

# J-B Weld Company LLC

## Version No: 4.6

Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Issue Date: 10/25/2023 Print Date: 02/06/2024 S.GHS.USA.EN

# **SECTION 1 Identification**

Product Identifier		
Product name	SteelStik™ Epoxy Putty	
Synonyms	8267 (SteelStik™ Epoxy Putty Stick), 8268 (7" SteelStik™ Epoxy Putty Stick)	
Other means of identification	UFI:SRVQ-J0S9-X008-KKMU	

## Recommended use of the chemical and restrictions on use

Relevant identified uses Use according to manufacturer's directions.

# Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	J-B Weld Company LLC
Address	400 CMH Road TX 75482 United States
Telephone	903-885-7696
Fax	Not Available
Website	WWW.JBWeld.com
Email	info@JBWeld.com

# Emergency phone number

Association / Organisation	InfoTrac	
Emergency telephone numbers	Transportation Emergencies: 800-535-5053 or (24 hours)	
Other emergency telephone numbers	Poison Control Centers: Medical Emergencies 800-222-1222 (24 hours)	

## SECTION 2 Hazard(s) identification

# Classification of the substance or mixture

NFPA 704 diamond



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

 Classification
 Skin Corrosion/Irritation Category 2, Sensitisation (Skin) Category 1B, Serious Eye Damage/Eye Irritation Category 2A

 Label elements
 Hazard pictogram(s)

Signal word Warning

# Hazard statement(s)

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

# Hazard(s) not otherwise classified

Not Applicable

# Precautionary statement(s) Prevention

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

# Precautionary statement(s) Response

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.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

# Precautionary statement(s) Storage

Not Applicable

# Precautionary statement(s) Disposal

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

# **SECTION 3 Composition / information on ingredients**

## Substances

See section below for composition of Mixtures

# Mixtures

CAS No	%[weight]	Name
7439-89-6	21	iron
72244-98-5*	10.77	pentaerythritol. propoxylated. mercaptoglycerol capped
25068-38-6*	10.21	bisphenol A diglycidyl ether polymer
90-72-2*	1	2.4.6-tris[(dimethylamino)methyl]phenol
3101-60-8*	0.54	4-tert-butylphenyl glycidyl ether
13463-67-7	0.5	titanium dioxide (brookite)
71074-89-0*	0.18	bis[(dimethylamino)methyl]phenol
14808-60-7*	0.07	Quartz
1333-86-4	0.05	carbon black
14807-96-6*	34.8	Talc
65997-17-3	18	glass, oxide
1318-59-8*	1.57	Chlorite
16389-88-1*	0.62	Dolomite
546-93-0*	0.62	Magnesite

# **SECTION 4 First-aid measures**

# Description of first aid measures

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

## See Section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

# **SECTION 5 Fire-fighting measures**

## Extinguishing media

Metal dust fires need to be smothered with sand, inert dry powders.

DO NOT USE WATER, CO2 or FOAM.
 Use DRY sand, graphite powder, dry sodium chloride based extinguishers, G-1 or Met L-X to smother fire.

• DO NOT use halogenated fire extinguishing agents.

## Special hazards arising from the substrate or mixture

Fire Incompatibility	Reacts with acids producing flammable / explosive hydrogen (H2) gas	
Special protective equipment a	and precautions for fire-fighters	
Sine Sinkline	Alert Fire Department and tell them location and nature of hazard.	

Fire Fighting	Wear breathing apparatus plus protective gloves in the event of a fire.
Fire/Explosion Hazard	<ul> <li>DO NOT disturb burning dust. Explosion may result if dust is stirred into a cloud, by providing oxygen to a large surface of hot metal.</li> <li>DO NOT use water or foam as generation of explosive hydrogen may result.</li> <li>Decomposition may produce toxic fumes of: metal oxides</li> <li>May emit corrosive fumes.</li> </ul>

# **SECTION 6 Accidental release measures**

Personal precautions, protective equipment and emergency procedures

See section 8

# Environmental precautions

See section 12

## Methods and material for containment and cleaning up

Minor Spills	<ul> <li>Clean up all spills immediately.</li> <li>Avoid contact with skin and eyes.</li> <li>Wear impervious gloves and safety goggles.</li> </ul>
Major Spills	Minor hazard. ► Clear area of personnel. ► Alert Fire Brigade and tell them location and nature of hazard.

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

# **SECTION 7 Handling and storage**

# Safe handling Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store in a cool, dry, well-ventilated area. Area Area

# Conditions for safe storage, including any incompatibilities

Suitable container	<ul> <li>Polyethylene or polypropylene container.</li> <li>Packing as recommended by manufacturer.</li> <li>Check all containers are clearly labelled and free from leaks.</li> </ul>
Storage incompatibility	<ul> <li>For frits:</li> <li>Avoid storage with hydrogen fluoride/ hydrofluoric acid, oxygen difluoride, manganese trifluoride, fluorine and other fluorine containing compounds, manganese trioxide, chlorates, chlorine trifluoride, chlorine trioxide, strong alkalis, metal oxides, concentrated orthophosphoric acid or vinyl acetate.</li> <li>WARNING: Avoid or control reaction with peroxides. All <i>transition metal</i> peroxides should be considered as potentially explosive. For example transition metal complexes of alkyl hydroperoxides may decompose explosively.</li> <li>Many metals may incandesce, react violently, ignite or react explosively upon addition of concentrated nitric acid.</li> <li>Reacts slowly with water.</li> <li>CAUTION contamination with moisture will liberate explosive hydrogen gas, causing pressure build up in sealed containers.</li> <li>Reacts violently with caustic soda, other alkalies - generating heat, highly flammable hydrogen gas.</li> <li>If alkali is dry, heat generated may ignite hydrogen - if alkali is in solution may cause violent foaming</li> </ul>

Metals exhibit varving degrees of activity. Reaction is reduced in the massive form (sheet, rod, or drop), compared with finely divided forms. The
less active metals will not burn in air but:
can react exothermically with oxidising acids to form noxious gases.
Finely divided metal powders develop pyrophoricity when a critical specific surface area is exceeded; this is ascribed to high heat of oxide
formation on exposure to air.
Safe handling is possible in relatively low concentrations of oxygen in an inert gas.
Several pyrophoric metals, stored in glass bottles have ignited when the container is broken on impact.
Many metals in elemental form react exothermically with compounds having active hydrogen atoms (such as acids and water) to form
flammable hydrogen gas and caustic products.
Elemental metals may react with azo/diazo compounds to form explosive products.
Some elemental metals form explosive products with halogenated hydrocarbons.

# SECTION 8 Exposure controls / personal protection

# **Control parameters**

# Occupational Exposure Limits (OEL)

# INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US OSHA Permissible Exposure Limits (PELs) Table Z-1	bisphenol A diglycidyl ether polymer	Particulates Not Otherwise Regulated (PNOR)- Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	bisphenol A diglycidyl ether polymer	Particulates Not Otherwise Regulated (PNOR)- Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	bisphenol A diglycidyl ether polymer	Inert or Nuisance Dust: Total Dust	15 mg/m3 / 50 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	bisphenol A diglycidyl ether polymer	Inert or Nuisance Dust: Respirable fraction	5 mg/m3 / 15 mppcf	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	bisphenol A diglycidyl ether polymer	Particulates not otherwise regulated	Not Available	Not Available	Not Available	See Appendix D
US OSHA Permissible Exposure Limits (PELs) Table Z-1	Talc	Particulates Not Otherwise Regulated (PNOR)- Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	Talc	Particulates Not Otherwise Regulated (PNOR)- Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	Talc	Silicates (less than 1% crystalline silica): Talc (not containing asbestos)	20 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	Talc	Silicates (less than 1% crystalline silica): Soapstone	20 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	Talc	Silicates (less than 1% crystalline silica): Talc (containing asbestos)	Not Available	Not Available	Not Available	Use asbestos limit
US NIOSH Recommended Exposure Limits (RELs)	Talc	Talc (containing no asbestos and less than 1% quartz) - respirable	2 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	Chlorite	Particulates Not Otherwise Regulated (PNOR)- Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	Chlorite	Particulates Not Otherwise Regulated (PNOR)- Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	Chlorite	Inert or Nuisance Dust: Respirable fraction	5 mg/m3 / 15 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	Chlorite	Inert or Nuisance Dust: Total Dust	15 mg/m3 / 50 mppcf	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	Chlorite	Particulates not otherwise regulated	Not Available	Not Available	Not Available	See Appendix D
US OSHA Permissible Exposure Limits (PELs) Table Z-1	Quartz	Quartz - respirable	0.05 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	Quartz	Silica: Crystalline: Quartz (Respirable)	10 (%SiO2+2) mg/m3 / 250 (%SiO2+5) mppcf	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	Quartz	Silica, crystalline (as respirable dust)	0.05 mg/m3	Not Available	Not Available	Ca; See Appendix A
US OSHA Permissible Exposure Limits (PELs) Table Z-1	titanium dioxide (brookite)	Titanium dioxide - Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	titanium dioxide (brookite)	Inert or Nuisance Dust: Total Dust	15 mg/m3 / 50 mppcf	Not Available	Not Available	Not Available

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US OSHA Permissible Exposure Limits (PELs) Table Z-3	titanium dioxide (brookite)	Inert or Nuisance Dust: Respirable fraction	5 mg/m3 / 15 mppcf	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	titanium dioxide (brookite)	Titanium dioxide	Not Available	Not Available	Not Available	Ca; See Appendix A
US OSHA Permissible Exposure Limits (PELs) Table Z-1	glass, oxide	Particulates Not Otherwise Regulated (PNOR)- Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	glass, oxide	Particulates Not Otherwise Regulated (PNOR)- Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	glass, oxide	Inert or Nuisance Dust: Total Dust	15 mg/m3 / 50 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	glass, oxide	Inert or Nuisance Dust: Respirable fraction	5 mg/m3 / 15 mppcf	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	glass, oxide	Particulates not otherwise regulated	Not Available	Not Available	Not Available	See Appendix D
US OSHA Permissible Exposure Limits (PELs) Table Z-1	Magnesite	Magnesite- Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	Magnesite	Magnesite- Total dust	15 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	Magnesite	Magnesite - respirable	5 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	Magnesite	Magnesite - total	10 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	iron	Particulates Not Otherwise Regulated (PNOR)- Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	iron	Particulates Not Otherwise Regulated (PNOR)- Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	iron	Inert or Nuisance Dust: Total Dust	15 mg/m3 / 50 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	iron	Inert or Nuisance Dust: Respirable fraction	5 mg/m3 / 15 mppcf	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	iron	Particulates not otherwise regulated	Not Available	Not Available	Not Available	See Appendix D
US OSHA Permissible Exposure Limits (PELs) Table Z-1	carbon black	Carbon black	3.5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	carbon black	Inert or Nuisance Dust: Total Dust	15 mg/m3 / 50 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	carbon black	Inert or Nuisance Dust: Respirable fraction	5 mg/m3 / 15 mppcf	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	carbon black	Carbon black	3.5 mg/m3	Not Available	Not Available	Ca; TWA 0.1 mg PAHs/m3 [Carbon black in presence of polycyclic aromatic hydrocarbons (PAHs)] See Appendix A See Appendix C

Emergency Limits

Ingredient	TEEL-1 TEEL-2			TEEL-3
bisphenol A diglycidyl ether polymer	90 mg/m3	990 mg/m3		5,900 mg/m3
Quartz	0.075 mg/m3	33 mg/m3		200 mg/m3
titanium dioxide (brookite)	30 mg/m3	330 mg/m3		2,000 mg/m3
glass, oxide	15 mg/m3	170 mg/m3		990 mg/m3
Magnesite	45 mg/m3	260 mg/m3		1,600 mg/m3
iron	3.2 mg/m3	35 mg/m3		150 mg/m3
2,4,6- tris[(dimethylamino)methyl]phenol	6.5 mg/m3	72 mg/m3		430 mg/m3
carbon black	9 mg/m3	99 mg/m3		590 mg/m3
Ingredient	Original IDLH	Original IDLH		IDLH
bisphenol A diglycidyl ether polymer	Not Available		Not Available	
4-tert-butylphenyl glycidyl ether	Not Available		Not Available	
Talc	1,000 mg/m3	1,000 mg/m3		ilable
Chlorite	Not Available		Not Available	
Quartz	25 mg/m3 / 50 mg/m3		Not Available	
titanium dioxide (brookite)	5,000 mg/m3		Not Avai	ilable
glass, oxide	Not Available		Not Avai	ilable

Ingredient	Original IDLH		Revised IDLH	
Dolomite	Not Available		Not Available	
Magnesite	Not Available		Not Available	
iron	Not Available		Not Available	
pentaerythritol, propoxylated, mercaptoglycerol capped	Not Available		Not Available	
bis[(dimethylamino)methyl]phenol	Not Available		Not Available	
2,4,6- tris[(dimethylamino)methyl]phenol	Not Available		Not Available	
carbon black	1,750 mg/m3		Not Available	
Occupational Exposure Banding				
Ingredient	Occupational Exposure Band Rating	Occupat	ional Exposure Band Limit	
4-tert-butylphenyl glycidyl ether	E	≤ 0.1 ppn	1	
pentaerythritol, propoxylated, mercaptoglycerol capped	D	> 0.1 to ≤ 1 ppm		
Notes:	Occupational exposure banding is a process of assigning chemicals into adverse health outcomes associated with exposure. The output of this pri range of exposure concentrations that are expected to protect worker hea	specific cate ocess is an c alth.	gories or bands based on a chemical's potency and the occupational exposure band (OEB), which corresponds to a	

# Exposure controls

Appropriate engineering controls	<ul> <li>Metal dusts must be collected at the source of generation as they are potentially explosive.</li> <li>Avoid ignition sources.</li> <li>Good housekeeping practices must be maintained.</li> </ul>
Individual protection measures, such as personal protective equipment	
Eye and face protection	<ul> <li>Safety glasses with side shields.</li> <li>Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent]</li> <li>Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.</li> </ul>
Skin protection	See Hand protection below
Hands/feet protection	<ul> <li>Wear chemical protective gloves, e.g. PVC.</li> <li>Wear safety footwear or safety gumboots, e.g. Rubber</li> <li>NOTE:</li> <li>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.</li> <li>Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.</li> </ul>
Body protection	See Other protection below
Other protection	<ul> <li>Overalls.</li> <li>P.V.C apron.</li> <li>Barrier cream.</li> </ul>

# **Respiratory protection**

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

# **SECTION 9** Physical and chemical properties

# Information on basic physical and chemical properties

Appearance	Grey 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

# SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	<ul> <li>Presence of heat source and ignition source</li> <li>Product is considered stable and hazardous polymerisation will not occur.</li> </ul>
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

# **SECTION 11 Toxicological information**

# 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. Not normally a hazard due to non-volatile nature of product
Ingestion	The material has <b>NOT</b> 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. Irritation and skin reactions are possible with sensitive skin
Eye	This material can cause eye irritation and damage in some persons. Contact with the eye by metal dusts may produce mechanical abrasion or foreign body penetration of the eyeball. Iron particles embedded in the eye may cause discolouration of the cornea and iris, and effects on the pupil such as poor rection to light and accommodation.
Chronic	Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.

SteelStik™ Epoxy Putty	ΤΟΧΙΟΙΤΥ		IRRITATION		
	Not Available Not Available				
	TOXICITY			IRRITATION	
bisphenol A diglycidyl ether polymer	dermal (rat) LD50: >1200 mg/kg <sup>[2]</sup>			Not Available	
	Oral (Mouse) LD50; >500 mg/kg <sup>[2]</sup>				
	TOXICITY			IRRITATION	
4-tert-butylphenyl glycidyl ether	dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>			Not Available	
	Oral (Rat) LD50: >2000 mg/kg <sup>[1]</sup>				
	ΤΟΧΙΟΙΤΥ	IRRITAT	RITATION		
Taic	dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>	Eye: no adverse effect observed (not irritating) <sup>[1]</sup>			
	Inhalation(Rat) LC50: >2.1 mg/l4h <sup>[1]</sup>	Skin: no adverse effect observed (not irritating) <sup>[1]</sup>			
	Oral (Rat) LD50: >5000 mg/kg <sup>[1]</sup>				

	ΤΟΧΙCΙΤΥ		IRRITATION			
Chlorite	Not Available		Not Available			
	τοχιζιτγ			IRRIT	ATION	
Quartz	Oral (Rat) LD50: 500 mg/kg <sup>[2]</sup>			Not Av	vailable	
	TOXICITY IRRITATION					
	dermal (hamster) LD50: >=10000 mg/kg <sup>[2]</sup> Eye: no adverse effect observ		served (no	ed (not irritating) <sup>[1]</sup>		
titanium dioxide (brookite)	Inhalation(Rat) LC50: >2.28 mg/l4h <sup>[1]</sup> Skin: no adverse effect observ		served (n	ot irritating) <sup>[1]</sup>		
	Oral (Rat) LD50: >=2000 mg/kg <sup>[1]</sup>					
	тохісіту		IRRITATION			
glass, oxide	Not Available		Not Available			
Delemite	τοχιςιτγ		IRRITATION			
Dolomite	Not Available		Not Available			
Magnosito	TOXICITY		IRR	RRITATION		
magnesite	Oral (Rat) LD50: >2000 mg/kg <sup>[1]</sup>			Not	Not Available	
iron	ΤΟΧΙCITY			IRR	ITATION	
iron	Oral (Rat) LD50: 98600 mg/kg <sup>[2]</sup>			Not	Available	
	ΤΟΧΙΟΙΤΥ				IRRITATION	
pentaerythritol, propoxylated,	Dermal (rabbit) LD50: >10200 mg/kg * <sup>[2]</sup>				Not Available	
mercaptoglycerol capped	Inhalation(Rat) LC50: >100 mg/m3 *[2]					
	Oral (Rat) LD50: 2600 mg/kg * <sup>[2]</sup>					
his[(dimethylamino)methyl]nhenol	ΤΟΧΙΟΙΤΥ		IRRITATION			
siel(amenikamie)menikajibiene	Not Available		Not Available			
	ΤΟΧΙΟΙΤΥ	IRRITATIO	N			
2,4,6- tris[(dimethylamino)methyl]phenol	dermal (rat) LD50: >973 mg/kg <sup>[1]</sup>	dermal (rat) LD50: >973 mg/kg <sup>[1]</sup> Eye: adverse effect observed (irreversible damage) <sup>[1]</sup>			age) <sup>[1]</sup>	
	Oral (Rat) LD50: 1200 mg/kg <sup>[2]</sup>	Skin: adve	erse effect observed (corros	sive) <sup>[1]</sup>		
	ΤΟΧΙΟΙΤΥ	DXICITY IRRITATION				
carbon black	Dermal (rabbit) LD50: >2000 mg/kg <sup>[1]</sup>	al (rabbit) LD50: >2000 mg/kg <sup>[1]</sup> Eye: no adverse effect observed		ed (not irr	itating) <sup>[1]</sup>	
	Oral (Rat) LD50: >2000 mg/kg <sup>[1]</sup>	Ski	n: no adverse effect observ	ved (not in	ritating) <sup>[1]</sup>	
Legend: 1	I Value obtained from Europe ECHA Registered Su	ubstances - Acute	toxicity 2. Value obtained fi	om manu	facturer's SDS. Unless otherwise	
specified data extracted from RTECS - Register of Toxic Effect of chemical Substances						
E	ar titanium diaxida					

TITANIUM DIOXIDE (BROOKITE)	The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. 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.
GLASS, OXIDE	A similar spherical glass powder was nontoxic to rats at 5,000 mg/kg. All animals survived, gained weight and appeared active and healthy. There were no signs of gross toxicity, adverse pharmacologic effects or abnormal behavior. There are no known reports of subchronic toxicity of nonfibrous glass. There are no known reports of carcinogenicity of nonfibrous glass. When tested for primary irritation potential, a similar material caused minimal irritation to eyes and was non-irritating to skin. Dust in excess of recommended exposure limits may result in irritation to the respiratory tract
pentaerythritol, propoxylated, mercaptoglycerol capped	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. 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 CARBON BLACK Inhalation (rat) TCLo: 50 mg/m3/6h/90D-I Nil reported SteelStik™ Epoxy Putty & The following information refers to contact allergens as a group and may not be specific to this product. pentaerythritol, propoxylated, Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact mercaptoglycerol capped eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. SteelStik™ Epoxy Putty & Exposure to titanium dioxide is via inhalation, swallowing or skin contact. When inhaled, it may deposit in lung tissue and lymph nodes causing TITANIUM DIOXIDE dysfunction of the lungs and immune system. Absorption by the stomach and intestines depends on the size of the particle. (BROOKITE) SteelStik™ Epoxy Putty & CARBON BLACK WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans. TITANIUM DIOXIDE (BROOKITE) & GLASS, OXIDE No significant acute toxicological data identified in literature search. & CARBON BLACK × Acute Toxicity × Carcinogenicity V × Skin Irritation/Corrosion Reproductivity × Serious Eye Damage/Irritation V STOT - Single Exposure Respiratory or Skin ~ STOT - Repeated Exposure × sensitisation X X Mutagenicity Aspiration Hazard ¥ − Data either not available or does not fill the criteria for classification Legend: ✔ – Data available to make classification

# **SECTION 12 Ecological information**

	Endpoint	Test Duration (hr)		Species	Value		Source		
SteelStik M Epoxy Putty	Not Available	Not Available		Not Available	Not Availa	ble	e Not Available		
bisphenol A diglycidyl ether	Endpoint	Test Duration (hr)	Test Duration (hr)		Value		Source		
	EC50	48h		Crustacea	Crustacea ~2mg/l		2		
polymer	EC50(ECx)	24h		Crustacea	3mg/l	3mg/l N		Not Available	
	LC50	96h		Fish	2.4mg	1	Not Availabl	e	
	Endpoint	Test Duration (hr)	Spec	cies		Value	•	Source	
4-tert-butylphenyl glycidyl ether	EC50	72h	Alga	e or other aquatic plar	nts	~9mg	~9mg/l		
	EC50	48h	Crustacea			~67.9	)mg/l	2	
	LC50	96h		Fish		~7.5r	~7.5mg/l		
	EC50(ECx)	72h Algae or other aquatic plants		nts	~9mg	ŋ∕l	2		
						I		1	
	Endpoint	Test Duration (hr)	Specie	s		Value		Source	
Talc	EC50	96h	Algae or other aquatic plants		7202.7mg/	1	2		
	LC50	96h	Fish			89581.016	img/l	2	
	NOEC(ECx) 720h			Algae or other aquatic plants 9 <sup>3</sup>			g/I	2	
	Endpoint	Test Duration (br)		Species	Value		Source		
Chlorite	Not Available	point         rest Duration (nr)           Available         Not Available		Not Available		ble	Not Available		
	Endneint	Test Duration (br)		Species	Value		Course		
Quartz		Not Available	Iest Duration (hr) S		Value		Source		
		Not Available Not Available Not Available				Not Available			
	Endpoint	Test Duration (hr)	Specie	es		Value		Source	
titanium dioxido (brookito)	BCF	1008h	Fish			<1.1-9.6		7	
manium dioxide (brookite)	EC50	72h	Algae	or other aquatic plant	S	3.75-7.58	img/l	4	
	EC50	48h	Crusta	Crustacea 1 9mg/l			2		

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Cx) t t Cx) t t t Cx) t t t t t t t t t t t t t t t t t t t	672h         rest Duration (hr)         72h         72h         Test Duration (hr)         Not Available         Test Duration (hr)         96h         72h         Test Duration (hr)         72h         Test Duration (hr)         72h         Test Duration (hr)         Test Duration (hr)         Test Duration (hr)	Fish           Spe           Alga           Fish           Cru           Fish           Spe           Spe           Alga           Fish           Spe           Alga           Alga           Alga           Alga           Crustace           Fish           Alga           Alga	ecies pae or other aquatic p istacea Species Not Available pecies sh Igae or other aquatic gae or other aquatic istacea other aquatic plants a other aquatic plants	plants plants Value Not A plants plants plants plants plants s	>=0.0 Value 18mg/I >100mg/I 0.00499-0.00 0.1-4mg/I	2004mg/L 2000mg/l 2000mg/l 1000mg/l 1000mg/l 2120mg/l >18.5mg/l 18.5mg/l 20819mg/l	Nource	2 Source 2 2 2 2 2 2 2 2 2 2 2 2 2
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t Cx) t Cx) t t Cx) t Cx) t Cx) t t Cx) t t Cx) t t t t t t t t t t t t t t t t t t t	Image: Test Duration (hr)         72h         96h         72h         Test Duration (hr)         Not Available         1         72h         Test Duration (hr)         Test Duration (hr)	Spe           Alga           Fish           Cru           Fish           Fish           Fish           Species           Algae or           Crustace           Fish           Algae or           Crustace           Fish	ecies pae or other aquatic p h ustacea Species Not Available pecies sh lgae or other aquatic lgae or other aquatic sa other aquatic plants a	plants Value Not A plants plants plants plants s s s s s s s s s s s s s s s s s s	Va       >10       >10       >10       >10       P       Available       Image: Ima	lue 000mg/l 000mg/l 000mg/l 1000mg/l 10000mg/l 1000mg/l 1	iource lot Availat	Source 2 2 2 2 2 3 3 3 3 3 3 4 4 4 4 5 5 5 5 5 5 5 5 5 5
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t able t Cx) t Cx) t Cx) t t t t t t t t t t t t t t t t t t t	Test Duration (hr)           Not Available           Image: Test Duration (hr)           96h           72h           Test Duration (hr)           72h           48h           96h           48h           Test Duration (hr)	Species Algae or Crustace Fish Algae or	Species Not Available  pecies sh lgae or other aquatic lgae or other aquatic s other aquatic plants a other aquatic plants	plants plants s s s s s s s s s s s s s s s s s s	e Available 2 2 2 2 3 4 2 2 4 2 2 4 2 2 2 4 2 2 2 2	Sc           /alue           2120mg/l           >18.5mg/l           8.5mg/l           0819mg/l	iource	ble Source 2 2 2 2 2 2 2 2 4 4 4 4
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t Cx) t - 7 4 5 Cx) 4 t	Test Duration (hr)           96h           72h           72h           Test Duration (hr)           72h           48h           96h           48h           Second Part Part Part Part Part Part Part Part	Species Algae or Crustace Fish Algae or	pecies ish Igae or other aquatic Igae or other aquatic Igae or other aquatic Igae or other aquatic plants Igae of the aquatic plants	c plants c plants c plants	Value           18mg/l           >100mg/l           0.00499-0.00           0.1-4mg/l	/alue 2120mg/l >18.5mg/l 18.5mg/l 0819mg/l	2	Source 2 2 2 2 3 Source 2 2 4 4 4 4
t	Test Duration (hr)           96h           72h           72h           Test Duration (hr)           72h           48h           96h           48h           Test Duration (hr)	Species Algae or Crustace Fish Algae or Crustace Fish Algae or	pecies ish Igae or other aquatic Igae or other aquatic Igae or other aquatic Igae or other aquatic plants	s plants	Value           18mg/l           >100mg/l           0.00499-0.00           0.1-4mg/l	/alue 2120mg/l >18.5mg/l 18.5mg/l 0819mg/l		Source 2 2 2 2 3 Source 2 2 4 4 4 4
Cx) t	96h           72h           72h           Test Duration (hr)           72h           48h           96h           48h           Test Duration (hr)	Fish Alg Alg Species Algae or Crustace Fish Algae or	ish Igae or other aquatic Igae or other aquatic Igae or other aquatic Igae or other aquatic plants Igae of the aquatic plants	s plants	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2120mg/l >18.5mg/l I8.5mg/l		2 2 2 3 3 5 0 0 7 2 2 4 4
Cx) t	72h 72h <b>Test Duration (hr)</b> 72h 48h 96h 48h	Alg Alg Algae or Crustace Fish Algae or	Igae or other aquatic Igae or other aquatic Igae or other aquatic Igae or other aquatic plants Igae of the aquatic plants	s plants	>           Value           18mg/l           >100mg/l           0.00499-0.00           0.1-4mg/l	>18.5mg/l  8.5mg/l		2 2 <b>Source</b> 2 2 2 4
t	72h Test Duration (hr) 72h 48h 96h 48h Test Duration (hr	Algae or Crustace Fish Algae or	Igae or other aquatic	s plants	Value 18mg/l >100mg/l 0.00499-0.00 0.1-4mg/l	18.5mg/l		2 Source 2 2 4 4
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Cx) 4	96h 48h Test Duration (hr	Fish Algae or	other aquatic plants	5	0.00499-0.00 0.1-4mg/l	)819mg/l		4
Cx) 4	48h Test Duration (hr	Algae or	other aquatic plants	3	0.1-4mg/l			4
t	Test Duration (hr				3			4
t	Test Duration (hr							
		)	Species	١	Value	Sourc	ce	
50 48h			Crustacea	. 1	12mg/l	Not Av	vailable	
	96h		Fish	8	37mg/l	Not Av	vailable	
Cx)	48h		Crustacea	1	12mg/l	Not Av	vailable	
t	Test Duration (hr)		Species Value		Se	ource		
able	Not Available		Not Available	Not A	Not Available Not Available			ole
							1	
t	Test Duration (hr)	Specie	ies		Value		Source	
	72h	Algae	or other aquatic plan	nts	2.8mg/l		2	
	48h	Crusta	acea		>100mg/l		2	
Cx)	24h	Crusta	tacea		280mg/l		Not Available	
	96h	Fish	Fish		1000mg/l N		Not Ava	ilable
t	Test Duration (br)	Specie	26		Value			Source
-	72h		Algae or other aquatic plants					2
	48h	Crustac	cea		33.076-41	.968ma/l		4
	96h	Fich	Grustacea 33.		>100mg/l			2
			cea		3200mg/l			1
1	x)	72h       48h       x)     24h       96h       Test Duration (hr)       72h       48h       96h	72hAlgae48hCrust24hCrust96hFishTest Duration (hr)72hAlgae of48hCrusta96hFish20024hCrustaCrusta	72h     Algae or other aquatic plan       48h     Crustacea       24h     Crustacea       96h     Fish         Test Duration (hr)     Species       72h     Algae or other aquatic plan       48h     Crustacea       96h     Fish         72h     Algae or other aquatic plan       96h     Fish         24h     Crustacea	72hAlgae or other aquatic plants48hCrustacea24hCrustacea96hFish***********************************	72h     Algae or other aquatic plants     2.8mg.       48h     Crustacea     >100m       x)     24h     Crustacea     280mg       96h     Fish     1000m       Test Duration (hr)     Species     Value       72h     Algae or other aquatic plants     >0.2mg/l       48h     Crustacea     33.076-41       96h     Fish     >100mg/l       72h     Algae or other aquatic plants     >0.2mg/l       48h     Crustacea     33.076-41       96h     Fish     >100mg/l       Cx)     24h     Crustacea     3200mg/l	72hAlgae or other aquatic plants2.8mg/l48hCrustacea>100mg/lx)24hCrustacea280mg/l96hFish1000mg/lVvvTest Duration (hr)SpeciesVvvv	72hAlgae or other aquatic plants2.8mg/l248hCrustacea>100mg/l2x)24hCrustacea280mg/lNot Ava96hFish1000mg/lNot Avavv<

# Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
4-tert-butylphenyl glycidyl ether	HIGH	HIGH
titanium dioxide (brookite)	HIGH	HIGH
Magnesite	LOW	LOW
2,4,6- tris[(dimethylamino)methyl]phenol	HIGH	HIGH

# **Bioaccumulative potential**

Ingredient

Bioaccumulation

Continued...

Ingredient	Bioaccumulation
4-tert-butylphenyl glycidyl ether	LOW (LogKOW = 3.5231)
titanium dioxide (brookite)	LOW (BCF = 10)
Magnesite	LOW (LogKOW = -0.4605)
2,4,6- tris[(dimethylamino)methyl]phenol	LOW (LogKOW = 0.773)

# Mobility in soil

Ingredient	Mobility
4-tert-butylphenyl glycidyl ether	LOW (KOC = 293.2)
titanium dioxide (brookite)	LOW (KOC = 23.74)
Magnesite	HIGH (KOC = 1)
2,4,6- tris[(dimethylamino)methyl]phenol	LOW (KOC = 15130)

# **SECTION 13 Disposal considerations**

Waste treatment methods	
Product / Packaging disposal	<ul> <li>Containers may still present a chemical hazard/ danger when empty.</li> <li>Return to supplier for reuse/ recycling if possible.</li> <li>Otherwise: <ul> <li>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.</li> <li>DO NOT allow wash water from cleaning or process equipment to enter drains.</li> <li>It may be necessary to collect all wash water for treatment before disposal.</li> <li>In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</li> <li>Recycle wherever possible or consult manufacturer for recycling options.</li> <li>Consult State Land Waste Management Authority for disposal.</li> <li>Bury residue in an authorised landfill.</li> </ul> </li> </ul>

# **SECTION 14 Transport information**

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

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

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

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
4-tert-butylphenyl glycidyl ether	Not Available
Talc	Not Available
Chlorite	Not Available
Quartz	Not Available
titanium dioxide (brookite)	Not Available
glass, oxide	Not Available
Dolomite	Not Available
Magnesite	Not Available
iron	Not Available
pentaerythritol, propoxylated, mercaptoglycerol capped	Not Available
bis[(dimethylamino)methyl]phenol	Not Available
2,4,6- tris[(dimethylamino)methyl]phenol	Not Available
carbon black	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
4-tert-butylphenyl glycidyl ether	Not Available

Product name	Ship Type
Talc	Not Available
Chlorite	Not Available
Quartz	Not Available
titanium dioxide (brookite)	Not Available
glass, oxide	Not Available
Dolomite	Not Available
Magnesite	Not Available
iron	Not Available
pentaerythritol, propoxylated, mercaptoglycerol capped	Not Available
bis[(dimethylamino)methyl]phenol	Not Available
2,4,6- tris[(dimethylamino)methyl]phenol	Not Available
carbon black	Not Available

## **SECTION 15 Regulatory information**

## 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

- International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)
- US Alaska Air Quality Control Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5
- US DOE Temporary Emergency Exposure Limits (TEELs)

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US OSHA Permissible Exposure Limits (PELs) Table Z-3

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

### 4-tert-butylphenyl glycidyl ether is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

US EPA Substance Registry Services (SRS) - 2020 CDR TSCA 4 TR

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

## Talc is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

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 Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

US - Alaska Air Quality Control - Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5

US - Massachusetts - Right To Know Listed Chemicals

US NIOSH Carcinogen List

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US OSHA Permissible Exposure Limits (PELs) Table Z-3

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

## Chlorite is found on the following regulatory lists

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

US - Alaska Air Quality Control - Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US OSHA Permissible Exposure Limits (PELs) Table Z-3

# Quartz is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

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 1: Carcinogenic to humans

US - California Proposition 65 - Carcinogens

US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List

US - Massachusetts - Right To Know Listed Chemicals

US DOE Temporary Emergency Exposure Limits (TEELs)

US National Toxicology Program (NTP) 15th Report Part A Known to be Human Carcinogens

US NIOSH Carcinogen List

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Carcinogens Listing

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US OSHA Permissible Exposure Limits (PELs) Table Z-3

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

# titanium dioxide (brookite) is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

	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)
	US - Alaska Air Quality Control - Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5
	US - California Proposition 65 - Carcinogens
	US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List
	US - Massachusetts - Right To Know Listed Chemicals
	US DOE Temporary Emergency Exposure Limits (TEELs)
	US NIOSH Carcinogen List
	US NUSH Recommended Exposure Limits (RELS)
	US OSHA Permissible Exposure Limits (PELS) labe 2-1
	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
Į,	glass, oxide is found on the following regulatory lists
	Chemical Footprint Project - Chemicals of High Concern List
	International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)
	US - Alaska Air Quality Control - Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5
	US - California Proposition 65 - Maximum Allowable Dose Levels (MADLs) for Chemicals Causing Reproductive Toxicity
	US - California e toposition os - No significant Kisk Levels (NSKLS) for Carolinogens
	US Clean Air Act - Hazardous Air Pollutants
	US CWA (Clean Water Act) - Priority Pollutants
	US CWA (Clean Water Act) - Toxic Pollutants
	US DOE Temporary Emergency Exposure Limits (TEELs)
	US National Toxicology Program (NTP) 15th Report Part B. Reasonably Anticipated to be a Human Carcinogen
	US NIOSH Recommended Exposure Limits (RELs)
	US OSHA Permissible Exposure Limits (PELs) Table Z-1
	US OSHA Permissible Exposure Limits (PELs) Table Z-3
	US TOXIC Substances Control Act (TSCA) - Chemical Substance Inventory
l	Dolomite is found on the following regulatory lists
	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
i.	Manual State Constitution of a Bandard State and Bate
à	Magnesite is found on the following regulatory lists
	US - Massachusetts - Right To Know Listed Chemicals
	US DOE temporary emergency exposure Limits (TELS)
	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
ĩ	
ł	iron is found on the following regulatory lists
	International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)
	US - Alaska Air Quality Control - Concentrations I riggering an Air Quality Episode for Air Pollutants Other Than PM-2.5
	US DOE lemporary emergency exposure limits (IEELS)
	US OSHA Permissible Exposure Limits (PELs)
	US OSHA Permissible Exposure Limits (PELs) Table Z-3
	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
ī	nonteenstheitel menerateelyeesel eenend is found on the following remulatory lists
à	pentaerythritol, propoxylated, mercaptoglycerol capped is found on the following regulatory lists
	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
l	bis[(dimethylamino)methyl]phenol is found on the following regulatory lists
	Not Applicable
ï	
	2,4,0-trisi(aimetnyiamino)metnyijphenoi is touna on the tollowing regulatory lists
	US DOE Temporary Emergency Exposure Limits (TEELs)
	US TOXIC Substances Control Act (TSCA) - Chemical Substance Inventory
l	carbon black is found on the following regulatory lists
	Chemical Footprint Project - Chemicals of High Concern List
	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)
	US - California Pronosition 65 - Carcinogens
	US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List
	US - Massachusetts - Right To Know Listed Chemicals
	US DOE Temporary Emergency Exposure Limits (TEELs)
	US NIOSH Carcinogen List
	US NIOSH Recommended Exposure Limits (RELs)
	US OSHA Permissible Exposure Limits (PELs) Table Z-1
	US USHA PERMISSIDIE EXPOSURE LIMITS (PELS) TADIE 2-3

# Additional Regulatory Information

Not Applicable

# Federal Regulations

# Superfund Amendments and Reauthorization Act of 1986 (SARA)

# Section 311/312 hazard categories

No
No
Yes
Yes
Yes
No

# US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

None Reported

# US. EPCRA Section 313 Toxic Release Inventory (TRI) (40 CFR 372) None Reported

# Additional Federal Regulatory Information

Not Applicable

## State Regulations

# US. California Proposition 65

WARNING: This product can expose you to chemicals including Quartz, titanium dioxide (brookite), carbon black, which are known to the State of California to cause cancer. For more information, go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Additional State Regulatory Information

Not Applicable

# **National Inventory Status**

National Inventory	Status		
Australia - AIIC / Australia Non-Industrial Use	No (Chlorite; bis[(dimethylamino)methyl]phenol)		
Canada - DSL	No (Chlorite; Dolomite; bis[(dimethylamino)methyl]phenol)		
Canada - NDSL	No (bisphenol A diglycidyl ether polymer; 4-tert-butylphenyl glycidyl ether; Talc; Chlorite; Quartz; titanium dioxide (brookite); glass, oxide; Magnesite; iron; pentaerythritol, propoxylated, mercaptoglycerol capped; bis[(dimethylamino)methyl]phenol; 2,4,6- tris[(dimethylamino)methyl]phenol; carbon black)		
China - IECSC	Yes		
Europe - EINEC / ELINCS / NLP	No (pentaerythritol, propoxylated, mercaptoglycerol capped)		
Japan - ENCS	No (Chlorite; glass, oxide; Dolomite; iron; pentaerythritol, propoxylated, mercaptoglycerol capped)		
Korea - KECI	No (bis[(dimethylamino)methyl]phenol)		
New Zealand - NZIoC	Yes		
Philippines - PICCS	Yes		
USA - TSCA	No (Chlorite; bis[(dimethylamino)methyl]phenol)		
Taiwan - TCSI	Yes		
Mexico - INSQ	No (bisphenol A diglycidyl ether polymer; 4-tert-butylphenyl glycidyl ether; Chlorite; pentaerythritol, propoxylated, mercaptoglycerol capped; bis[(dimethylamino)methyl]phenol)		
Vietnam - NCI	Yes		

National Inventory	Status		
Russia - FBEPH	No (4-tert-butylphenyl glycidyl ether; Chlorite; pentaerythritol, propoxylated, mercaptoglycerol capped; bis[(dimethylamino)methyl]phenol)		
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	10/25/2023
Initial Date	09/14/2020

# SDS Version Summary

Version	Date of Update	Sections Updated
3.6	10/24/2023	Hazards identification - Classification, Composition / information on ingredients - Ingredients, Name

## Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chernwatch 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.

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