

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 13.08.2019

Version number 1

Revision: 13.08.2019

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

**Product identifier****Trade name** weber.knight armor Hardener**Safety data sheet no.:** XXP015300b**Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

**Application of the substance / the mixture** Construction chemicals**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

Saint-Gobain India Pvt. Ltd.

Sigapi Achi Building, Floor no. 7

18/3 Rukmini Lakshmipathy Road, Egmore

Chennai- 600008

Tamil Nadu, India.

Phone: +912240212121

**Emergency telephone number:**

+912240212121(Board line number)

In case of emergency: +918451931666, +919324391824

### 2 Hazards identification

**Classification of the substance or mixture**

corrosion

Skin Corr. 1A      H314 Causes severe skin burns and eye damage.

Eye Dam. 1      H318 Causes serious eye damage.



Skin Sens. 1      H317 May cause an allergic skin reaction.

Acute Tox. 5      H303 May be harmful if swallowed.

Acute Tox. 5      H313 May be harmful in contact with skin.

Aquatic Acute 3      H402 Harmful to aquatic life.

Aquatic Chronic 3      H412 Harmful to aquatic life with long lasting effects.

**Label elements****GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

**Hazard pictograms**

GHS05    GHS07

**Signal word** Danger

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**Hazard-determining components of labelling:**

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Benzyl alcohol

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with fatty acids, C16-18 and C18-unsatd., branched and linear and triethylenetetramine

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

**Hazard statements**

H303 May be harmful if swallowed.

H313 May be harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards**

**Results of PBT and vPvB assessment**

**PBT:** Does not contain PBT substances.

**vPvB:** Does not contain vPvB substances.

**3 Composition/information on ingredients**

**Chemical characterisation: Mixtures**

**Description:** Mixture of substances listed below with non hazardous additions.

**Dangerous components:**

CAS: 100-51-6 EINECS: 202-859-9	Benzyl alcohol ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319; Acute Tox. 5, H313	25-50%
CAS: 2855-13-2 EINECS: 220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine ⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	25-50%
CAS: 157707-72-7 NLP: 500-381-8	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with fatty acids, C16-18 and C18-unsatd., branched and linear and triethylenetetramine ⚠ Skin Corr. 1A, H314; Eye Dam. 1, H318; ⚠ Skin Sens. 1, H317; Aquatic Acute 3, H402; Aquatic Chronic 3, H412	10-25%

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CAS: 38294-64-3 NLP: 500-101-4	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine ⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ⚠ Skin Sens. 1, H317; Aquatic Acute 3, H402; Aquatic Chronic 3, H412	10-20%
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**SVHC** Void

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

**4 First aid measures**

**Description of first aid measures**

**General information**

Immediately remove any clothing soiled by the product.  
Remove the victim immediately from the danger area. If the patient is unwell consult a doctor and present this data sheet.

**After inhalation**

Supply fresh air and to be sure call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation.

**After skin contact**

Seek immediate medical advice.  
Immediately wash with water and soap and rinse thoroughly.

**After eye contact**

Rinse opened eye for several minutes under running water. Then consult doctor. Rinse liquid should be tempered (20-30°C).

**After swallowing**

Drink plenty of water and provide fresh air. Call for a doctor immediately.  
Seek immediate medical advice.

**Information for doctor**

**Most important symptoms and effects, both acute and delayed**

No further relevant information available.

**Indication of any immediate medical attention and special treatment needed**

If swallowed, gastric irrigation with added, activated carbon.

**5 Firefighting measures**

**Extinguishing media**

**Suitable extinguishing agents**

Use fire extinguishing methods suitable to surrounding conditions.

**Special hazards arising from the substance or mixture**

During heating or in case of fire poisonous gases are produced.

**Advice for firefighters**

**Protective equipment:**

Use methods suitable to surrounding conditions.  
Wear fully protective suit.  
Mouth respiratory protective device.

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### 6 Accidental release measures

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

Ensure adequate ventilation.

Mouth respiratory protective device.

**Environmental precautions:**

The product must not get into watercourses or into the soil.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

Do not allow product to reach sewage system or any water course.

Suppress gases/fumes/haze with water spray.

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

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

**Reference to other sections**

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and storage

**Handling****Precautions for safe handling**

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

**Information about fire - and explosion protection:** Keep respiratory protective device available.**Conditions for safe storage, including any incompatibilities****Storage****Requirements to be met by storerooms and receptacles:**

Prevent any seepage into the ground.

Store only in unopened original receptacles.

**Information about storage in one common storage facility:** Store away from foodstuffs.**Further information about storage conditions:** Keep container tightly sealed.**Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

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

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**Control parameters**

**Ingredients with limit values that require monitoring at the workplace:**

<b>DNELs</b>		
<b>CAS: 2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine</b>		
Oral	Derived No Effect Level	0.526 mg/kgxday (consumer systemic long term value)
Inhalative	Derived No Effect Level	0.073 mg/m <sup>3</sup> (worker local short term value)
		0.073 mg/m <sup>3</sup> (worker local long term value)
<b>CAS: 38294-64-3 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine</b>		
Dermal	Derived No Effect Level	0.14 mg/kgxday (worker systemic long term value)
		0.05 mg/kgxday (consumer systemic long term value)
Inhalative	Derived No Effect Level	0.98 mg/m <sup>3</sup> (worker systemic long term value)
		0.18 mg/m <sup>3</sup> (consumer systemic long term value)

**Additional information:**

The applicable TRGS 900 (MAK list) was used as the basis for the preparation and/or revision of this safety data sheet.

**Exposure controls**

**Personal protective equipment:**

**General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Use a moisturising skin cream after processing the product.

**Respiratory protection:**

Filter A2/P2.

In case of brief exposure or low pollution use respiratory filter device.

In case of intensive or longer exposure use self-contained respiratory protective device.

**Protection of hands:** Protective gloves.

**Eye protection:** Tightly sealed goggles

**Body protection:** Protective work clothing.

**9 Physical and chemical properties**

**Information on basic physical and chemical properties**

**General Information**

**Appearance:**

<b>Form:</b>	Liquid
<b>Colour:</b>	Light yellow
<b>Odour:</b>	Amine-like

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<b>Odour threshold:</b>	Not determined.
<b>pH-value:</b>	Not applicable. Not determined.
<b>Change in condition</b>	
<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	180 °C
<b>Flash point:</b>	>100 °C
<b>Flammability (solid, gas):</b>	Not applicable.
<b>Ignition temperature:</b>	380 °C
<b>Decomposition temperature:</b>	Not determined.
<b>Auto-ignition temperature:</b>	Product is not selfigniting.
<b>Explosive properties:</b>	Product does not present an explosion hazard.
<b>Explosion limits:</b>	
<b>Lower:</b>	1.3 Vol %
<b>Upper:</b>	13 Vol %
<b>Oxidising properties</b>	Not determined.
<b>Vapour pressure:</b>	Not determined.
<b>Density at 25 °C:</b>	0.97 g/cm <sup>3</sup>
<b>Bulk density:</b>	Not applicable.
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Evaporation rate</b>	Not determined.
<b>Solubility in / Miscibility with</b>	
<b>Water:</b>	Not miscible or difficult to mix
<b>Segregation coefficient (n-octanol/water) log</b>	
<b>Pow:</b>	Not determined.
<b>Viscosity:</b>	
<b>dynamic:</b>	Not determined.
<b>kinematic:</b>	Not determined.
<b>Solvent separation test:</b>	Not determined
<b>Solvent content:</b>	
<b>EU-VOC (%)</b>	30.00 %
<b>EU-VOC (g/L)</b>	291.0 g/l
<b>Solids content:</b>	0.0 %
<b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

**Reactivity** Not reactive under normal conditions of use

**Chemical stability** Stable at recommended storage conditions

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**Thermal decomposition / Conditions to be avoided:**

No decomposition if used according to specifications.

**Possibility of hazardous reactions** No dangerous reactions known

**Conditions to avoid** No further relevant information available.

**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

**Information on toxicological effects**

**Acute toxicity**

**LD/LC50 values relevant for classification:**

Components	Type	Value	Species
<b>CAS: 100-51-6 Benzyl alcohol</b>			
Oral	LD50	1,580 mg/kg	(Mouse)
Dermal	LD50	>2,000 mg/kg	(Rabbit)
Inhalative	LC50/4 h	4,178 mg/l	(Rat)
<b>CAS: 2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine</b>			
Oral	LD50	1,030 mg/kg	(Rat)
Dermal	LD50	>2,000 mg/kg	(Rat)

**Primary irritant effect:**

**Skin corrosion/irritation**

Strong caustic effect on skin and mucous membranes.

Irritant to skin and mucous membranes.

**Serious eye damage/irritation**

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

**Respiratory or skin sensitisation** Sensitisation possible through skin contact.

**Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

Irritant

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

## 12 Ecological information

**Toxicity**

**Aquatic toxicity:**

Harmful to aquatic life with long lasting effects (H412).

Harmful to aquatic life with long lasting effects.

Type of test	Effective concentration	Method	Assessment
<b>CAS: 100-51-6 Benzyl alcohol</b>			
LC50/48h	645 mg/l	(Leuciscus idus (Orfe))	

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LC50/96h	10 mg/l (Lepomis macrochirus (Sunfish)) 460 mg/l (Pimephales promelas (Minnow))
EC50/24h	400 mg/l (Daphnia magna)
EC50/96h	400 mg/l (Daphnia magna) 640 mg/l (Scenedesmus quadricauda (Algae))
EC 10	400 mg/l (Pseudomonas putida (Bacteria))

**CAS: 2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine**

LC50/96h	110 mg/l (Brachydanio rerio (zebra danio))
EC50/24h	42 mg/l (Daphnia magna)
EC50/48h	23 mg/l (Daphnia magna)
EC50/72h	37 mg/l (Scenedesmus subspicatus (Algae))
EC 10	1,120 mg/l (Pseudomonas putida (Bacteria))
EC 10/18h	1,120 mg/l (Pseudomonas putida (Bacteria))

**Persistence and degradability** No further relevant information available.

**Behaviour in environmental systems:**

**Bioaccumulative potential**

**CAS: 100-51-6 Benzyl alcohol**

EBAB	1.1 log Pow (Bioaccumulation)
<b>CAS: 2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine</b>	
EBAB	0.79 log Pow

**Mobility in soil** No further relevant information available.

**Ecotoxicological effects:**

**Remark:**

The product contains substances which cause a local pH change and thus have a detrimental effect on fish and bacteria.

The product contains substances which are toxic to fishes and bacteria.

Harmful to fish

**Behaviour in sewage processing plants:**

**Type of test Effective concentration Method Assessment**

<b>CAS: 100-51-6 Benzyl alcohol</b>	
EC 50 (3h)	79 mg/l (Scenedesmus quadricauda (Algae))

**Other information:**

**CAS: 100-51-6 Benzyl alcohol**

BSB (5)	1,550 mg O <sub>2</sub> /g
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**Additional ecological information:**

**General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

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**Results of PBT and vPvB assessment**

**PBT:** Does not contain PBT substances.

**vPvB:** Does not contain vPvB substances.

**Other adverse effects** No further relevant information available.

**13 Disposal considerations**

**Waste treatment methods**

**Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packaging:**

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

**14 Transport information**

**UN-Number**

**ADR, IMDG, IATA**

UN2289

**UN proper shipping name**

**ADR**

2289 ISOPHORONEDIAMINE mixture

**IMDG, IATA**

ISOPHORONEDIAMINE mixture

**Transport hazard class(es)**

**ADR**



**Class**

8 (C7) Corrosive substances.

**Label**

8

**IMDG, IATA**



**Class**

8 Corrosive substances.

**Label**

8

**Packing group**

**ADR, IMDG, IATA**

III

**Environmental hazards:**

Not applicable.

**Special precautions for user**

Warning: Corrosive substances.

**Danger code (Kemler):**

80

**EMS Number:**

F-A,S-B

**Stowage Category**

A

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<b>Segregation Code</b>	SG35 Stow "separated from" SGG1-acids
<b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
<b>Transport/Additional information:</b>	
<b>ADR</b>	
<b>Limited quantities (LQ)</b>	5L
<b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<b>Transport category</b>	3
<b>Tunnel restriction code</b>	E
<b>IMDG</b>	
<b>Limited quantities (LQ)</b>	5L
<b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<b>UN "Model Regulation":</b>	UN 2289 ISOPHORONEDIAMINE MIXTURE, 8, III

### 15 Regulatory information

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

Regulation (EC) No 1272/2008 (CLP)

Regulation (EC) No 1907/2006 (REACH) (Candidate List, Annexes XIV and XVII)

Directive 2004/42/CE (VOC), cf. section 9

#### GHS label elements

cf. section 2

The product is classified and labelled according to the Globally Harmonised System (GHS).

#### Hazard pictograms



GHS05 GHS07

#### Signal word Danger

#### Hazard-determining components of labelling:

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Benzyl alcohol

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with fatty acids, C16-18 and C18-unsatd., branched and linear and triethylenetetramine

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

#### Hazard statements

H303 May be harmful if swallowed.

H313 May be harmful in contact with skin.

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

**Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P103 Read label before use.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor.  
P321 Specific treatment (see on this label).  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Directive 2012/18/EU****Named dangerous substances - ANNEX I** None of the ingredients is listed.**Seveso category** Hazardous to the Aquatic Environment**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Relevant phrases**

H302 Harmful if swallowed.  
H312 Harmful in contact with skin.  
H313 May be harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H402 Harmful to aquatic life.  
H412 Harmful to aquatic life with long lasting effects.

**Department issuing SDS:** Research & Development**Contact:**

S. Nagaraju  
Phone: +918451931666  
e-mail: nagaraju.s@saint-gobain.com

**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organisation

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EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
DNEL: Derived No-Effect Level (REACH)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
SVHC: Substances of Very High Concern (REACH regulation)  
vPvB: very Persistent and very Bioaccumulative  
Acute Tox. 4: Acute toxicity – Category 4  
Acute Tox. 5: Acute toxicity – Category 5  
Skin Corr. 1A: Skin corrosion/irritation – Category 1A  
Skin Corr. 1B: Skin corrosion/irritation – Category 1B  
Eye Dam. 1: Serious eye damage/eye irritation – Category 1  
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
Skin Sens. 1: Skin sensitisation – Category 1  
Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3  
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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

According to Annex II of the REACH regulation, the modified sections in this version of the Safety Data Sheet in comparison with the previous one are marked with asterisks.

IN