

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1. Product identifier**

Product name : STAR BRITE EPOXY/ALUMINUM PUTTY STICK
Product code : 87004

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

Application : SU21 Consumer product. PC9b Fillers, putties, plasters, modelling clay.

1.3. Details of the supplier of the safety data sheet

Supplier : Star Brite Europe Inc.
86 bis route de Brignais
69630 Chaponost, France
Telephone : +33-478-56-77-80
Fax : +33-472-39-97-96
E-mail : jp.kitzinger@starbrite-europe.com
Website : www.starbrite.com

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:

FR - Telephone : +33-478-56-77-80 (During office hours only)

EMERGENCY TELEPHONE NUMBER (for DOCTORS only):

National Poisons Information Service +44 344 892 0111 (24/7)

SECTION 2 HAZARDS IDENTIFICATION**2.1. Classification of the substance or mixture**

CLP classification : Skin irritation, category 2. Eye irritation, category 2. Skin sensitization, category 1. Hazardous to the aquatic environment — Chronic category 3. (1272/2008/EC)

Human health hazards : Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.

Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives.

Environmental hazards : Harmful to aquatic life with long lasting effects.

2.2. Label elements

Label elements (1272/2008/EC):

Hazard pictograms :



Signal word : Warning

H- and P-phrases :

H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P280 gloves	Wear protective gloves.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of water/soap.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to an official chemical waste depot.

Additional labelling (for all packaging sizes)

: Contains: reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) ; 2,4,6-tris(dimethylaminomethyl)phenol .

2.3. Other hazards

Other information : The product does not need to carry all label elements required by Article 17 of Regulation (EC) No 1272/2008 on the basis of Annex I, point 1.5.2.1. Exemption for packages where the contents do not exceed 125 ml. Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	Remark	REACH nr.
Talc	50 - 75	14807-96-6	238-877-9	MAC	
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	5 - < 25	25068-38-6	500-033-5		
aluminium powder (stabilised)	1 - < 5	7429-90-5	231-072-3		
2,4,6-tris(dimethylaminomethyl)phenol	1 - < 5	90-72-2	202-013-9		

Substance name	Hazard Class	H-phrases	Pictograms	
Talc	-----	-----	-----	
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1; Aquatic Chronic 2	H319; H315; H317; H411	GHS07; GHS09	H319 : C ≥ 5 % H315 : C ≥ 5 %
aluminium powder (stabilised)	Water-react. 2; Flam. Sol. 1	H261; H228	GHS02	
2,4,6-tris(dimethylaminomethyl)phenol	Acute Tox. 4; Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1; Aquatic Chronic 3	H302; H319; H315; H312; H317; H412	GHS07	

Occupational exposure limit(s), if relevant, are listed in section 8.

Reference is made to chapter 16 for full text of each relevant H phrase.

SECTION 4 FIRST-AID MEASURES

4.1. Description of first aid measures

First aid measures

- Inhalation : Not applicable.
- Skin contact : Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up. Consult a doctor if irritation occurs.
- Eye contact : Wash out with (lukewarm) water for at least 15 minutes. Remove contact lenses. Consult a doctor.
- Ingestion : Do not induce vomiting. Do rinse the mouth. Give one glass of water. Never give anything by mouth to an unconscious person. Consult a doctor if victim feels unwell.

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

Effects and symptoms

- Inhalation : No specific effects and/or symptoms are known.
- Skin contact : Irritant. May cause redness and irritation, sensitisation. May produce an allergic reaction.

Eye contact : Irritant. May cause redness and pain.
Ingestion : May cause a feeling of sickness, vomiting and diarrhoea.

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

Note to physicians : None known.

SECTION 5 FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Suitable : Carbondioxide (CO2). Foam. Dry chemical. Water fog.
Not suitable : Water jet.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards : None known.
Hazardous thermal decomposition products : Carbon monoxide may be evolved if incomplete combustion occurs.

5.3. Advice for firefighters

Special protective equipment for fire-fighters : Use adequate respiratory equipment in case of insufficient ventilation.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material.

6.2. Environmental precautions

Environmental precautions : Avoid release of product into sewers, surface water and/or ground water. Waste product should not be allowed to contaminate soil or water.
Other information : Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spilled material in containers. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

6.4. Reference to other sections

Reference to other sections : See also section 8.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep in a cool, dry and well-ventilated place (< 35 °C).
Recommended packaging : Keep only in the original container.

Non recommended packaging : None known.

7.3. Specific end use(s)

Use : Use only as directed.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits : Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.

Workplace exposure limits (mg/m³):

Chemical name	Country	TWA 8 hour (mg/m ³)	STEL 15 min (mg/m ³)	Comments
Talc	GB	1	-	Respirable fraction.
Talc		2	-	
aluminium powder (stabilised)		2		

Derived no-effect level (DNEL) for workers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	Dermal		8,33 mg/kg bw		8,33 mg/kg bw/day
	Inhalation		12,25 mg/m ³		12,25 mg/m ³
aluminium powder (stabilised)	Inhalation				3,72 mg/m ³

Derived no-effect level (DNEL) for consumers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	Dermal				3,571 mg/kg bw/day
	Oral		0,75 mg/kg bw		0,75 mg/kg bw/day
aluminium powder (stabilised)	Oral				3,95 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	Water	0,006 mg/l	0,001 mg/l	
	Sediment	0,996 mg/kg	0,1 mg/kg	
	Intermittent water			0,018 mg/l
	STP			10 mg/l
aluminium powder (stabilised)	Soil			0,196 mg/kg
	Oral			11 mg/kg food
	Water	0,074 mg/l		
	STP			20 mg/l

8.2. Exposure controls

Engineering measures : Comply with standard precautionary measures for working with chemicals.
Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:

The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.



- Body protection : Wear appropriate protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345. Suitable material: not known. Indication of permeation breakthrough time: not known.
- Respiratory protection : Take care of sufficient ventilation.
- Hand protection : Wear appropriate safety gloves in accordance with EN 374. Suitable material: laminated film. ± 0,5 mm. Indication of permeation breakthrough time: not known.
- Eye protection : Wear appropriate safety glasses with side shields, in accordance with EN 166, when there is danger of possible eye contact.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	: Solid.	
Colour	: Grey.	
Odour	: Characteristic.	
Odour threshold	: Not known.	
pH	: Not applicable.	Solid.
Solubility in water	: Not soluble.	
Partition coefficient (n-octanol/water)	: Not known.	
Flash point	: Not relevant.	Solid.
Flammability (solid, gas)	: Not flammable.	Not easily ignitable.
Auto ignition temperature	: Not known.	Does not contain substances with a known auto ignition temperature.
Boiling point/boiling range	: Not known	
Melting point/melting range	: Not known.	
Explosive properties	: None known.	Does not contain explosives.
Explosion limits (% in air)	: Not applicable.	
Oxidising properties	: Not applicable.	Does not contain oxidizing substances.
Decomposition temperature	: > 200 °C	
Viscosity (20°C)	: Not applicable.	Solid.
Viscosity (40°C)	: Not applicable.	Almost solid at 40 °C.
Vapour pressure (20°C)	: Very low.	Solid.
Vapour density (20°C)	: Not applicable.	The solvent content of this product is less than 1%.
Relative density (20°C)	: 1,93 g/ml	
Evaporation rate	: Very low.	Solid.

SECTION 10 STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity : See sub-sections below.

10.2. Chemical stability

Stability : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactivity : No other hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid : See section 7.

10.5. Incompatible materials

Materials to avoid : Keep away from oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products : Not known.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No toxicological research has been carried out on this product.

Inhalation

- Acute toxicity : Not applicable. No specific effects and/or symptoms are known.
- Corrosion/irritation : No specific effects and/or symptoms are known. Not classified - based on available data, the classification criteria are not met.
- Sensitisation : Does not contain substances classified as respiratory sensitiser. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

Skin contact

- Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Irritant. May cause redness.
- Sensitisation : May cause sensitisation by skin contact. May produce an allergic reaction.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

Eye contact

- Corrosion/irritation : Irritant.

Ingestion

- Acute toxicity : Calculated LD50: > 1249 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Aspiration : Not classified - based on available data, the classification criteria are not met. Does not contain substances with an aspiration hazard.
- Corrosion/irritation : May cause a feeling of sickness, vomiting and diarrhoea.
- Carcinogenicity : Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.
- Reprotoxicity : Development: Not expected to be reprotoxic. Development: Not classified - Based on available data, the classification criteria are not met. Fertility: not expected to be reprotoxic. Fertility: Not classified - based on available data, the classification criteria are not met.

Toxicological information:

Chemical name	Property		Method	Test animal
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	Genotoxicity - in vivo	Negative	-----	Mouse
	Skin irritation	Slightly irritant	OECD 404	Rabbit

2,4,6-tris(dimethylaminomethyl)phenol	LD50 (dermal)	> 23000 mg/kg bw	-----	Rat
	NOEL (carcinogenicity, dermal)	100 mg/kg bw/d	-----	Rat
	Skin sensitisation	Sensitizing.		Guinea pig
	NOAEL (oral)	50 mg/kg bw/d	OECD 408	Rat
	LD50 (oral)	> 2000 mg/kg bw	OECD 420	Rat
	Eye irritation	Non-irritant	OECD 405	Rabbit
	LC50 (inhalation) - estimate	> 5000 mg/m3	-----	Rat
	Skin irritation	Severely irritant	-----	Rat
	LD50 (oral)	1200 mg/kg bw	-----	Rat
	Eye irritation	Severely irritant	-----	Rabbit
	LD50 (dermal)	1280 mg/kg bw	-----	Rat

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Harmful to aquatic organisms. Calculated LC50 (fish): 6 mg/l. Calculated EC50 (waterflea): 6 mg/l. Contains 3 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence – degradability : May cause long-term adverse effects in the aquatic environment.

12.3. Bioaccumulative potential

Bioaccumulative potential : No specific information known.

12.4. Mobility in soil

Mobility : Little chance of penetration of spilled product into the ground and surface water.

12.5. Results of PBT and vPvB ass

PBT/vPvB assessment : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

12.6. Other adverse effects

Other information : Not applicable.

Ecological information:

Chemical name	Property		Method	Test animal	
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	LC50 (fish)	> 1 mg/l	OECD 203	Oncorhynchus mykiss	
	Ultimate aerobic biodegradation (%)	0 %	OECD 301 F		
	EC50 (waterflea)	> 1 mg/l	OECD 202	Daphnia magna	
	NOEC (waterflea) - chronic	0,3 mg/l.d	OECD 211	Daphnia magna	
	IC50 (algae)	9,4 mg/l	EPA 660/3-75-009	Scenedesmus subspicatus	
	2,4,6-tris(dimethylaminomethyl)phenol	LC50 (fish)	175 mg/l	-----	Cyprinus carpio
		IC50 (algae)	84 mg/l	OECD 201	Desmodesmus subspicatus
Ultimate aerobic biodegradation (%)		4 %	OECD 301 D		
	Log P(ow)	0,219			

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

- Product residues : Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues and non-empty pack as hazardous waste.
- Additional warning : None.
- European waste catalogue : Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.
- Local legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

SECTION 14 TRANSPORT INFORMATION

14.1. UN number

UN nr. : None.

14.2. UN proper shipping name

Transport name : Not regulated.

14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID/ADN (road/railway/inland waterways)

Class : This product is not classified according to ADR/RID/ADN.

IMDG (sea)

Class : This product is not classified according to IMDG.

Marine pollutant : No

IATA (air)

Class : This product is not classified according to IATA.

14.6. Special precautions for user

Other information : Country specific variations may apply.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

SECTION 15 REGULATORY INFORMATION

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

Community regulations : Regulation (EC) No 453/2010 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations.

15.2. Chemical safety assessment

Chemical safety assessment : Not applicable.

SECTION 16 OTHER INFORMATION

16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EC) No 453/2010 dated 20 May 2010 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (*).

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

ADR	: European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	: Acute Toxicity Estimate
CLP	: Classification, Labeling & Packaging
CMR	: Carcinogenic, Mutagenic or toxic for Reproduction
EEC	: European Economic Community
IATA	: International Air Transport Association
IBC code	: International Bulk Chemical Code
IMDG	: International Maritime Dangerous Goods Code
LD50/LC50	: Lethal Dose/Concentration for 50% of a population
MAC	: Maximum Allowable Concentration
MARPOL	: International Convention for the Prevention of Pollution From Ships
NO(A)EL	: No Observed (Adverse) Effect Level
OECD	: Organisation for Economic Co-operation and Development
PBT	: Persistent, Bioaccumulative and Toxic
PC	: Chemical product category
PT	: Product type
REACH	: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	: Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	: Sewage Treatment Plant
SU	: Sector of Use
TWA/STEL	: Time-Weighted Average/Short Term Exposure Limit
UN	: United Nations
VOC	: Volatile Organic Compounds
vPvB	: Very Persistent and Very Bioaccumulative

Full text of hazard classes mentioned in section 3:

Flam. Sol. 1	: Flammable solid, category 1.
Acute Tox. 4	: Acute toxicity, category 4.
Skin Irrit. 2	: Skin irritation, category 2.
Eye Irrit. 2	: Eye irritation, category 2.
Skin Sens. 1/1A/1B	: Skin sensitization, category 1/1A/1B.
Aquatic Chronic 2	: Hazardous to the aquatic environment — Chronic category 2.
Aquatic Chronic 3	: Hazardous to the aquatic environment — Chronic category 3.
Water-react. 2	: Substances and Mixtures which, in contact with water, emit flammable gases, Hazard Category 2.

Full text of H-phrases mentioned in section 3:

H228	Flammable solid.
H261	In contact with water releases flammable gases.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Number format : ", " used as decimal separator.

End of safety data sheet.