADR/RID-Labels 3.

Classification code F1.

Risk No. 33.

Limited quantity 1 L.

Tunnel code D/E

IMO

Proper shipping name Flammable liquid, n.o.s., Mixture (toluene)

UN No 1993.

Class 3.

Packing group II.

ADR/RID-Labels 3.

Limited quantity 1 L.

EmS F-E, S-E.

Marine Pollutant no



ICAO	Proper shipping name Flammable liquid, n.o.s., Mixture (toluene) UN No 1993. Class 3. Packing group II. Packing instruction (passenger aircraft): 353 (5 L). Packing instruction (LQ): Y341 (1 L). Packing instruction (cargo aircraft): 364 (60 L).
Inland navigation ADN	Proper shipping name FLAMMABLE LIQUID, N.O.S., Mixture (toluene) UN No 1993. Class 3. Packing group II. ADN danger 3+CMR.
Further Information	None.

15. Regulatory information

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

Regulatory Information	The product is classified and labelled according to Regulation (EC) No. 1272/2008 (GHS/CLP). Take note of Dir 92/85/EEC on the safety and health at work of pregnant workers. Take note of Dir 94/33/EC on the protection of young people at work.
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Methyl ethyl ketone (CAS 78-93-3)

EU - Narcotics (273/2004) - Drug Precursors - Annex I - Scheduled Substances Category 3 Substance

EU - REACH (1907/2006) - List of Registered Substances Present

Ethyl acetate (CAS 141-78-6)

EU - REACH (1907/2006) - List of Registered Substances Present

Toluene (CAS 108-88-3)

EU - Narcotics (273/2004) - Drug Precursors - Annex I - Scheduled Substances Category 3 Substance

EU - Narcotics (1277/2005) - Implementing Export Requirements - Scheduled Substances Category 3 Substance

15.2. Chemical safety assessment	A Chemical Safety Assessment is not required.
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16. Other information

Revision Note	General update.
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Key or legend to abbreviations and acronyms

CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS/CLP)

DSD/DPD: Classification according to EU Directives 67/548/EEC or 1999/45/EC

MAK: Maximale Arbeitsplatzkonzentration.

STEL: Short Term Exposure Limit

TWA: time weighted average

VOC: Volatile organic compounds (VOC) content

Key literature references and sources for data

Information taken from reference works and the literature.

Classification procedure

Calculation method.

Full text of phrases referred to under sections 2 and 3

EUH066: Repeated exposure may cause skin dryness or cracking.

H225: Highly flammable liquid and vapour.

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

H361: Suspected of damaging fertility or the unborn child.

H361d: Suspected of damaging the unborn child.

H373: May cause damage to organs through prolonged or repeated exposure.

R11: Highly flammable.

R36/38: Irritating to eyes and skin.

R36: Irritating to eyes.

R38: Irritating to skin.

R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R63: Possible risk of harm to the unborn child.

R65: Harmful: may cause lung damage if swallowed.

R66: Repeated exposure may cause skin dryness or cracking.

R67: Vapours may cause drowsiness and dizziness.

Training advice

For further information, refer to the product technical data sheet.

Further information

Take notice of the directions of use on the label.

Instructions for use

See product description. Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use. Keep away from children.

Disclaimer

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. It is not to be considered a warranty or quality specification.