KwikWood™ Epoxy Putty

JRP Distribution Ltd

Version No: **3.7**
Safety data sheet according to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

Issue Date: **02/20/2023**
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S.REACH.GB.EN

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

1.1. Product Identifier

Product name	KwikWood™ Epoxy Putty
Synonyms	8257, 8258 (KwikWood™ Epoxy Putty Stick
Other means of identification	Not Available

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

Relevant identified uses	Use according to manufacturer's directions.
Uses advised against	No specific uses advised against are identified.

1.3. Details of the manufacturer or supplier of the safety data sheet

Registered company name	**JRP Distribution Ltd**
Address	Unit 10A, Business Park, City Fields Way Tangmere PO20 2FT United Kingdom
Telephone	+44 1903 750355
Fax	903-885-5911
Website	www.jbweld.com
Email	info@jbweld.com

1.4. Emergency telephone number

Association / Organisation	**Department of Health & Social Care (DHSC)**
Emergency telephone numbers	**112**
Other emergency telephone numbers	**Not Available**

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

Classified according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567 [1]	H350i - Carcinogenicity Category 1A, H360Fd - Reproductive Toxicity Category 1A, H315 - Skin Corrosion/Irritation Category 2, H317 - Sensitisation (Skin) Category 1A, H319 - Serious Eye Damage/Eye Irritation Category 2
Legend:	*1. Classified by Chemwatch; 2. Classification drawn from GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567*

2.2. Label elements

Hazard pictogram(s)	
Signal word	**Danger**

Hazard statement(s)

H350i	May cause cancer by inhalation.
H360Fd	May damage fertility. Suspected of damaging the unborn child.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

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Supplementary statement(s)

EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P280	Wear protective gloves, protective clothing, eye protection and face protection.
P261	Avoid breathing mist/vapours/spray.
P264	Wash all exposed external body areas thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary statement(s) Response

P308+P313	IF exposed or concerned: Get medical advice/ attention.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

Precautionary statement(s) Storage

P405	Store locked up.

Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

2.3. Other hazards

Cumulative effects may result following exposure*.

2-ethylhexanoic acid	Listed in the Europe Regulation (EC) No 1907/2006 - Annex XVII (Restrictions may apply)

SECTION 3 Composition / information on ingredients

3.1.Substances

See 'Composition on ingredients' in Section 3.2

3.2.Mixtures

1. CAS No 2.EC No 3.Index No 4.REACH No	%[weight]	Name	Classified according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567	SCL / M-Factor	Nanoform Particle Characteristics
1. 25068-38-6* 2.500-033-5 3.603-074-00-8 4.Not Available	10 - 30	bisphenol A diglycidyl ether polymer	Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3 , Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2, Sensitisation (Skin) Category 1B; H335, H315, H319, H317 [1]	Eye Irrit. 2; H319: C ≥ 5 % | Skin Irrit 2; H315: C ≥ 5 %	Not Available
1. 9003-36-5* 2.500-006-8 3.Not Available 4.Not Available	1 - 5	bisphenol F diglycidyl ether copolymer	Skin Corrosion/Irritation Category 2, Sensitisation (Skin) Category 1A; H315, H317 [1]	Not Available	Not Available
1. 72244-98-5* 2.Not Available 3.Not Available 4.Not Available	10 - 20	pentaerythritol, propoxylated, mercaptoglycerol capped	Sensitisation (Skin) Category 1, Hazardous to the Aquatic Environment Long-Term Hazard Category 3; H317, H412 [1]	Not Available	Not Available
1. 90-72-2* 2.202-013-9 3.603-069-00-0 4.Not Available	0.1 - 1	2,4,6-tris[(dimethylamino)methyl]phenol	Acute Toxicity (Dermal) Category 4, Corrosive to Metals Category 1, Acute Toxicity (Oral) Category 4, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2; H312, H290, H302, H315, H319 [1]	Not Available	Not Available
1. 149-57-5* 2.205-743-6 3.607-230-00-6 4.Not Available	0.1 - 1	2-ethylhexanoic acid	Acute Toxicity (Dermal) Category 4, Reproductive Toxicity Category 1A, Acute Toxicity (Oral) Category 4, Serious Eye Damage/Eye Irritation Category 2; H312, H360Fd, H302, H319 [1]	Not Available	Not Available
1. 140-31-8* 2.205-411-0 3.612-105-00-4 4.Not Available	0.1 - 1	N-aminoethylpiperazine	Acute Toxicity (Dermal) Category 3, Skin Corrosion/Irritation Category 1B, Corrosive to Metals Category 1, Serious Eye Damage/Eye Irritation Category 1, Acute Toxicity (Oral) Category 4, Sensitisation (Skin) Category 1; H311, H314, H290, H318, H302, H317 [1]	Not Available	Not Available

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1. CAS No 2.EC No 3.Index No 4.REACH No	%[weight]	Name	Classified according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567	SCL / M-Factor	Nanoform Particle Characteristics
1. 112-24-3* 2.203-950-6 3.612-059-00-5 4.Not Available	< 0.5	triethylenetetramine	Skin Corrosion/Irritation Category 1C, Acute Toxicity (Dermal) Category 4, Serious Eye Damage/Eye Irritation Category 1, Acute Toxicity (Oral) Category 4, Sensitisation (Skin) Category 1; H314, H312, H318, H302, H317 [1]	Not Available	Not Available
1. 13463-67-7* 2.236-675-5 3.022-006-00-2 4.Not Available	1 - 5	titanium dioxide	Carcinogenicity Category 1A, Acute Toxicity (Inhalation) Category 4, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2; H350i, H332, H315, H319 [1]	Not Available	Not Available
Legend:	*1. Classified by Chemwatch; 2. Classification drawn from GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567; 3. Classification drawn from C&L; * EU IOELVs available; [e] Substance identified as having endocrine disrupting properties*				

SECTION 4 First aid measures

4.1. Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: ▸ Wash out immediately with fresh running water. ▸ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▸ Seek medical attention without delay; if pain persists or recurs seek medical attention. ▸ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: ▸ Immediately remove all contaminated clothing, including footwear. ▸ Flush skin and hair with running water (and soap if available). ▸ Seek medical attention in event of irritation.
Inhalation	▸ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▸ Other measures are usually unnecessary.
Ingestion	▸ Immediately give a glass of water. ▸ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

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

Treat symptomatically.

SECTION 5 Firefighting measures

5.1. Extinguishing media

▸ There is no restriction on the type of extinguisher which may be used.
▸ Use extinguishing media suitable for surrounding area.

5.2. Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.

5.3. Advice for firefighters

Fire Fighting	▸ Alert Fire Department and tell them location and nature of hazard. ▸ Wear breathing apparatus plus protective gloves in the event of a fire.
Fire/Explosion Hazard	▸ Non combustible. ▸ Not considered a significant fire risk, however containers may burn. May emit poisonous fumes. May emit corrosive fumes.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8

6.2. Environmental precautions

See section 12

6.3. Methods and material for containment and cleaning up

Minor Spills	▸ Clean up all spills immediately.

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	▸ Avoid contact with skin and eyes. ▸ Wear impervious gloves and safety goggles.
Major Spills	Minor hazard. ▸ Clear area of personnel. ▸ Alert Fire Brigade and tell them location and nature of hazard.

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Safe handling	▸ Avoid all personal contact, including inhalation. ▸ Wear protective clothing when risk of exposure occurs. ▸ Use in a well-ventilated area.
Fire and explosion protection	See section 5
Other information	▸ Store in original containers. ▸ Keep containers securely sealed. ▸ Store in a cool, dry, well-ventilated area.

7.2. Conditions for safe storage, including any incompatibilities

Suitable container	▸ Polyethylene or polypropylene container. ▸ Packing as recommended by manufacturer. ▸ Check all containers are clearly labelled and free from leaks.
Storage incompatibility	None known
Hazard categories in accordance with Regulation (EC) No 1272/2008	Not Available
Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of	Not Available

7.3. Specific end use(s)

See section 1.2

SECTION 8 Exposure controls / personal protection

8.1. Control parameters

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
bisphenol F diglycidyl ether copolymer	Dermal 104.15 mg/kg bw/day (Systemic, Chronic) Inhalation 29.39 mg/m³ (Systemic, Chronic) *Dermal 62.5 mg/kg bw/day (Systemic, Chronic) ** *Inhalation 8.7 mg/m³ (Systemic, Chronic) ** *Oral 6.25 mg/kg bw/day (Systemic, Chronic) **	Not Available
2,4,6-tris[(dimethylamino)methyl]phenol	Dermal 0.15 mg/kg bw/day (Systemic, Chronic) Inhalation 0.53 mg/m³ (Systemic, Chronic) Dermal 0.6 mg/kg bw/day (Systemic, Acute) Inhalation 2.1 mg/m³ (Systemic, Acute) *Dermal 0.075 mg/kg bw/day (Systemic, Chronic) ** *Inhalation 0.13 mg/m³ (Systemic, Chronic) ** *Oral 0.075 mg/kg bw/day (Systemic, Chronic) ** *Dermal 0.075 mg/kg bw/day (Systemic, Acute) ** *Inhalation 0.13 mg/m³ (Systemic, Acute) **	0.046 mg/L (Water (Fresh)) 0.46 mg/L (Water - Intermittent release) 0.005 mg/L (Water (Marine)) 0.262 mg/kg sediment dw (Sediment (Fresh Water)) 0.026 mg/kg sediment dw (Sediment (Marine)) 0.025 mg/kg soil dw (Soil) 0.2 mg/L (STP)
2-ethylhexanoic acid	Dermal 2 mg/kg bw/day (Systemic, Chronic) Inhalation 14 mg/m³ (Systemic, Chronic) Dermal 300 mg/kg bw/day (Systemic, Acute) Inhalation 105.79 mg/m³ (Systemic, Acute) *Dermal 1 mg/kg bw/day (Systemic, Chronic) ** *Inhalation 3.5 mg/m³ (Systemic, Chronic) ** *Oral 1 mg/kg bw/day (Systemic, Chronic) ** *Dermal 150 mg/kg bw/day (Systemic, Acute) ** *Inhalation 26.01 mg/m³ (Systemic, Acute) ** *Oral 15 mg/kg bw/day (Systemic, Acute) **	72 mg/L (STP)
N-aminoethylpiperazine	Dermal 3.33 mg/kg bw/day (Systemic, Chronic) Inhalation 10.6 mg/m³ (Systemic, Chronic) Inhalation 15 µg/m³ (Local, Chronic) Inhalation 10.6 mg/m³ (Systemic, Acute) Inhalation 80 µg/m³ (Local, Acute)	0.058 mg/L (Water (Fresh)) 0.58 mg/L (Water - Intermittent release) 0.006 mg/L (Water (Marine)) 215 mg/kg sediment dw (Sediment (Fresh Water)) 21.5 mg/kg sediment dw (Sediment (Marine)) 1 mg/kg soil dw (Soil) 250 mg/L (STP)

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Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
triethylenetetramine	Dermal 0.57 mg/kg bw/day (Systemic, Chronic) Inhalation 1 mg/m³ (Systemic, Chronic) Dermal 28 µg/cm² (Local, Chronic) Inhalation 5 380 mg/m³ (Systemic, Acute) *Dermal 0.25 mg/kg bw/day (Systemic, Chronic) ** *Inhalation 0.29 mg/m³ (Systemic, Chronic) ** *Oral 0.41 mg/kg bw/day (Systemic, Chronic) ** *Dermal 0.43 mg/cm² (Local, Chronic) ** *Dermal 8 mg/kg bw/day (Systemic, Acute) ** *Inhalation 1 600 mg/m³ (Systemic, Acute) ** *Oral 20 mg/kg bw/day (Systemic, Acute) ** *Dermal 1 mg/cm² (Local, Acute) **	Not Available
titanium dioxide	Inhalation 0.8 mg/m³ (Local, Chronic) *Inhalation 28 µg/m³ (Local, Chronic) **	Not Available

* Values for General Population

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
UK Workplace Exposure Limits (WELs).	titanium dioxide	Titanium dioxide: respirable	4 mg/m3	Not Available	Not Available	Not Available
UK Workplace Exposure Limits (WELs).	titanium dioxide	Titanium dioxide: total inhalable	10 mg/m3	Not Available	Not Available	Not Available

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
bisphenol A diglycidyl ether polymer	90 mg/m3	990 mg/m3	5,900 mg/m3
2,4,6-tris[(dimethylamino)methyl]phenol	6.5 mg/m3	72 mg/m3	430 mg/m3
2-ethylhexanoic acid	15 mg/m3	99 mg/m3	590 mg/m3
N-aminoethylpiperazine	6.4 mg/m3	71 mg/m3	420 mg/m3
triethylenetetramine	3 ppm	14 ppm	83 ppm
titanium dioxide	30 mg/m3	330 mg/m3	2,000 mg/m3

Ingredient	Original IDLH	Revised IDLH
bisphenol A diglycidyl ether polymer	Not Available	Not Available
bisphenol F diglycidyl ether copolymer	Not Available	Not Available
pentaerythritol, propoxylated, mercaptoglycerol capped	Not Available	Not Available
2,4,6-tris[(dimethylamino)methyl]phenol	Not Available	Not Available
2-ethylhexanoic acid	Not Available	Not Available
N-aminoethylpiperazine	Not Available	Not Available
triethylenetetramine	Not Available	Not Available
titanium dioxide	5,000 mg/m3	Not Available

Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
bisphenol A diglycidyl ether polymer	E	≤ 0.1 ppm
bisphenol F diglycidyl ether copolymer	E	≤ 0.1 ppm
pentaerythritol, propoxylated, mercaptoglycerol capped	D	> 0.1 to ≤ 1 ppm
2,4,6-tris[(dimethylamino)methyl]phenol	E	≤ 0.1 ppm
2-ethylhexanoic acid	E	≤ 0.1 ppm
N-aminoethylpiperazine	E	≤ 0.1 ppm
triethylenetetramine	E	≤ 0.1 ppm
Notes:	*Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.*	

8.2. Exposure controls

8.2.1. Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can

Continued...

	be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk.
8.2.2. Individual protection measures, such as personal protective equipment	
Eye and face protection	‣ Safety glasses with side shields. ‣ Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent] ‣ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.
Skin protection	See Hand protection below
Hands/feet protection	‣ Wear chemical protective gloves, e.g. PVC. ‣ Wear safety footwear or safety gumboots, e.g. Rubber **NOTE:** ‣ The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. ‣ Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.
Body protection	See Other protection below
Other protection	‣ Overalls. ‣ P.V.C apron. ‣ Barrier cream.

Respiratory protection

Type -P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

8.2.3. Environmental exposure controls

See section 12

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Brown Putty

Physical state	Non Slump Paste	**Relative density (Water = 1)**	Not Available
Odor	Not Available	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Available
pH (as supplied)	Not Available	**Decomposition temperature (°C)**	Not Available
Melting point / freezing point (°C)	Not Available	**Viscosity (cSt)**	Not Available
Initial boiling point and boiling range (°C)	Not Available	**Molecular weight (g/mol)**	Not Available
Flash point (°C)	Not Available		
Evaporation rate	Not Available	**Explosive properties**	Not Available
Flammability	Not Available	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	Not Available	**Surface Tension (dyn/cm or mN/m)**	Not Available
Lower Explosive Limit (%)	Not Available	**Volatile Component (%vol)**	Not Available
Vapour pressure (kPa)	Not Available	**Gas group**	Not Available
Solubility in water	Immiscible	**pH as a solution (1%)**	Not Available
Vapour density (Air = 1)	Not Available	**VOC g/L**	Not Available
Nanoform Solubility	Not Available	**Nanoform Particle Characteristics**	Not Available
Particle Size	Not Available		

9.2. Other information

Not Available

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SECTION 10 Stability and reactivity

10.1.Reactivity	See section 7.2
10.2. Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
10.3. Possibility of hazardous reactions	See section 7.2
10.4. Conditions to avoid	See section 7.2
10.5. Incompatible materials	See section 7.2
10.6. Hazardous decomposition products	See section 5.3

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
Ingestion	The material has **NOT** been classified by EC Directives or other classification systems as 'harmful by ingestion'. This is because of the lack of corroborating animal or human evidence.
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	This material can cause eye irritation and damage in some persons.
Chronic	Studies show that inhaling this substance for over a long period (e.g. in an occupational setting) may increase the risk of cancer. Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Ample evidence exists that this material directly causes reduced fertility

KwikWood Stick

TOXICITY	IRRITATION
Not Available	Not Available

bisphenol A diglycidyl ether polymer

TOXICITY	IRRITATION
dermal (rat) LD50: >1200 mg/kg[2]	Not Available
Oral (Mouse) LD50; >500 mg/kg[2]	

bisphenol F diglycidyl ether copolymer

TOXICITY	IRRITATION
dermal (rat) LD50: >400 mg/kg[2]	Eye: no adverse effect observed (not irritating)[1]
Oral (Rat) LD50: >5000 mg/kg[2]	Skin: adverse effect observed (irritating)[1]

pentaerythritol, propoxylated, mercaptoglycerol capped

TOXICITY	IRRITATION
Dermal (rabbit) LD50: >10200 mg/kg *[2]	Not Available
Inhalation(Rat) LC50: >100 mg/m3 *[2]	
Oral (Rat) LD50: 2600 mg/kg *[2]	

2,4,6-tris[(dimethylamino)methyl]phenol

TOXICITY	IRRITATION
Dermal (rabbit) LD50: 1280 mg/kg[2]	Eye (rabbit): 0.05 mg/24h - SEVERE
Inhalation(Rat) LC50: >0.5 mg/l/1 hr.[2]	Eye: adverse effect observed (irreversible damage)[1]
Oral (Rat) LD50: 1200 mg/kg[2]	Skin (rabbit): 2 mg/24h - SEVERE
Oral (Rat) LD50: 2500 mg/kg *[2]	Skin: adverse effect observed (corrosive)[1]

2-ethylhexanoic acid

TOXICITY	IRRITATION
Dermal (rabbit) LD50: 1260 mg/kg[2]	Eye (rabbit): 4.5 mg SEVERE
Oral (Rat) LD50: 3000 mg/kg[2]	Skin (rabbit): 10 mg/24h mild

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	Skin (rabbit): 450 mg open mild

N-aminoethylpiperazine

TOXICITY	IRRITATION
Dermal (rabbit) LD50: 880 mg/kg[2]	Eye (rabbit): 20 mg/24h - mod
Intraperitoneal (Mouse) LD50: 250 mg/kg[2]	Eye: adverse effect observed (irritating)[1]
Oral (Rat) LD50: 2410 mg/kg[2]	Skin (rabbit): 0.1 mg/24h - mild
	Skin (rabbit): 5 mg/24h - SEVERE
	Skin: adverse effect observed (corrosive)[1]

triethylenetetramine

TOXICITY	IRRITATION
Dermal (rabbit) LD50: 805 mg/kg[2]	Not Available
Oral (Rat) LD50: 1591.4 mg/kg[1]	

titanium dioxide

TOXICITY	IRRITATION
Inhalation (Rat)TCLo: 0.04 mg/kg[2]	Eye: no adverse effect observed (not irritating)[1]
Oral (Mouse)LD50; >10000 mg/kg *[2]	Skin (human): 0.3 mg /3D (int)-mild *
Oral (Mouse)TDLo: 0.0032 mg/kg[2]	Skin: no adverse effect observed (not irritating)[1]
Oral (Rat)LD50: >20000 mg/kg *[2]	
Oral (Rat)TDLo: 60000 mg/kg[2]	

Legend: *1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances*

pentaerythritol, propoxylated, mercaptoglycerol capped

Polyethers (such as ethoxylated surfactants and polyethylene glycols) are highly susceptible to being oxidized in the air. They then form complex mixtures of oxidation products.
Animal testing reveals that whole the pure, non-oxidised surfactant is non-sensitizing, many of the oxidation products are sensitisers. The oxidization products also cause irritation.
Both the vitro skin corrosion test and the vivo skin irritation study did not show significant irritating properties A reliable in vivo eye irritation in rabbit is available, demonstrating no significant eye irritating properties. In a LLNA study it was shown that the material could elicit a SI =3. Based on this result, the material needs to be classified as a skin sensitiser, according to Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures. A 90-day oral gavage study in rats was performed according to GLP and OECD 408 (1998). Based on decreased platelet count and increased incidence of follicular hypertrophy/hyperplasia in the thyroid glands in males at 250 mg/kg bw/d and above, the NOAEL was set at 75 mg/kg bw/d. Based on the available data on genetic toxicity, the substance needs not to be classified for genotoxicity according to Regulation (EC) No. 1272/2008 on Classification, Labelling and Packaging of Substances and Mixture
* REACh Dossier

2,4,6-tris[(dimethylamino)methyl]phenol

Overexposure to most of these materials may cause adverse health effects.
Many amine-based compounds can cause release of histamines, which, in turn, can trigger allergic and other physiological effects, including constriction of the bronchi or asthma and inflammation of the cavity of the nose. Whole-body symptoms include headache, nausea, faintness, anxiety, a decrease in blood pressure, rapid heartbeat, itching, reddening of the skin, urticaria (hives) and swelling of the face, which are usually transient.
There are generally four routes of possible or potential exposure: inhalation, skin contact, eye contact, and swallowing.
Inhalation: Inhaling vapours may result in moderate to severe irritation of the tissues of the nose and throat and can irritate the lungs. Higher concentrations of certain amines can produce severe respiratory irritation, characterized by discharge from the nose, coughing, difficulty in breathing and chest pain.

N-aminoethylpiperazine

for piperazine:
Exposure to piperazine and its salts has clearly been demonstrated to cause asthma in occupational settings. No NOAEL can be estimated for respiratory sensitisation (asthma).
Although the LD50 levels indicate a relatively low level of oral acute toxicity (LD50 1-5 g/kg bw), signs of neurotoxicity may appear in humans after exposure to lower doses. Based on exposure levels of up to 3.4 mg/kg/day piperazine base and a LOAEL of 110 mg/kg, there is no concern for acute toxicity
In pigs, piperazine is readily absorbed from the gastrointestinal tract, and the major part of the resorbed compound is excreted as unchanged piperazine during the first 48 hours.
Ethyleneamines are very reactive and can cause chemical burns, skin rashes and asthma-like symptoms. It is readily absorbed through the skin and may cause eye blindness and irreparable damage. As such, they require careful handling.

titanium dioxide

* IUCLID
Laboratory (in vitro) and animal studies show, exposure to the material may result in a possible risk of irreversible effects, with the possibility of producing mutation.
Exposure to titanium dioxide is via inhalation, swallowing or skin contact. When inhaled, it may deposit in lung tissue and lymph nodes causing dysfunction of the lungs and immune system. Absorption by the stomach and intestines depends on the size of the particle.

WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.

KwikWood Stick & pentaerythritol, propoxylated, mercaptoglycerol capped & N-aminoethylpiperazine

The following information refers to contact allergens as a group and may not be specific to this product.
Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type.

pentaerythritol, propoxylated, mercaptoglycerol capped & 2,4,6-tris[(dimethylamino)methyl]phenol & 2-ethylhexanoic acid & N-aminoethylpiperazine & titanium dioxide

Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant.

Continued...

2,4,6-tris[(dimethylamino)methyl]phenol & titanium dioxide	No significant acute toxicological data identified in literature search.
2,4,6-tris[(dimethylamino)methyl]phenol & 2-ethylhexanoic acid	The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
2,4,6-tris[(dimethylamino)methyl]phenol & N-aminoethylpiperazine	The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration.
2-ethylhexanoic acid & titanium dioxide	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.
N-aminoethylpiperazine & titanium dioxide	The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

Acute Toxicity	✗	**Carcinogenicity**	✓
Skin Irritation/Corrosion	✓	**Reproductivity**	✓
Serious Eye Damage/Irritation	✓	**STOT - Single Exposure**	✗
Respiratory or Skin sensitisation	✓	**STOT - Repeated Exposure**	✗
Mutagenicity	✗	**Aspiration Hazard**	✗

Legend: ✗ *– Data either not available or does not fill the criteria for classification*
✓ *– Data available to make classification*

11.2 Information on other hazards

11.2.1. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

11.2.2. Other information

See Section 11.1

SECTION 12 Ecological information

12.1. Toxicity

KwikWood Stick

Endpoint	Test Duration (hr)	Species	Value	Source
Not Available	Not Available	Not Available	Not Available	Not Available

bisphenol A diglycidyl ether polymer

Endpoint	Test Duration (hr)	Species	Value	Source
EC50	48h	Crustacea	~2mg/l	2
EC50(ECx)	24h	Crustacea	3mg/l	Not Available
LC50	96h	Fish	2.4mg/l	Not Available

bisphenol F diglycidyl ether copolymer

Endpoint	Test Duration (hr)	Species	Value	Source
Not Available	Not Available	Not Available	Not Available	Not Available

pentaerythritol, propoxylated, mercaptoglycerol capped

Endpoint	Test Duration (hr)	Species	Value	Source
EC50	48h	Crustacea	12mg/l	Not Available
LC50	96h	Fish	87mg/l	Not Available
EC50(ECx)	48h	Crustacea	12mg/l	Not Available

2,4,6-tris[(dimethylamino)methyl]phenol

Endpoint	Test Duration (hr)	Species	Value	Source
EC50	72h	Algae or other aquatic plants	2.8mg/l	2
EC50	48h	Crustacea	>100mg/l	2
EC50(ECx)	24h	Crustacea	280mg/l	Not Available
LC50	96h	Fish	1000mg/l	Not Available

2-ethylhexanoic acid

Endpoint	Test Duration (hr)	Species	Value	Source
EC50	72h	Algae or other aquatic plants	49.3mg/l	2
EC50	48h	Crustacea	85.4mg/l	1
EC50	96h	Algae or other aquatic plants	41mg/l	1
LC50	96h	Fish	>100mg/l	2
NOEC(ECx)	24h	Fish	14.424mg/L	4

Continued...

N-aminoethylpiperazine

Endpoint	Test Duration (hr)	Species	Value	Source
EC50	72h	Algae or other aquatic plants	495mg/l	1
EC50	48h	Crustacea	32mg/l	1
LC50	96h	Fish	>100mg/l	2
NOEC(ECx)	48h	Crustacea	18mg/l	1

triethylenetetramine

Endpoint	Test Duration (hr)	Species	Value	Source
BCF	1008h	Fish	<0.5	7
EC50	72h	Algae or other aquatic plants	2.5mg/l	1
EC50	48h	Crustacea	31.1mg/l	1
EC50	96h	Algae or other aquatic plants	3.7mg/l	4
ErC50	72h	Algae or other aquatic plants	2.5mg/l	1
LC50	96h	Fish	180mg/l	1
EC10(ECx)	72h	Algae or other aquatic plants	0.67mg/l	1

titanium dioxide

Endpoint	Test Duration (hr)	Species	Value	Source
BCF	1008h	Fish	<1.1-9.6	7
EC50	72h	Algae or other aquatic plants	3.75-7.58mg/l	4
EC50	48h	Crustacea	1.9mg/l	2
EC50	96h	Algae or other aquatic plants	179.05mg/l	2
LC50	96h	Fish	1.85-3.06mg/l	4
NOEC(ECx)	672h	Fish	>=0.004mg/L	2

Legend: *Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data*

DO NOT discharge into sewer or waterways.

12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
2,4,6-tris[(dimethylamino)methyl]phenol	HIGH	HIGH
2-ethylhexanoic acid	LOW	LOW
N-aminoethylpiperazine	HIGH	HIGH
triethylenetetramine	LOW	LOW
titanium dioxide	HIGH	HIGH

12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
2,4,6-tris[(dimethylamino)methyl]phenol	LOW (LogKOW = 0.773)
2-ethylhexanoic acid	LOW (LogKOW = 2.64)
N-aminoethylpiperazine	LOW (LogKOW = -1.5677)
triethylenetetramine	LOW (BCF = 5)
titanium dioxide	LOW (BCF = 10)

12.4. Mobility in soil

Ingredient	Mobility
2,4,6-tris[(dimethylamino)methyl]phenol	LOW (KOC = 15130)
2-ethylhexanoic acid	LOW (KOC = 24.06)
N-aminoethylpiperazine	LOW (KOC = 171.7)
triethylenetetramine	LOW (KOC = 309.9)
titanium dioxide	LOW (KOC = 23.74)

12.5. Results of PBT and vPvB assessment

	P	B	T
Relevant available data	Not Available	Not Available	Not Available
PBT	✗	✗	✗
vPvB	✗	✗	✗

Continued...

PBT Criteria fulfilled?	No
vPvB	No

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

12.7. Other adverse effects

No evidence of ozone depleting properties were found in the current literature.

SECTION 13 Disposal considerations

13.1. Waste treatment methods

Product / Packaging disposal	▸ Containers may still present a chemical hazard/ danger when empty. ▸ Return to supplier for reuse/ recycling if possible. Otherwise: ▸ If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. ▸ Recycle wherever possible or consult manufacturer for recycling options. ▸ Consult State Land Waste Management Authority for disposal. ▸ Bury residue in an authorised landfill.
Waste treatment options	Not Available
Sewage disposal options	Not Available

SECTION 14 Transport information

Note:	For inner packagings not over 5L as manufactured and supplied by J-B Weld, the following exceptions apply: DOT - 49CFR §173.155 (b); IMDG - §2.10.2.7; IATA - Special Provision A197 For non-exempt packagings, the proper shipping name is UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN), 9, PGIII
HAZCHEM	Not Applicable

Land transport (ADR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. **UN number or ID number**	Not Applicable
14.2. **UN proper shipping name**	Not Applicable
14.3. **Transport hazard class(es)**	Class: Not Applicable Subsidiary Hazard: Not Applicable
14.4. **Packing group**	Not Applicable
14.5. **Environmental hazard**	Not Applicable
14.6. **Special precautions for user**	Hazard identification (Kemler): Not Applicable Classification code: Not Applicable Hazard Label: Not Applicable Special provisions: Not Applicable Limited quantity: Not Applicable Tunnel Restriction Code: Not Applicable

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. **UN number**	Not Applicable
14.2. **UN proper shipping name**	Not Applicable
14.3. **Transport hazard class(es)**	ICAO/IATA Class: Not Applicable ICAO / IATA Subsidiary Hazard: Not Applicable ERG Code: Not Applicable
14.4. **Packing group**	Not Applicable
14.5. **Environmental hazard**	Not Applicable
14.6. **Special precautions for user**	Special provisions: Not Applicable Cargo Only Packing Instructions: Not Applicable Cargo Only Maximum Qty / Pack: Not Applicable Passenger and Cargo Packing Instructions: Not Applicable Passenger and Cargo Maximum Qty / Pack: Not Applicable

Continued...

	Passenger and Cargo Limited Quantity Packing Instructions	Not Applicable
	Passenger and Cargo Limited Maximum Qty / Pack	Not Applicable

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. **UN number**	Not Applicable	
14.2. **UN proper shipping name**	Not Applicable	
14.3. **Transport hazard class(es)**	IMDG Class	Not Applicable
	IMDG Subsidiary Hazard	Not Applicable
14.4. **Packing group**	Not Applicable	
14.5 **Environmental hazard**	Not Applicable	
14.6. **Special precautions for user**	EMS Number	Not Applicable
	Special provisions	Not Applicable
	Limited Quantities	Not Applicable

Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. **UN number**	Not Applicable	
14.2. **UN proper shipping name**	Not Applicable	
14.3. **Transport hazard class(es)**	Not Applicable	Not Applicable
14.4. **Packing group**	Not Applicable	
14.5. **Environmental hazard**	Not Applicable	
14.6. **Special precautions for user**	Classification code	Not Applicable
	Special provisions	Not Applicable
	Limited quantity	Not Applicable
	Equipment required	Not Applicable
	Fire cones number	Not Applicable

14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
bisphenol A diglycidyl ether polymer	Not Available
bisphenol F diglycidyl ether copolymer	Not Available
pentaerythritol, propoxylated, mercaptoglycerol capped	Not Available
2,4,6-tris[(dimethylamino)methyl]phenol	Not Available
2-ethylhexanoic acid	Not Available
N-aminoethylpiperazine	Not Available
triethylenetetramine	Not Available
titanium dioxide	Not Available

14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
bisphenol A diglycidyl ether polymer	Not Available
bisphenol F diglycidyl ether copolymer	Not Available
pentaerythritol, propoxylated, mercaptoglycerol capped	Not Available
2,4,6-tris[(dimethylamino)methyl]phenol	Not Available
2-ethylhexanoic acid	Not Available
N-aminoethylpiperazine	Not Available
triethylenetetramine	Not Available
titanium dioxide	Not Available

Continued...

SECTION 15 Regulatory information

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

bisphenol A diglycidyl ether polymer is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List
Great Britain GB mandatory classification and labelling list (GB MCL)
International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

bisphenol F diglycidyl ether copolymer is found on the following regulatory lists

Not Applicable

pentaerythritol, propoxylated, mercaptoglycerol capped is found on the following regulatory lists

Not Applicable

2,4,6-tris[(dimethylamino)methyl]phenol is found on the following regulatory lists

Great Britain GB mandatory classification and labelling list (GB MCL)

2-ethylhexanoic acid is found on the following regulatory lists

Great Britain GB mandatory classification and labelling (GB MCL) technical reports
Great Britain GB mandatory classification and labelling list (GB MCL)

N-aminoethylpiperazine is found on the following regulatory lists

Great Britain GB mandatory classification and labelling list (GB MCL)

triethylenetetramine is found on the following regulatory lists

Great Britain GB mandatory classification and labelling list (GB MCL)

titanium dioxide is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List
Great Britain GB mandatory classification and labelling list (GB MCL)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans
International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)
UK Workplace Exposure Limits (WELs).

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2020/878; Regulation (EC) No 1272/2008 as updated through ATPs.

Information according to 2012/18/EU (Seveso III):

Seveso Category	Not Available

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (bisphenol A diglycidyl ether polymer; bisphenol F diglycidyl ether copolymer; pentaerythritol, propoxylated, mercaptoglycerol capped; 2,4,6-tris[(dimethylamino)methyl]phenol; 2-ethylhexanoic acid; N-aminoethylpiperazine; triethylenetetramine; titanium dioxide)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	No (pentaerythritol, propoxylated, mercaptoglycerol capped)
Japan - ENCS	No (pentaerythritol, propoxylated, mercaptoglycerol capped)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (bisphenol A diglycidyl ether polymer; pentaerythritol, propoxylated, mercaptoglycerol capped)
Vietnam - NCI	Yes
Russia - FBEPH	No (pentaerythritol, propoxylated, mercaptoglycerol capped)
Legend:	*Yes = All CAS declared ingredients are on the inventory* *No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.*

SECTION 16 Other information

Revision Date	02/20/2023
Initial Date	09/22/2020

Full text Risk and Hazard codes

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.

Continued...

H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

SDS Version Summary

Version	Date of Update	Sections Updated
2.7	02/19/2023	Toxicological information - Chronic Health, Composition / information on ingredients - Ingredients

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.
The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios.
For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:
EN 166 Personal eye-protection
EN 340 Protective clothing
EN 374 Protective gloves against chemicals and micro-organisms
EN 13832 Footwear protecting against chemicals
EN 133 Respiratory protective devices

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Classification according to regulation (EC) No 1272/2008 [CLP] and amendments	Classification Procedure
Carcinogenicity Category 1A, H350i	Calculation method
Reproductive Toxicity Category 1A, H360Fd	Calculation method
Skin Corrosion/Irritation Category 2, H315	Minimum classification
Sensitisation (Skin) Category 1A, H317	Calculation method
Serious Eye Damage/Eye Irritation Category 2, H319	Minimum classification
, EUH211	Calculation method

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