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 : ISOTACKER
Product code : 1651.
RESIN

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

Recommended use : resin
Uses advised against : data not available

1.3. Details of the supplier of the safety data sheet

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

1.4. Emergency telephone number : .

Association/Organisation : ToxInfo Suisse, Tel. 145, International +41 (0)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.

Aerosol, Category 1 (Aerosol 1, H222 - H229).
Skin irritation, Category 2 (Skin Irrit. 2, H315).
Eye irritation, Category 2 (Eye Irrit. 2, H319).
Skin sensitisation, Category 1 (Skin Sens. 1, H317).
Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H336).
Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).

2.2. Label elements

Mixture for aerosol application.

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

Hazard pictograms :

GHS02 GHS07

Signal Word :
DANGER
Product identifiers :

EC 201-159-0	BUTANONE
EC 500-006-8	FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PHENOL
EC 216-823-5	2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE

Additional labeling :

EUH205	Contains epoxy constituents. May produce an allergic reaction.

Hazard statements :

H222	Extremely flammable aerosol.

H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements - Prevention :

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - Response :

P302 + P352	IF ON SKIN: Wash with plenty of water/...
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Precautionary statements - Storage :

P410 + P412	Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table
The mixture fulfils 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: 78-93-3 EC: 201-159-0 REACH: 01-2119457290-43-XXXX BUTANONE	GHS07, GHS02 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH:066	[1]	50 <= x % < 100
INDEX: 603-019-00-8 CAS: 115-10-6 EC: 204-065-8 DIMETHYL ETHER	GHS02, GHS04 Dgr Flam. Gas 1, H220	[1] [7]	25 <= x % < 50
CAS: 9003-36-5 EC: 500-006-8 REACH: 01-2119454392-40-XXXX FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PHENOL	GHS07, GHS09 Wng Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411		10 <= x % < 25
CAS: 1675-54-3 EC: 216-823-5 REACH: 01-2119456619-26-XXXX 2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE	GHS07, GHS09 Wng Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic Chronic 2, H411		2.5 <= x % < 10

(Full text of H-phrases: see section 16)

Information on ingredients :

[7] Propellant gas
[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, 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.
Consult doctor in case of inhalation of spray mist and show the container or the label.

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.
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.

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.
Contact a specialist for treatment poisoning if large quantities have been ingested or inhaled.

SECTION 5 : FIREFIGHTING MEASURES

Flammable.
Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

Suitable methods of extinction

In the event of a fire, use :
- sprayed water or water mist
- water with AFFF (Aqueous Film Forming Foam) additive
- halon
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO_2)

Prevent the effluent of fire-fighting measures from entering drains or waterways.

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 (CO_2)
- nitrogen oxide (NO)

5.3. Advice for firefighters

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

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 inhaling the vapors.
Avoid any contact with the skin and eyes.
If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.
Because of the organic solvents in the mixture, eliminate sources of ignition and ventilate the area.

For first aid worker

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

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.
Prevent any material from entering drains or waterways.
If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures
Use drums to dispose of collected waste in compliance with current regulations (see section 13).

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

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.
Remove contaminated clothing and protective equipment before entering eating areas.
Local and ventilated workstations, observe the rules of personal hygiene to avoid contact with skin and eyes, wash hands before breaks and work stoppage.
Do not breathe vapors.
Spray with short strokes, not prolonged spraying.
Avoid contact with skin and eyes.

Fire prevention :

Handle in well-ventilated areas.
Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.
Do not spray on a naked flame or any incandescent material.
Do not pierce or burn, even after use.
Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.
Keep packages tightly closed and away from sources of heat, sparks and naked flames.
Do not use tools which may produce sparks. Do not smoke.
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.
Do not breathe in aerosols.
Avoid inhaling vapors.
Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.
Provide vapor extraction at the emission source and also general ventilation of the premises.
Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.
In all cases, recover emissions at source.
Avoid skin and eye contact with this mixture.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.
Never open the packages under pressure.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep the container tightly closed in a dry, well-ventilated place.
Keep away from all sources of ignition - do not smoke.
Keep well away from all sources of ignition, heat and direct sunlight.
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C.
Keep out of the reach of children.
The floor must be impermeable and form a dike to prevent the liquid from spilling.

Packaging

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

7.3. Specific end use(s)

Use : adhesives

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- European Union (2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :
78-93-3	600	200	900	300	-
115-10-6	1920	1000	-	-	-

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

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm	300 ppm		BEI	

- Germany - AGW (BAuA - TRGS 900, 29/01/2018) :

CAS	VME :	VME :	Excess	Notes
78-93-3		200 ppm 600 mg/m³		1(I)
115-10-6		1000 ppm 1900 mg/m³		8(II)

- France (INRS - ED984 :2016) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
78-93-3	200	600	300	900	*	84
115-10-6	1000	1920	-	-	-	-

- UK / WEL (Workplace exposure limits, EH40/2005, 2011) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-93-3	200 ppm 600 mg/m³	300 ppm 899 mg/m³		Sk, BMGV	
115-10-6	400 ppm 766 mg/m³	500 ppm 958 mg/m³			

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

Final use: **Workers.**

Exposure method: Dermal contact.
Potential health effects: Short term systemic effects.
DNEL : 8.3 mg/kg de poids corporel/jour

Exposure method: Dermal contact.
Potential health effects: Long term systemic effects.
DNEL : 8.3 mg/kg de poids corporel/jour

Exposure method: Inhalation.
Potential health effects: Short term systemic effects.
DNEL : 12.3 mg de substance/m3

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL : 12.3 mg de substance/m3

Final use: **Man exposed via the environment.**

Exposure method: Ingestion.
Potential health effects: Short term systemic effects.
DNEL : 0.75 mg/kg de poids corporel/jour

Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	0.75 mg/kg de poids corporel/jour
Exposure method:	Dermal contact.
Potential health effects:	Short term systemic effects.
DNEL :	3.6 mg/kg de poids corporel/jour
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	3.6 mg/kg de poids corporel/jour
Exposure method:	Inhalation.
Potential health effects:	Short term systemic effects.
DNEL :	0.75 mg de substance/m3
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	0.75 mg de substance/m3

FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PHENOL (CAS: 9003-36-5)

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Short term local effects.
DNEL :	8.3 µg de substance/cm2
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	104.15 mg/kg de poids corporel/jour
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	29.39 mg de substance/m3
Final use:	**Man exposed via the environment.**
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	6.25 mg/kg de poids corporel/jour
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	62.5 mg/kg de poids corporel/jour
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	8.7 mg de substance/m3

BUTANONE (CAS: 78-93-3)

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	1161 mg/kg de poids corporel/jour
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	600 mg de substance/m3
Final use:	**Consumers.**
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	31 mg/kg de poids corporel/jour
Exposure method:	Dermal contact.

Potential health effects:	Long term systemic effects.
DNEL :	412 mg/kg de poids corporel/jour
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	106 mg de substance/m3

Predicted no effect concentration (PNEC):

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

Environmental compartment:	Soil.
PNEC :	0.05 mg/kg
Environmental compartment:	Fresh water.
PNEC :	3 µg/l
Environmental compartment:	Sea water.
PNEC :	0.3 µg/l
Environmental compartment:	Intermittent waste water.
PNEC :	0.013 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	0.5 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	0.5 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	10 mg/l

FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PHENOL (CAS: 9003-36-5)

Environmental compartment:	Soil.
PNEC :	0.237 mg/kg
Environmental compartment:	Fresh water.
PNEC :	0.003 mg/l
Environmental compartment:	Sea water.
PNEC :	0.0003 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	0.0254 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	0.294 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	0.0294 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	10 mg/l

BUTANONE (CAS: 78-93-3)

Environmental compartment:	Soil.
PNEC :	22.5 mg/kg
Environmental compartment:	Fresh water.
PNEC :	55.8 mg/l
Environmental compartment:	Sea water.
PNEC :	55.8 mg/l
Environmental compartment:	Intermittent waste water.

PNEC :	55.8 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	284.7 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	709 mg/l

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.
Use eye protectors designed to protect against liquid splashes
Before handling, wear safety goggles with protective sides accordance with standard EN166.
In the event of high danger, protect the face with a face shield.
Prescription glasses are not considered as protection.
Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.
Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

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 :
- PVA (Polyvinyl alcohol)
- Butyl Rubber (Isobutylene-isoprene copolymer)
Recommended properties :
- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.
Wear suitable protective clothing.
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.
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 vapours.
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.
Type of FFP mask :
Wear a disposable half-mask aerosol filter in accordance with standard EN149.
Category :
- FFP1
Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :
- A1 (Brown)
Particle filter according to standard EN143 :
- P1 (White)

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state :	Fluid liquid.
	Spray.

Important health, safety and environmental information

pH :	Not relevant.
Boiling point/boiling range :	Not relevant.
Vapour pressure (50°C) :	Below 110 kPa (1.10 bar).
Density :	< 1
Water solubility :	Insoluble.
Melting point/melting range :	Not relevant.
Self-ignition temperature :	Not relevant.
Decomposition point/decomposition range :	Not relevant.
Chemical combustion heat :	>= 30 kJ/g.

9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Exposed to high temperatures, the mixture can release dangerous decomposition products such as carbon monoxide, carbon dioxide, smoke and nitrogen oxide.

10.4. Conditions to avoid

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid :

- heating
- heat

10.5. Incompatible materials

Keep away from :

- oxidising agents

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

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

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

Narcotic effects may occur, such as drowsiness, narcosis, decreased alertness, loss of reflexes, lack of coordination or dizziness.

Effects may also occur in the form of violent headaches or nausea, judgement disorder, giddiness, irritability, fatigue or memory disturbance.

May cause an allergic reaction by skin contact.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar preparations, this preparation may be a skin sensitiser and a respiratory tract sensitiser as well as an irritant.

Constituents with a low molecular weight irritate the eyes, mucous membranes and the skin

Repeated contact with the skin may cause irritation and hypersensitisation, possibly in combination with other epoxide compounds.

11.1.1. Substances

Acute toxicity :

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

Oral route : LD50 = 11400 mg/kg
Species : Rat

Dermal route : LD50 = 2000 mg/kg
Species : Rat

FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PHENOL (CAS: 9003-36-5)
Oral route : LD50 > 2000 mg/kg
Species : Rat

Dermal route : LD50 > 2000 mg/kg
Species : Rabbit

BUTANONE (CAS: 78-93-3)
Oral route : LD50 = 3460 mg/kg
Species : Rat
OCDE Ligne directrice 423 (Toxicité aiguë par voie orale - Méthode de la classe de toxicité aiguë)

Dermal route : LD50 = 5000 mg/kg
Species : Rabbit
OCDE Ligne directrice 402 (Toxicité aiguë par voie cutanée)

Inhalation route (Gas) : LC50 = 7500 ppm

Skin corrosion/skin irritation :

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)
Species : Rabbit
OCDE Ligne directrice 404 (Effet irritant/corrosif aigu sur la peau.)

FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PHENOL (CAS: 9003-36-5)
Species : Rabbit
OCDE Ligne directrice 404 (Effet irritant/corrosif aigu sur la peau.)

Serious damage to eyes/eye irritation :

FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PHENOL (CAS: 9003-36-5)
Conjunctival redness : Average score = 0
Species : Rabbit

Conjunctival oedema : Average score = 0
Species : Rabbit
OCDE Ligne directrice 405 (Effet irritant/corrosif aigu sur les yeux)

Respiratory or skin sensitisation :

BUTANONE (CAS: 78-93-3)
Guinea Pig Maximisation Test (GMPT) : Non-sensitiser.
Species : Guinea pig

Buehler Test : Non-sensitiser.
Species : Guinea pig
OCDE Ligne directrice 406 (Sensibilisation de la peau)

Germ cell mutagenicity :

BUTANONE (CAS: 78-93-3)
Mutagenesis (in vitro) : Negative.
Species : Bacteria

Specific target organ systemic toxicity - repeated exposure :

BUTANONE (CAS: 78-93-3)
Inhalation route : C = 5014 ppmV/6h/jour
Species : Rat
Duration of exposure : 90 jours

11.1.2. Mixture

Respiratory or skin sensitisation :

Contains epoxy compounds. May cause an allergic reaction.

Monograph(s) from the IARC (International Agency for Research on Cancer) :

CAS 1675-54-3 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

SECTION 12 : ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.1. Substances

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

Fish toxicity :	LC50 = 1.3 mg/l Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 2.1 mg/l Species : Daphnia sp. Duration of exposure : 48 h OCDE Ligne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)
Algae toxicity :	ECr50 > 11 mg/l Duration of exposure : 72 h

FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PHENOL (CAS: 9003-36-5)

Fish toxicity :	LC50 = 2.54 mg/l Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 2.55 mg/l Species : Daphnia sp. Duration of exposure : 48 h OCDE Ligne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)
Algae toxicity :	ECr50 > 1000 mg/l Species : Selenastrum capricornutum Duration of exposure : 72 h OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

BUTANONE (CAS: 78-93-3)

Fish toxicity :	LC50 = 2993 mg/l Species : Pimephales promelas Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 308 mg/l Species : Daphnia magna Duration of exposure : 48 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

Biodegradability :	no degradability data is available, the substance is considered as not degrading quickly.

FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PHENOL (CAS: 9003-36-5)

Biodegradability :	Non-rapidly degradable.

BUTANONE (CAS: 78-93-3)

Biodegradability :	Rapidly degradable.

12.3. Bioaccumulative potential

12.3.1. Substances

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

Octanol/water partition coefficient : log Koe = 4

FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PHENOL (CAS: 9003-36-5)
Octanol/water partition coefficient : log Koe = 3.3

Bioaccumulation : BCF = 150

BUTANONE (CAS: 78-93-3)
Octanol/water partition coefficient : log Koe = 0.3

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws) :

WGK 2 : 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.

Soiled packaging :

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

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2017 - IMDG 2016 - ICAO/IATA 2017).

14.1. UN number

1950

14.2. UN proper shipping name

UN1950=AEROSOLS, flammable

14.3. Transport hazard class(es)

- Classification :

2.1

14.4. Packing group

-

14.5. Environmental hazards

-

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	2	5F	-	2.1	-	1 L	190 327 344 625	E0	2	D

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ
	2	See SP63	-	See SP277	F-D,S-U	63 190	E0

						277 327 344 381 959			
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	2.1	-	-	Forbidden	Forbidden	203	150 kg	A1 A145 A167 A802	E0
	2.1	-	-	Forbidden	Forbidden	-	-	A1 A145 A167 A802	E0

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.
For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

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

No data available.

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:
- Directive 75/324/CEE modified by directive 2013/10/UE
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2018/669 (ATP 11)

- Container information:

No data available.

- Particular provisions :

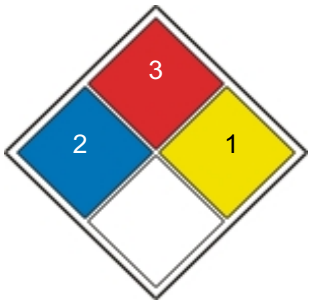
No data available.

- German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws) :

WGK 2 : 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=3 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 :

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Abbreviations :

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration
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 : Wassergefahrdungsklasse (Water Hazard Class).
GHS02 : Flame
GHS07 : Exclamation mark
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
SVHC : Substances of very high concern.