

SD TOPCLEAR 1533 - 1895



SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : SD TOPCLEAR 1533
Product code : 1895.

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

Hardener

1.3. Details of the supplier of the safety data sheet

Registered company name : Suter Kunststoffe AG
Address : Aefligenstrasse 3, 3312 Fraubrunnen
Telephone : +41 (0)31 763 60 60 Fax : +41 (0)31 763 60 61
e-mail: info@swiss-composite.ch
Site web : http://www.swiss-composite.ch

1.4. Emergency telephone number : .

Emergency number: 145 (from abroad: +41 44 251 51 51)

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Acute inhalation toxicity, Category 4 (Acute Tox. 4, H332).
Skin sensitisation, Category 1 (Skin Sens. 1, H317).
Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H335).
This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.
This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS07

Signal Word :

WARNING

Product identifiers :

CAS 28182-81-2 POLYISOCYANATE ALIPHATIQUE
EC 212-485-8 HEXAMETHYLENE-DI-ISOCYANATE

Additional labeling :

EUH204 Contains isocyanates. May produce an allergic reaction.

Hazard statements :

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

Precautionary statements - Prevention :

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

SD TOPCLEAR 1533 - 1895

P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statements - Response :	
P302 + P352	IF ON SKIN: Wash with plenty of water/...
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P362 + P364	Take off contaminated clothing and wash it before reuse.
Precautionary statements - Storage :	
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	(EC) 1272/2008	Note	%
CAS: 28182-81-2 REACH: 01-2119485796-17 POLYISOCYANATE ALIPHATIQUE	GHS07 Wng Skin Sens. 1, H317 Acute Tox. 4, H332 STOT SE 3, H335		50 \leq x % < 100
CAS: 822-06-0 EC: 212-485-8 REACH: 01-2119457571-37-XXXX HEXAMETHYLENE-DI-ISOCYANATE	GHS06, GHS08 Dgr Acute Tox. 4, H302 Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Acute Tox. 1, H330 Resp. Sens. 1, H334 STOT SE 3, H335	[1]	0 \leq x % < 1

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation :

In the event of massive inhalation of dust, remove the person exposed to fresh air. Keep warm and at rest.
If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.
Do not proceed with mouth-to-mouth or mouth-to-nose resuscitation. Use the appropriate equipment.
Consult a doctor.

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.
If there is any redness, pain or visual impairment, consult an ophthalmologist.
Flush with large amounts of water. Remove contact lenses if the victim is. Continue to rinse. Seek medical attention if symptoms persist.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.
Watch out for any remaining product between skin and clothing, watches, shoes, etc.

SD TOPCLEAR 1533 - 1895

In the event of an allergic reaction, seek medical attention.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Seek medical attention immediately, showing the label.

Do not induce vomiting.

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

No data available.

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

Information for the doctor :

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to remain under medical supervision for 48 hours.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- powder
- carbon dioxide (CO₂)
- foam

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

5.3. Advice for firefighters

Firefighters should wear suitable protective clothing and a respirator mask with self- full operated in positive pressure mode.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

Avoid inhaling dust.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Prevent any material from entering drains or waterways.

SD TOPCLEAR 1533 - 1895

6.3. Methods and material for containment and cleaning up

Contaminated areas must be cleaned very quickly.

A possible decontaminant for flammable products may be : (expressed by volume) water (45 parts), ethanol or isopropanol (50 parts), concentrated ammonia (d-0.880) (5 parts). For non-flammable products: sodium carbonate (5 parts), water (95 parts).

This residue must be stored for disposal in compliance with current regulations (see section 13).

Retrieve the product by mechanical means (sweeping/vacuuming).

Use a non-combustible material (sand, earth, vermiculite, diatomite, etc. ..)

Clean contaminated surfaces with suitable solvents immediately.

Use (flammable): 45 vol% water, ethanol or isopropanol 50 vol% ammonia solution (density = 0.88) 5 vol%...

Alternative (non-flammable): Soda 5 vol%, 95 vol% water..

Absorb spilled residuals with the same product and leave in a non-closed until there is no more reaction tank. then closing the reservoir.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Keep away from sources of ignition and heat.

The product may charge electrostatically. Provide earthing of containers, apparatus, pumps and suction devices. soils must be able conduire l'électricité. Warning, danger when opening used containers (overpressure).

Security measures should be taken to decrease the intensity due to atmospheric humidity or water: CO₂ is formed, which can cause pressure in closed containers.

Fire prevention :

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

The vapors are heavier than air and will spread at floor level. Vapour forms with air explosive mixtures.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

Store between 5 ° C. and 25 ° C. in a dry, well ventilated place.

Storage

Keep the container tightly closed in a dry, well-ventilated place.

Store in original container protected from direct sunlight in a dry, cool and well ventilated area away from heat sources.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

Hardener

SD TOPCLEAR 1533 - 1895

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
822-06-0	0.005 ppm	-	-	-	-

- Germany - AGW (BAuA - TRGS 900, 21/06/2010) :

CAS	VME :	VME :	Excess	Notes
822-06-0	0,005 ml/m3	0,035 mg/m3	1;=2=(I)	DFG, 12

- France (INRS - ED984 :2008) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
822-06-0	0.01	0.075	0.02	0.15	AR	62

- UK / WEL (Workplace exposure limits, EH40/2005, 2007) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
822-06-0	0.02 mg/m3	0.07 mg/m3	-	-	-

8.2. Exposure controls

Use only with adequate ventilation or provided with ventilation at the source.

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

Thickness > 0.4mm - latency > 480 min

Recommended properties :

- Impervious gloves in accordance with standard EN374

- Antistatic gloves in accordance with standard EN1149

- Body protection

Avoid skin contact.

Wear protective clothing against solid chemicals and particles suspended in the air (type 5) in accordance with standard EN13982-1 to prevent skin contact.

Wear antistatic clothing made from heat resistant natural or synthetic fibres in accordance with standard EN1149.

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

SD TOPCLEAR 1533 - 1895

Work clothing worn by personnel shall be laundered regularly.
After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid breathing dust.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

A2-P2

Attention! If the protection group is insufficient.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state : Solid.
Color: colorless

Important health, safety and environmental information

pH : Not relevant.
Boiling point/boiling range : Not relevant.
Flash point interval : Not relevant.
Vapour pressure (50°C) : Not relevant.
Density : 1.15 g/cm³ @ 20°C
Water solubility : Insoluble.
Melting point/melting range : Not relevant.
Self-ignition temperature : Not relevant.
Decomposition point/decomposition range : Not relevant.

9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

Keep away from oxidising agents and strongly acidic or basic materials to avoid exothermic reactions.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

The mixture can also release hydrogen cyanide, amines and alcohols.

Exothermic reactions: strong acids, strong bases and strong oxidizing agents.

10.4. Conditions to avoid

Avoid :

- formation of dusts

Dusts can form an explosive mixture with air.

10.5. Incompatible materials

Keep away from :

- acids

- alkalis

- oxidising agents

- alcohols

- water

SD TOPCLEAR 1533 - 1895

- amines

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO₂)
- nitrogen oxide (NO)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Harmful by inhalation.

Respiratory tract irritation may occur, together with symptoms such as coughing, choking and breathing difficulties.

May cause an allergic reaction by skin contact.

Based on isocyanate properties and considering the toxicological data of similar mixtures, this preparation may cause irritations and/or sensitisations of the respiratory system.

It may therefore bring about asthma, respiratory difficulties and angina pectoris.

Those susceptible may display asthmatic symptoms when exposed to atmospheres with an isocyanate concentration well below those of the VLE : exposure limits.

Repeated exposure may cause permanent respiratory problems.

11.1.1. Substances

No toxicological data available for the substances.

11.1.2. Mixture

Respiratory or skin sensitisation :

Contains isocyanates. May cause an allergic reaction.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This material does not meet the criteria for PBT or vPvB.

12.6. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK) :

WGK 2 (VwVwS vom 27/07/2005, KBws) : Hazardous for water.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

SD TOPCLEAR 1533 - 1895

Soiled packaging :

Empty container completely. Keep label(s) on container.
Give to a certified disposal contractor.

Codes of wastes (Decision 2001/573/EC, Directive 2006/12/EEC, Directive 94/31/EEC on hazardous waste) :

08 01 11 * waste paint and varnish containing organic solvents or other dangerous substances

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2015 - IMDG 2014 - ICAO/IATA 2015).

SECTION 15 : REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 1297/2014.

- Container information:

No data available.

- Particular provisions :

No data available.

- German regulations concerning the classification of hazards for water (WGK) :

WGK 2 (VwVwS vom 27/07/2005, KBws) : Hazardous for water.

- Standardised American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704) :

NFPA 704, Labelling: Health=2 Inflammability=1 Instability/Reactivity=1 Specific Risk=none



15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

- | | |
|------|--------------------------------------|
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |

SD TOPCLEAR 1533 - 1895

H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.

Abbreviations :

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefährdungsklasse (Water Hazard Class).

GHS07 : Exclamation mark

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.