

# SAFETY DATA SHEET

## Section 1. Identification

### Manufacturer

Brodi Specialty Products Ltd  
3175 14th Avenue Unit 1  
Markham On L3R 0H1  
Tel: 1-877-744-0751  
Fax: 1-877-366-7306  
Web: www.brodi.com

### Supplier

Brodi Specialty Products Ltd  
3175 14th Avenue Unit 1  
Markham On L3R 0H1  
Tel: 1-877-744-0751  
Fax: 1-877-366-7306  
Web: www.brodi.com

### Emergency telephone number

(610)286-2500 (24 Hours) Chemtrec Contract No.: 17567

### Product name Code

Brofix Multi Purpose  
FG600450555-24

### Specific uses

Sealants and adhesives

## Section 2. Hazards identification

### OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Classification of the substance or mixture

SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B  
SKIN SENSITIZATION - Category 1

### GHS label elements

#### Hazard pictograms



#### Signal word

Warning!

#### Hazard statements

Causes skin and eye irritation.  
May cause an allergic skin reaction.

### Precautionary statements

#### Prevention

Wear protective gloves. Wear eye or face protection. Avoid breathing dust. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

#### Response

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

#### Storage

Not applicable.

#### Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

### Hazards not otherwise classified

None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** Mixture

Ingredient name	% by weight	CAS number
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	10 - 30	25068-38-6
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	5 - 10	25068-38-6
2,4,6-tris(dimethylaminomethyl)phenol	1 - 5	90-72-2
crystalline silica non-respirable	0.1 - 1	14808-60-7

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Skin contact</b>	Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
<b>Ingestion</b>	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

<b>Inhalation</b>	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
<b>Skin contact</b>	Causes skin irritation. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	Irritating to mouth, throat and stomach.

#### Over-exposure signs/symptoms

<b>Inhalation</b>	No specific data.
<b>Skin contact</b>	Adverse symptoms may include the following: irritation redness

## Section 4. First aid measures

<b>Eye contact</b>	Adverse symptoms may include the following: pain or irritation watering redness
<b>Ingestion</b>	No specific data.
<b><u>Indication of immediate medical attention and special treatment needed, if necessary</u></b>	
<b>Notes to physician</b>	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Specific treatments</b>	No specific treatment.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	None known.

**Specific hazards arising from the chemical** No specific fire or explosion hazard.

### National Fire Protection Association (U.S.A.)



### **Hazardous thermal decomposition products**

Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
sulfur oxides  
halogenated compounds  
metal oxide/oxides

### **Special protective actions for fire-fighters**

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

### **Special protective equipment for fire-fighters**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
<b>For emergency responders</b>	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

## Section 6. Accidental release measures

**Environmental precautions** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

**Large spill** Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities** Do not store above the following temperature: 35°C (95°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

### Precautions for safe handling

**Protective measures** Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## Section 8. Exposure controls/personal protection

### Control parameters

### Occupational exposure limits

Ingredient name	CAS #	Exposure limits
crystalline silica non-respirable	14808-60-7	<p><b>OSHA PEL Z3 (United States, 9/2005). Notes: 250/(%SiO<sub>2</sub>+5)</b> TWA: 250 MPPCF / (%SiO<sub>2</sub>+5) 8 hours. Form: Respirable</p> <p><b>OSHA PEL Z3 (United States, 9/2005). Notes: 10/(SiO<sub>2</sub>+2)</b> TWA: 10 MG/M<sup>3</sup> / (%SiO<sub>2</sub>+2) 8 hours. Form: Respirable</p> <p><b>ACGIH TLV (United States, 3/2012).</b> TWA: 0.025 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction</p> <p><b>NIOSH REL (United States, 1/2013).</b> TWA: 0.05 mg/m<sup>3</sup> 10 hours. Form: respirable dust</p> <p><b>OSHA PEL Z3 (United States, 9/2005). Notes: 30/(%SiO<sub>2</sub>+2)</b> TWA: 30 MG/M<sup>3</sup> / (%SiO<sub>2</sub>+2) 8 hours. Form: Total dust.</p>

**Appropriate engineering controls** Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

## Section 8. Exposure controls/personal protection

### Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Respiratory protection

Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

#### Skin protection

##### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

##### Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

##### Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

## Section 9. Physical and chemical properties

### Physical state

Solid.

### Color

White. Beige. [Light]

### Odor

Pungent. Sulfurous. [Strong]

### Odor threshold

Not available.

### pH

Not applicable.

### Melting point

Not available.

### Boiling point

Not available.

### Flash point

Closed cup: >93.3°C (>199.9°F) [Setaflash.] [Product does not sustain combustion.]

### Evaporation rate

Not applicable.

### Flammability (solid, gas)

Not available.

### Lower and upper explosive (flammable) limits

Not available.

### Vapor pressure

Not available.

### Vapor density

Not available.

### Relative density

1.95

### Solubility

Easily soluble in the following materials: methanol and acetone.  
Insoluble in the following materials: cold water and hot water.

## Section 9. Physical and chemical properties

<b>Solubility in water</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.

## Section 10. Stability and reactivity

<b>Reactivity</b>	No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	The product is stable.
<b>Possibility of hazardous reactions</b>	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	No specific data.
<b>Incompatible materials</b>	No specific data.
<b>Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	LD50 Dermal	Rabbit	23000 mg/kg	-
2,4,6-tris(dimethylaminomethyl)phenol	LD50 Oral	Rat	>15000 mg/kg	-
	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	Eyes - Mild irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 microliters	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	Eyes - Moderate irritant	Mammal - species unspecified	-	-	-
	Skin - Moderate irritant	Mammal - species unspecified	-	-	-
2,4,6-tris(dimethylaminomethyl)phenol	Eyes - Severe irritant	Rabbit	-	24 hours 50 Micrograms	-
	Skin - Mild irritant	Rat	-	0.025 Milliliters	-
	Skin - Severe irritant	Rat	-	0.25 Milliliters	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 milligrams	-

#### Sensitization

## Section 11. Toxicological information

Product/ingredient name	Route of exposure	Species	Result
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	skin	Human	Sensitizing

### Mutagenicity

No specific data.

### Carcinogenicity

No specific data.

### Classification

Product/ingredient name	OSHA	IARC	NTP
crystalline silica non-respirable	-	1	Known to be a human carcinogen.

### Reproductive toxicity

No specific data.

### Teratogenicity

No specific data.

### Specific target organ toxicity (single exposure)

No specific data.

### Specific target organ toxicity (repeated exposure)

No specific data.

### Aspiration hazard

No specific data.

### Information on the likely routes of exposure

Not available.

### Potential acute health effects

#### Eye contact

Causes serious eye irritation.

#### Inhalation

Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

#### Skin contact

Causes skin irritation. May cause an allergic skin reaction.

#### Ingestion

Irritating to mouth, throat and stomach.

### Symptoms related to the physical, chemical and toxicological characteristics

#### Eye contact

Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

#### Inhalation

No specific data.

#### Skin contact

Adverse symptoms may include the following:  
irritation  
redness

#### Ingestion

No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

## Section 11. Toxicological information

**Potential immediate effects** Not available.

**Potential delayed effects** Not available.

### Long term exposure

**Potential immediate effects** Not available.

**Potential delayed effects** Not available.

### Potential chronic health effects

No specific data.

**General** Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** No known significant effects or critical hazards.

**Mutagenicity** No known significant effects or critical hazards.

**Teratogenicity** No known significant effects or critical hazards.

**Developmental effects** No known significant effects or critical hazards.

**Fertility effects** No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	5962.8 mg/kg
Dermal	37473.2 mg/kg

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	EC50 11 mg/l	Aquatic plants	72 hours
	EC50 1.8 mg/l	Daphnia	48 hours
	LC50 2 mg/l	Fish	96 hours
	Chronic NOEC 0.3 mg/l	Daphnia	-

### Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	OECD 302B 302B Inherent Biodegradability: Zahn-Wellens/ EMPA Test	12 % - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	-	-	Not readily

### Bioaccumulative potential

## Section 12. Ecological information

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	2.64 to 3.78	31	low
2,4,6-tris(dimethylaminomethyl)phenol	0.219	-	low

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** Not available.

**Other adverse effects** No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**RCRA classification** Not applicable.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
<b>UN Number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-	-	-
<b>Transport hazard class(es)</b>	-	-	-	-	-
<b>Packing group</b>	-	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.	No.
<b>Additional information</b>	-	-	-	-	-

**Special precautions for user** **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory information

**U.S. Federal regulations**  
**TSCA 8(a) PAIR:** Siloxanes and Silicones, di-Me, reaction products with silica  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** All components are listed or exempted.  
**Clean Water Act (CWA) 307:** zinc sulphide

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** Not listed

**Clean Air Act Section 602 Class I Substances** Not listed

**Clean Air Act Section 602 Class II Substances** Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** Not applicable.

### SARA 311/312

**Classification** Immediate (acute) health hazard

#### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	10 - 30	No.	No.	No.	Yes.	No.
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	5 - 10	No.	No.	No.	Yes.	No.
2,4,6-tris(dimethylaminomethyl)phenol	1 - 5	No.	No.	No.	Yes.	No.
crystalline silica non-respirable	0.1 - 1	No.	No.	No.	No.	Yes.

### SARA 313

	Product name	CAS number	%
<b>Form R - Reporting requirements</b>	zinc sulphide	1314-98-3	1 - 5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

**Massachusetts** The following components are listed: SOAPSTONE; MINERAL WOOL FIBER

**New York** None of the components are listed.

**New Jersey** The following components are listed: SOAPSTONE; SILICA, QUARTZ; QUARTZ (SiO<sub>2</sub>); ZINC compounds

**Pennsylvania** The following components are listed: SOAPSTONE DUST; QUARTZ (SiO<sub>2</sub>); ZINC COMPOUNDS

**Minnesota Hazardous Substances** None of the components are listed.

### California Prop. 65

**WARNING:** This product contains a chemical known to the State of California to cause cancer.

## Section 15. Regulatory information

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Talc , not containing asbestiform fibres crystalline silica non-respirable	Yes. Yes.	No. No.	No. No.	No. No.

### Canada inventory

All components are listed or exempted.

### International regulations

#### International lists

**Australia inventory (AICS):** All components are listed or exempted.

**China inventory (IECSC):** All components are listed or exempted.

**Japan inventory:** Not determined.

**Korea inventory:** All components are listed or exempted.

**Malaysia Inventory (EHS Register):** Not determined.

**New Zealand Inventory of Chemicals (NZIoC):** All components are listed or exempted.

**Philippines inventory (PICCS):** All components are listed or exempted.

**Taiwan inventory (CSNN):** Not determined.

### Substances of very high concern

None of the components are listed.

## Section 16. Other information

### Key to abbreviations

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

### References

Not available.

✔ Indicates information that has changed from previously issued version.

### Notice to reader

**NON-WARRANTY:** The information presented in this publication is based upon the research and experience of Brodi. No representation or warranty is made, however, concerning the accuracy or completeness of the information presented in this publication. Brodi makes no warranty or representation of any kind, express or implied, including without limitation any warranty of merchantability or fitness for any particular purpose, and no warranty or representation shall be implied by law or otherwise. Any products sold by Brodi are not warranted as suitable for any particular purpose to the buyer. The suitability of any products for any purpose particular to the buyer is for the buyer to determine. Brodi assumes no responsibility for the selection of products suitable to the particular purposes of any particular buyer. Brodi shall in no event be liable for any special, incidental, or consequential damages.