



Safety Data Sheet

in accordance with Regulation (EC) No 1907/2006

Hardener C

Revision date: 11.03.2024

Product code: 120310

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

1.1. Product identifier

Hardener C

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

Use of the substance/mixture

epoxy resin hardener

1.3. Details of the supplier of the safety data sheet

Company name:	Suter Kunststoffe AG	Telefax: +41 (0)31 763 60 61
Street:	Aefligenstrasse 3	
Place:	CH-3312 Fraubrunnen	
Telephone:	+41 (0)31 763 60 60	
e-mail:	info@swiss-composite.ch	
Internet:	www.swiss-composite.ch	
Responsible Department:	Sales Team	

1.4. Emergency telephone number:

Tox Info Suisse 145
from abroad +41 44 251 51 51

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Acute Tox. 4; H302
Skin Corr. 1B; H314
Eye Dam. 1; H318
Skin Sens. 1; H317
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

3-aminomethyl-3,5,5-trimethylcyclohexylamine
Phenol, methylstyrolisiert
benzyl alcohol

Signal word: Danger

Pictograms:



Hazard statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

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Precautionary statements

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P310 Immediately call a POISON CENTER/doctor.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.

Additional advice on labelling

The product is classified and labelled under the EC Directives/hazardous substances laws (GefStoffV).

2.3. Other hazards

Endocrine disrupting properties: Salicylsäure.
No information available.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

Chemical characterization
epoxy resin hardener

Hazardous components

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
100-51-6	benzyl alcohol			25 - 50 %
	202-859-9	603-057-00-5	01-2119492630-38	
	Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H332 H302 H319			
2855-13-2	3-aminomethyl-3,5,5-trimethyl-cyclohexylamine			25 - 50 %
	220-666-8	612-067-00-9	01-2119514687-32	
	Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1A; H302 H314 H318 H317			
	Reaction products of the oligomerization andalkylation of 2-phenylpropene and phenol			2,5 - 10%
	700-960-7		01-2119555274-38	
	Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 3; H315 H317 H412			
69-72-7	Salicylsäure			< 2,5 %
	200-712-3			
	Acute Tox. 4, Eye Dam. 1; H302 H318			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
100-51-6	202-859-9	benzyl alcohol	25 - 50 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: LC50 = > 4,178 mg/l (dusts or mists); dermal: LD50 = 2000 mg/kg; oral: LD50 = 1620 mg/kg		
2855-13-2	220-666-8	3-aminomethyl-3,5,5-trimethyl-cyclohexylamine	25 - 50 %
	dermal: LD50 = 1840 mg/kg; oral: ATE 1030 mg/kg Skin Sens. 1A; H317: >= 0,001 - 100		
	700-960-7	Reaction products of the oligomerization andalkylation of 2-phenylpropene and phenol	2,5 - 10%
	dermal: LD50 = >2000 mg/kg; oral: LD50 = >2000 mg/kg		
69-72-7	200-712-3	Salicylsäure	< 2,5 %
	dermal: LD50 = >2000 mg/kg; oral: LD50 = 891 mg/kg		



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Further Information

The wording of the listed risk phrases refer to section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated clothing immediately. Symptoms of poisoning may develop several hours following exposure. Victim should be under medical observation for at least 48 hours after exposure.

After inhalation

Remove casualty to fresh air and keep warm and at rest.
Consult physician if problems persist.
If unconscious, storage and transport in stable lateral position.

After contact with skin

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.
In case of skin irritation, seek medical treatment.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink plenty of water. Provide fresh air.
Immediately call a POISON CENTER/doctor/..?.

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂).
Extinguishing powder.
Water spray.
alcohol resistant foam

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Gases/vapours, toxic

5.3. Advice for firefighters

[In case of inadequate ventilation] wear respiratory protection.

Additional information

Contaminated fire-fighting water must be collected separately. Prevent contamination of soil and water.
Prevent from spreading or entering into drains. Dispose according to legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Wear personal protection equipment.



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6.2. Environmental precautions

Disposal: see section 13 Do not allow to enter into surface water or drains.
Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).
Disposal: see section 13
Provide adequate ventilation.

6.4. Reference to other sections

Clear contaminated areas thoroughly.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Advices on safe handling, Observe instructions for use.
If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

Advice on protection against fire and explosion

No special measures are necessary.

Advice on general occupational hygiene

Keep away from food, drink and animal feeding stuffs.
Take off immediately all contaminated clothing.
Wash hands before breaks and after work.
Avoid contact with eyes and skin.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in the original container.

Hints on joint storage

Keep away from food, drink and animal feeding stuffs.

Further information on storage conditions

Keep container tightly closed.

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
100-51-6	benzyl alcohol			
Worker DNEL, long-term		dermal		9,5 mg/kg bw/day
Worker DNEL, long-term		inhalation		22 mg/m ³
Consumer DNEL, acute		oral	systemic	20 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	4 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	40 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	20 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	8 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	4 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	27 mg/m ³
Consumer DNEL,		inhalation	systemic	5,4 mg/m ³
2855-13-2	3-aminomethyl-3,5,5-trimethyl-cyclohexylamine			
Worker DNEL, long-term		inhalation	local	0,073 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,526 mg/kg bw/day
	Reaction products of the oligomerization and alkylation of 2-phenylpropene and phenol			
Consumer DNEL, long-term		oral	systemic	0,2 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	3,5 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	1,7 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	1,4 mg/m ³
Consumer DNEL, long-term		inhalation	systemic	0,35 mg/m ³
69-72-7	Salicylsäure			
Worker DNEL, long-term		dermal	systemic	2,3 mg/kg bw/day
Worker DNEL, long-term		inhalation	local	5 mg/m ³

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PNEC values

CAS No	Substance	Value
Environmental compartment		
100-51-6	benzyl alcohol	
Freshwater		
Marine water		
Freshwater sediment		
Marine sediment		
2855-13-2	3-aminomethyl-3,5,5-trimethyl-cyclohexylamine	
Freshwater		
Marine water		
Freshwater sediment		
Marine sediment		
Micro-organisms in sewage treatment plants (STP)		
Reaction products of the oligomerization and alkylation of 2-phenylpropene and phenol		
Freshwater		
Marine water		
Freshwater sediment		
Marine sediment		
69-72-7	Salicylsäure	
Freshwater		
Marine water		
Freshwater sediment		
Marine sediment		

Additional advice on limit values

See chapter 7. No additional measures necessary.

8.2. Exposure controls**Individual protection measures, such as personal protective equipment****Eye/face protection**

Tightly sealed safety glasses.

Hand protection

Wear protective gloves. NBR (Nitrile rubber). FKM (fluoro rubber) PVC (Polyvinyl chloride).

Thickness of the glove material: > 0,5 mm

Unsuitable material: Leather articles, Thick fabric.

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

To minimize the wetness in the glove due to perspiration changing of gloves during a shift is required

Check leak tightness/impermeability prior to use.

Protect skin by using skin protective cream.

The required protective gloves have to be specified by the glove material and the penetration time of the glove material depending on strength and duration of dermal exposition.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.



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Combination filtering device: A-P2

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: yellowish
Odour: amines.

Test method

Melting point/freezing point: not determined
Boiling point or initial boiling point and boiling range: 200 °C
Flammability: No data available
Flash point: 100 °C
Auto-ignition temperature: 380 °C
Decomposition temperature: No data available
Water solubility: not miscible
Solubility in other solvents: No data available
Density (at 23 °C): 1,03 g/cm³ ISO 2811-2
Relative vapour density: No data available

9.2. Other information

Information with regard to physical hazard classes

Explosive properties
The product is not: Explosive
Oxidizing properties
No data available

Other safety characteristics

Evaporation rate: No data available
Viscosity / dynamic:
(at 25 °C) 440 mPa·s ISO 3219

Further Information

The product is not: Spontaneously flammable.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

none spontaneous decomposition: Specific use(s)

10.3. Possibility of hazardous reactions

Response:: Etchant and acids, Alkali (lye), Oxidizing agents.

10.4. Conditions to avoid

No data available

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition products

In case of fire may be liberated: Gases/vapours, toxic

SECTION 11: Toxicological information



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11.1. Information on hazard classes as defined in GB CLP Regulation

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
100-51-6	benzyl alcohol				
	oral	LD50 1620 mg/kg	Rat		
	dermal	LD50 2000 mg/kg	rabbit		
	inhalation vapour	ATE 11 mg/l			
	inhalation (4 h) dust/mist	LC50 > 4,178 mg/l	Rat	OECD 403	
2855-13-2	3-aminomethyl-3,5,5-trimethyl-cyclohexylamine				
	oral	ATE 1030 mg/kg			
	dermal	LD50 1840 mg/kg	Rabbit	Manufacturer	
	Reaction products of the oligomerization and alkylation of 2-phenylpropene and phenol				
	oral	LD50 >2000 mg/kg	rat		
	dermal	LD50 >2000 mg/kg	rat		
69-72-7	Salicylsäure				
	oral	LD50 891 mg/kg	(rat)		
	dermal	LD50 >2000 mg/kg	(rat)		

Irritation and corrosivity

Skin corrosion
IF IN EYES: strongly corrosive.

Sensitising effects

May cause sensitization by skin contact.

STOT-single exposure

Harmful
corrosive.
If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

Specific effects in experiment on an animal

Harmful to fish.

11.2. Information on other hazards

Endocrine disrupting properties

Endocrine disrupting properties: Salicylsäure.
Salicylic acid: List II; III

Further information

Harmful to aquatic life.
Water hazard class: slightly hazardous to water
Do not allow to enter into surface water or drains.

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SECTION 12: Ecological information**12.1. Toxicity**

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
100-51-6	benzyl alcohol					
	Acute fish toxicity	LC50 460 mg/l	96 h	Pimephales promelas (fathead minnow)	EPA OPP 72-1	
	Acute algae toxicity	ErC50 640 mg/l	96 h	Algae Scenedesmus sp.)		
	Acute crustacea toxicity	EC50 253 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202	
	Algae toxicity	NOEC mg/l 3140	3 d	Pseudokirchneriella subcapitata	OECD 201	
	Acute bacteria toxicity	(EC50 mg/l) 400	0,5 h	Pseudomonas putida		
2855-13-2	3-aminomethyl-3,5,5-trimethyl-cyclohexylamine					
	Acute fish toxicity	LC50 110 mg/l	96 h	Leuciscus idus (golden orfe)	Manufacturer	
	Acute algae toxicity	ErC50 mg/l > 50	72 h	Scenedesmus subspicatus	Manufacturer	
	Acute crustacea toxicity	EC50 23 mg/l	48 h	Daphnia magna	Manufacturer	
	Reaction products of the oligomerization and alkylation of 2-phenylpropene and phenol					
	Acute fish toxicity	LC50 mg/l 25,8	96 h	fish		
	Acute algae toxicity	ErC50 15 mg/l	72 h	algae		
	Acute crustacea toxicity	EC50 14 mg/l	48 h	Daphnia magna		
69-72-7	Salicylsäure					
	Acute fish toxicity	LC50 mg/l 1380	96 h	Pimephales promelas (fathead minnow)		
	Acute algae toxicity	ErC50 mg/l > 100	72 h	Desmodesmus subspicatus		

12.2. Persistence and degradability

No data available

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
100-51-6	benzyl alcohol				
	OECD 301C/ ISO 9408/ EEC 92/69/V, C.4-F	92-96 %	14		
	Readily biodegradable (according to OECD criteria).				

12.3. Bioaccumulative potential

No data available

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
100-51-6	benzyl alcohol	1,05

12.4. Mobility in soil

No data available

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12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.
No data available

12.6. Endocrine disrupting properties

Endocrine disrupting properties: Salicylsäure.
Salicylic acid: List II; III

12.7. Other adverse effects

No data available

Further information

Do not let the product enter the groundwater, open water, or the sewerage system.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Dispose of waste according to applicable legislation. Dispose of contents/container to industrial incineration plant.
Following consultation with waste management company and after solidification, landfill together with household waste.

List of Wastes Code - residues/unused products

080299 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of other coatings (including ceramic materials); wastes not otherwise specified

List of Wastes Code - used product

080299 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of other coatings (including ceramic materials); wastes not otherwise specified

Contaminated packaging

Dispose of waste according to applicable legislation.

SECTION 14: Transport information**Land transport (ADR/RID)**

14.1. UN number or ID number: UN2735
14.2. UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORNDIAMIN)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8



Classification code: C7
Special Provisions: 274
Limited quantity: 5 L
Transport category: 3
Hazard No: 80
Tunnel restriction code: E

Other applicable information (land transport)

E1

Marine transport (IMDG)

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14.1. UN number or ID number: UN2735
14.2. UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORNDIAMINE)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8



Marine pollutant: no
Special Provisions: 274
Limited quantity: 5 L
EmS: F-A, S-B
Segregation group: 1 - acids

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN2735
14.2. UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORNDIAMINE)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8



Limited quantity Passenger: 5 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: strongly corrosive.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

Additional information

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment - Annex II: None of the ingredients are included.

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPORT SUBSTANCES FOR EXPLOSIVES (upper concentration limit for a permit pursuant to Article 5(3)): None of the ingredients are included.

Annex II - EXPLOSIVES REPORTABLE FOR EXPLOSIVES: None of the ingredients are included.

Regulation (EC) No 273/2004 on drug precursors: None of the ingredients are included.



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Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug trade in drug substitutes between the Community and third countries: None of the ingredients are included.

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 15.

Abbreviations and acronyms

Acute Tox: Acute toxicity

Skin Corr: Skin corrosion

Skin Irrit: Skin irritation

Eye Dam: Eye damage

Eye Irrit: Eye irritation

Skin Sens: Skin sensitisation

Aquatic Chronic: Chronic aquatic hazard

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
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.
H412	Harmful to aquatic life with long lasting effects.

Further Information

Avoid contact with the eyes and skin.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)