



MSDS: 0007116  
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## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **BR® 623-1 Potting Compound**  
Synonyms: None  
Chemical Family: Epoxy  
Molecular Formula: Mixture  
Molecular Weight: Mixture

CYTEC INDUSTRIES INC., FIVE GARRET MOUNTAIN PLAZA, WOODLAND PARK, NEW JERSEY 07424, USA  
For Product Information call 1-800/652-6013. Outside the USA and Canada call 1-973/357-3193.

**EMERGENCY PHONE (24 hours/day) - For emergency involving spill, leak, fire, exposure or accident call:**

**Asia Pacific:**

Australia - +61-3-9663-2130 or 1800-033-111

China (PRC) - +86 10 5100 3039 (Carechem24 China)

New Guinea - +61-3-9663-2130

New Zealand - +61-3-9663-2130 or 0800-734-607

All Others - +65 3158 1074 (Carechem24 Singapore)

**Canada:** +1-905-356-8310 (Cytec Welland, Canada plant)

**Europe/Africa/Middle East (Carechem24 UK):**

Europe, Middle East, Africa, Israel - +44 (0) 1235 239 670

Middle East, Africa (Arabic speaking countries) - +44 (0) 1235 239 671

**Latin America:**

Brazil - 0800 0111 767 (SOS Cotec)

Chile - +56-2-247-3600 (CITUC QUIMICO)

All Others - +52-376-73 74122 (Cytec Atequiza, Mexico plant)

**USA:** +1-703-527-3887 or 1-800-424-9300 (CHEMTREC #CCN6083)

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### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**APPEARANCE AND ODOR:**

Color: yellow  
Appearance: paste  
Odor: faint epoxy

**STATEMENTS OF HAZARD:**

**DANGER!** CAUSES EYE BURNS  
MAY CAUSE ALLERGIC SKIN OR RESPIRATORY REACTION

#### POTENTIAL HEALTH EFFECTS

EFFECTS OF EXPOSURE:

The acute oral (rat) and dermal (rabbit) LD50 values are estimated to be greater than 5,000 mg/kg and greater than 2,000 mg/kg, respectively. Allergic skin reactions or primary skin irritation may be produced by prolonged or repeated dermal contact with epoxy resins. Direct contact with this material may cause severe eye irritation. Inhalation exposure may cause allergic respiratory reaction. Exposure to vapor during heat curing may cause irritation or injury of the respiratory tract and eye irritation. Refer to Section 11 for toxicology information on the regulated components of this product.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### OSHA REGULATED COMPONENTS

Component / CAS No.	%	Carcinogen
Hydrated alumina 14762-49-3	13.6	-
Substituted phthalic anhydride -	15 - 40	-
Silica, siliconized 67762-90-7	1.4	-
Phenolic epoxy resin -	15 - 40	-
Glass oxide 65997-17-3	11.9	-

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### 4. FIRST AID MEASURES

**Eye Contact:**

Rinse immediately with plenty of water for at least 30 minutes or until the chemical has been removed. Obtain medical advice if there are persistent symptoms.

**Skin Contact:**

Wash immediately with plenty of water and soap. Remove contaminated clothing and shoes without delay. Obtain medical attention. Do not reuse contaminated clothing without laundering. Destroy or thoroughly clean shoes before reuse.

**Ingestion:**

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

**Inhalation:**

Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms.

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### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:**

Use water spray or fog, carbon dioxide or dry chemical.

**Protective Equipment:**

Firefighters, and others exposed, wear self-contained breathing apparatus. Wear full firefighting protective clothing. See MSDS Section 8 (Exposure Controls/Personal Protection).

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## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Where exposure level is not known, wear approved, positive pressure, self-contained respirator. Where exposure level is known, wear approved respirator suitable for level of exposure. Refer to Section 8 (Exposure Controls/Personal Protection) for appropriate personal protective equipment.

**Methods For Cleaning Up:**

Sweep up into containers for disposal. Flush spill area with water.

**Environmental Precautions:**

None known

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## 7. HANDLING AND STORAGE

**HANDLING**

**Precautionary Measures:** Do not get in eyes. Do not breathe dust or vapor. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.

**Special Handling Statements:** None

**STORAGE**

None

**Storage Temperature:** Store at -18 °C 0 °F

**Reason:** Quality.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Measures:**

Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure when spraying or curing at elevated temperatures.

**Respiratory Protection:**

Where exposures are below the established exposure limit, no respiratory protection is required. Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure. A full facepiece respirator also provides eye and face protection. Cutting, grinding or sanding of parts fabricated after curing may create respirable dust particles. Respiratory protection appropriate for this dust may be required. Refer to components listed above for potential hazardous components in the dust.

**Eye Protection:**

Wear eye/face protection such as chemical splash proof goggles or face shield. Eyewash equipment and safety shower should be provided in areas of potential exposure.

**Skin Protection:**

Avoid skin contact. Wear impermeable gloves and suitable protective clothing. Barrier creams may be used in conjunction with the gloves to provide additional skin protection.

**Additional Advice:**

Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water.

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### Exposure Limit(s)

**14762-49-3 Hydrated alumina**

OSHA (PEL):	15 mg/m <sup>3</sup> total 5 mg/m <sup>3</sup> respirable
ACGIH (TLV):	Not established
Other Value:	Not established

**65997-17-3 Glass oxide**

OSHA (PEL):	Not established
ACGIH (TLV):	1 f/cc respirable fibers (TWA) 5 mg/m <sup>3</sup> inhalable fraction (TWA)
Other Value:	Not established

**67762-90-7 Silica, siliconized**

OSHA (PEL):	20 mppcf
ACGIH (TLV):	Not established
Other Value:	Not established

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Color:	yellow
Appearance:	paste
Odor:	faint epoxy
Boiling Point:	Not applicable
Melting Point:	Not applicable
Vapor Pressure:	Not applicable
Specific Gravity/Density:	0.75
Vapor Density:	Not applicable
Percent Volatile (% by wt.):	>1.0
pH:	Not applicable
Saturation In Air (% By Vol.):	Not applicable
Evaporation Rate:	Not applicable
Solubility In Water:	negligible
Volatile Organic Content:	0 gm/L
Flash Point:	Not applicable
Flammable Limits (% By Vol):	Not applicable
Autoignition Temperature:	Not applicable
Decomposition Temperature:	Not applicable
Partition coefficient (n-octanol/water):	Not applicable
Odor Threshold:	Not available

**10. STABILITY AND REACTIVITY**

Stability:	Stable
Conditions To Avoid:	None known Avoid temperatures above 32.2 C (90 F) to maintain product quality.
Polymerization:	May occur
Conditions To Avoid:	Avoid contact with bases or amines. Do not heat above 32.2 C (90 F).
Materials To Avoid:	No specific incompatibility
Hazardous Decomposition Products:	oxides of carbon sulfur nitrogen

## 11. TOXICOLOGICAL INFORMATION

Toxicological information for the product is found under Section 2. HAZARDS IDENTIFICATION. Toxicological information on the regulated components of this product is as follows:

Alumina is a nuisance particle which is not expected to cause any adverse effects other than congestion and respiratory irritation.

Substituted phthalic anhydride has an acute oral (rat) LD50 value of >4000 mg/kg. Literature reports an oral (rat) and dermal (rabbit) LD50 values both of < 5 ml/kg. Direct contact with this material may cause moderate skin irritation and corrosion to the eye. Prolonged or repeated contact may cause allergic skin reactions. Inhalation overexposure may cause allergic respiratory reactions. Literature also reports that this material has caused mutagenic effects in mammalian cells in vitro.

Exposure to fumed silica dust by inhalation, skin, oral or dermal routes is not expected to cause significant adverse effects. However, repeated inhalation of dust may produce pulmonary irritation. Fumed silica does not cause the lung diseases crystalline silica is known to cause. The rat oral LD50 for silica is 24.6 g/kg and the LC50 in rats exposed via inhalation is >250 mg/m<sup>3</sup>. The one hour inhalation (rat) LC50 is estimated to range from 1.26 mg/l to 2.83 mg/l.

Phenolic epoxy resin has acute oral (rat) and dermal (rabbit) LD50 values of >5000 mg/kg and 6000 mg/kg, respectively. Direct contact with this material caused moderate skin and mild eye irritation when tested in rabbits. Prolonged or repeated contact with this material may cause allergic skin reaction.

Glass oxide is considered a nuisance particulate which will not cause adverse health effects other than respiratory congestion or irritation.

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## 12. ECOLOGICAL INFORMATION

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The ecological assessment for this material is based on an evaluation of its components.

## 13. DISPOSAL CONSIDERATIONS

### 13. DISPOSAL CONSIDERATIONS

The information on RCRA waste classification and disposal methodology provided below applies only to the product, as supplied. If the material has been altered or contaminated, or it has exceeded its recommended shelf life, the guidance may be inapplicable. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA 'listed hazardous waste' or has any of the four RCRA 'hazardous waste characteristics.' Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA 'listed hazardous waste'; information contained in Section 15 of this MSDS is not intended to indicate if the product is a 'listed hazardous waste.' RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: Ignitability, Corrosivity, Reactivity, and Toxicity. To determine Ignitability, see Section 9 of this MSDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 3 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed. The Company encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. The Company recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. The Company has provided the foregoing for information only; the person generating the waste is responsible for determining the waste classification and disposal method.

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### 14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

#### US DOT

Dangerous Goods? X

Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s.

Hazard Class: 9

Packing Group: III

UN/ID Number: UN3082

Transport Label Required: Miscellaneous

Technical Name (N.O.S.): Zinc Salt

<u>Component / CAS No.</u>	<u>Hazardous Substances / Reportable Quantity of Product (lbs)</u>
Zinc borate hydrate (Included under CAS# 1332-07-6)	15873

Comments: Hazardous Substances/Reportable Quantities - DOT requirements specific to Hazardous Substances only apply if the quantity in one package equals or exceeds the product reportable quantity.

#### TRANSPORT CANADA

Dangerous Goods? Not applicable/Not regulated

#### ICAO / IATA

Dangerous Goods? Not applicable/Not regulated

#### IMO

Dangerous Goods? Not applicable/Not regulated

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### 15. REGULATORY INFORMATION

#### Inventory Information

**United States (USA):** All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

**Canada:** One or more components of this product are NOT included on the Canadian Domestic Substances List (DSL). These components are included on the Canadian Non-Domestic Substances List (NDSL).

**Australia:** All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on AICS.

**China:** All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

**Japan:** All components of this product are included on the Japanese (ENCS) inventory or are not required to be listed on the Japanese inventory.

**Korea:** One or more components of this product are NOT included on the Korean (ECL) inventory.

**Philippines:** One or more components of this product are NOT included on the Philippine (PICCS) inventory.

#### OTHER ENVIRONMENTAL INFORMATION

The following components of this product may be subject to reporting requirements pursuant to Section 313 of CERCLA (40 CFR 372), Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40 CFR 311, etc.) See Section 13 for information on waste classification and waste disposal of this product.

Component / CAS No.	%	TPQ (lbs)	RQ(lbs)	S313	TSCA 12B
Zinc borate hydrate (Included under CAS# 1332-07-6) 138265-88-0	6.3	None	1000	Yes(as Zinc compounds)	No

#### PRODUCT HAZARD CLASSIFICATION UNDER SECTION 311 OF SARA

- Acute

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## 16. OTHER INFORMATION

#### NFPA Hazard Rating (National Fire Protection Association)

Health: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

Fire: 1 - Materials that must be preheated before ignition can occur.

Instability: 0 - Materials that in themselves are normally stable, even under fire exposure conditions.

<b>Reasons For Issue:</b>	Revised Section 1
	Revised Section 2
	Revised Section 3
	Revised Section 8

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