

TRANSLUCENT EPOXY

832C-PART A

Safety Data Sheet

Section 1: Product and Company Identification

Product Identifier and Other Means of Identification

Product Name: Translucent Epoxy**MSDS Code:** 832C-Part A**Related Part #:** 832C-375ML, 832C-3L, 832C-60L

Recommended Use and Restriction on Use

Use: Epoxy resin for use with hardeners to pot devices or encapsulate components**Uses Advised Against:** Not for use as a spray coating

Details of Manufacturer or Importer

Manufacturer

MG Chemicals
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADA

MG Chemicals (Head Office)
9347-193 Street
Surrey, British Columbia V4N 4E7
CANADA

☎ 1-800-340-0772

FAX 1-800-340-0773

E-MAIL: support@mgchemicals.comWEB www.mgchemicals.com

☎ 1-905-331-1396

FAX 1-905-331-2682

E-MAIL: info@mgchemicals.comE-MAIL (Competent Person): sds@mgchemicals.com

Emergency Phone Number

For hazardous material incidents ONLY—leaks, spills, fires, exposures or accidentsUSA or CANADA: Call CHEMTREC ☎: **1-800-424-9300****For emergencies involving dangerous goods;** Collect 24/7CANADA: Call CANUTEC ☎: **1-613-996-6666** or ***666** on cellular phones

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Section 2: Hazards Identification

WHMIS Classification



D2B – Toxic Material (Skin/Eye Irritation; Skin Sensitization in Humans)

GHS Categories

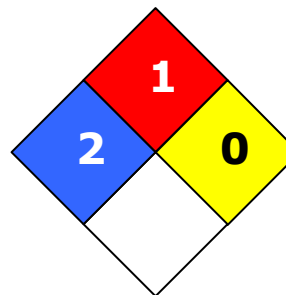
Criteria		Category	Signal Word	Pictograms
Sensitization	Skin sensitizer	1	Warning	
Skin Irritation		2A	Warning	
Eye Irritation		2	Warning	
Environmental Hazard	Chronic Aqua. Tox.	2	Warning	
Environmental Hazard	Acute Aqua. Tox.	2	—	

Other Classifications

HMIS® RATING

HEALTH:	2
FLAMMABILITY:	1
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend:



0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

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Label Elements

Signal Word	WARNING
Pictograms	Hazard Statements
	H319: Causes serious eye irritation H317: May cause allergic skin reaction H315: Causes skin irritation
	H411: Toxic to aquatic life with long lasting effects
	Precautionary Statements
Prevention	P280: Wear protective eye protection/face protection/gloves. P264: Wash hands thoroughly after handling. P261: Avoid breathing vapors. P272: Contaminated work clothing should not be allowed out of the workplace. P273: Avoid release to the environment.
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. P302 + P352 + P362+ P364: IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. P332 + P337+ P313: If eye or skin irritation occurs or persists: Get medical advice/attention. P391: Collect spillage.
Disposal	P501: Dispose of contents/container in accordance to local/regional/national/international regulations.

Other Hazards

Not applicable

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Section 3: Hazardous Ingredients

CAS #	Chemical Name	Wt%
25068-38-6	reaction products: bisphenol-A-(epichlorhydrin) and epoxy resin average MW ≤700	80-95%
68609-97-2	alkyl glycidyl ether	7-13%

Section 4: First Aid Measures

<i>Exposure Condition</i>	<i>GHS Code: Precautionary Statement</i>
IF IN EYES	P305
Symptoms	Immediate: <i>irritation, redness, pain</i>
Response	P351: Rinse cautiously with water for several minutes. P338: Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists	P313: Get medical attention.
IF ON SKIN	P302
Symptoms	Immediate: <i>irritation, redness;</i> Delayed: <i>rash</i>
Response	P352: Wash with plenty of water. P362+ P364 + P272: Take off contaminated clothing and wash it before reuse.
If skin irritation or rash occurs	P313: Get medical advice/attention.
IF INHALED	P304 (<i>Not a likely route of exposure under normal use</i>)
Symptoms	Immediate: <i>cough, respiratory system irritation</i>
Response	P340: Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing.
If feeling unwell	P312: Call a POISON CENTRE/doctor.
IF SWALLOWED	P301 (<i>Not a likely route of exposure under normal use</i>)
Symptoms	Immediate: <i>irritation</i>
Response	P330: Rinse mouth. P331: Do NOT induce vomiting.
If feeling unwell	P312: Call a POISON CENTRE/doctor.

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Section 5: Fire Fighting Measures

Autoignition Temperature	Not Established	Flash Point ^{a)}	>142 °C [>287 °F]	LFL [LEL] ^{b)}	Not Established
				UFL [UEL]	Established

In case of fire	P370
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Response P378: Use dry chemical, carbon dioxide, or chemical foam to extinguish. Use water spray to cool containers.

Combustion Products Produces CO, CO₂, and toxic fumes.

Fire-Fighter Wear self-contained breathing apparatus for fire fighting

General Information Prevent fire-fighting wash from entering waterway or sewer system.

a) Closed cup value for the alkyl glycidyl ether resin component.

b) LFL = Lower Flammability [or Explosion] Limit (in volume %);

UFL = Upper Flammability [or Explosion] Limit (in volume %)

Section 6: Accidental Release Measures

Personal Protection: See Section 8. Avoid breathing the vapors.

Containment Remove all sources of ignition.

Cleaning Collect liquid in a sealable, solvent-resistant container. Sprinkle inert absorbent compound onto spill, then sweep into the container. Wipe up further residue with paper towel wetted with alcohol (or other suitable organic solvent) and place dirty towels in container. Wash spill area with soap and water to remove the last traces of residue.

RECOMMENDATION: Use a plastic, stainless steel, or carbon steel container.

Disposal Dispose of spill waste according to Section 13.

TRANSLUCENT EPOXY**832C-PART A****Section 7: Handling and Storage**

Prevention P261: Avoid breathing vapors.

P272: Contaminated work clothing should not be allowed out of the workplace.

P270: Do not eat, drink, or smoke when using this product.

Handling P280: Wear protective eye protection/face protection/gloves.

P264: Wash hands thoroughly after handling.

Storage **RECOMMENDATION:** Keep in a dry and clean area, away from incompatible substances.

Section 8: Exposure Controls/Personal Protection**Routes of Entry**

Eyes, ingestion, inhalation, and skin

Substances with Occupational Exposure Limit Values

No Ingredients are listed in the ACGIH², OSHA, and Canadian provinces exposure limits were consulted. Limits from by RTECS database¹ of the Canadian Centre for Occupational Health and Safety (CCOHS) a data from suppliers' SDS were also consulted.

Engineering Controls

Ventilation Keep airborne concentrations below exposure limits.

RECOMMENDATION: If the product is heated at high temperatures or worker has a known allergic reaction, consider using a full mask with organic vapor cartridges.

Personal Protective Equipment

Eye protection Wear appropriate protective eyeglasses or chemical safety goggles.

RECOMMENDATION: Use safety glasses with lateral protection (side shields).

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Skin Protection Wear appropriate protective clothing to prevent skin contact.

RECOMMENDATION: Use of protective gloves in butyl rubber, latex, neoprene, or other chemically resistant gloves.

Respiratory Protection If exposed to vapors, wear respirator such as a half-mask respirator.

RECOMMENDATION: Consult your local safety supply store to ensure your respirator has filter cartridges appropriate for the ingredients listed in section 3 of this MSDS, and that the respirator is fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when not being used.

General Hygiene Considerations

Wash hands thoroughly with water and soap after handling.

Section 9: Physical and Chemical Properties

Physical State	Liquid	Appearance	Clear
Odor	Mild	Odor Threshold	Not established
pH	Not available	Specific Gravity	1.12
Solubility in Water	Negligible	Freezing/Melting Point	Not established
Flash Point ^{a)}	> 142°C [>288 °F]	Vapor Pressure @ 20 °C	Not established
Boiling Point	≥ 150 °C [≥302 °F]	Evaporation Rate	Not established
Lower Flammability Limit	Not established	Upper Flammability Limit	Not established
Auto-ignition Temperature	Not established	Decomposition Temperature	Not available
Viscosity @25 °C	1700 cSt	Vapor Density	> 1 (Air = 1)
Partition Coefficient	Not established		

a) The closed cup flash point values are based on the alkyl glycidyl ether resin component.

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Section 10: Stability and Reactivity

Stabilities	Chemically stable at normal temperatures and pressures
Conditions to Avoid	Excessive heat and incompatible substances. Do not use in a way that forms a mist or aerosolizes the product.
Incompatibilities	Strong oxidizing agents, strong acids, strong bases, ammonia <i>Note:</i> React with amines.
Polymerization	Will not occur
Decomposition	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5

Section 11: Toxicological Information

Routes of Exposure

Eyes, ingestion, and skin

Symptoms Summary

Eyes	Causes serious eye irritation. May also cause eye redness or pain.
Skin	May cause mild to moderate skin irritation and allergic skin reactions.
Inhalation	<i>Not a likely route of exposure due to low volatility.</i> Inhalation of vapors may cause irritation to the nose, throat and lung (upper respiratory tract).
Ingestion	No acute toxicity effect known. See skin and inhalation symptoms.
Chronic	Prolonged or repeated exposure to the uncured epoxy resins used may cause dermatitis and sensitization.

Acute Toxicity (Lethal Exposure Concentrations)

Chemical Name	LD50 oral	LD50 dermal	LC50 inhalation	TCLo inhalation
reaction products: bisphenol-A-(epichlor-hydrin) and epoxy resin	11 400 mg/kg Rat	Not established	Not established	Not established
alkyl glycidyl ether	19 200 mg/kg Rat	4 500 mg/kg Rat	Not established	Not established

Note: Representative toxicity data from by RTECS database of the Canadian Centre for Occupational Health and Safety (CCOHS)¹ data from supplier MSDS were also consulted.

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Skin corrosion/irritation	Skin irritant
Serious eye damage/irritation	Causes serious eye irritation.
Sensitization (allergic reactions)	The epoxy resin components (CAS# 25068-38-6 and 68609-97-2) may cause skin sensitization in humans
Carcinogenicity (risk of cancer)	Not classified or listed as a carcinogen by IARC, ACGIH, CA Prop 65, or NTP
Mutagenicity (risk of heritable genetic effects)	No data available
Reproductive Toxicity (risk to sex functions)	No data available
Teratogenicity (risk of fetus malformation)	No data available
STOT-single exposure	No data available
STOT-repeated exposure	No data available
Aspiration hazard	Viscosity at 40 °C is >>20.5 mm ² /s, thus not classified as aspiration hazard.

Section 12: Ecological Information

The ecotoxicity of the mixture was estimated by the calculation method using the summation of classified ingredients. The IMDG Code criteria and the raw-material MSDS along with supporting data for the classification of registered substances from the European Chemical Agency database (<http://echa.europa.eu>) were used.

Similar epoxy resins with CAS# 25068-38-6 and 68609-97-2 are generally classified as category 2 marine pollutant due to LC50 96 h of >1 but ≤10 mg/L.

Acute Ecotoxicity

Category 2

GHS Code: Hazard Statement

H401: Very toxic to aquatic life

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TRANSLUCENT EPOXY**832C-PART A****Chronic Ecotoxicity**

Category 2

GHS Code: Hazard Statement

H410: Very toxic to aquatic life with long lasting effects

P273: Avoid release to the environment

P391: Collect spillage

Biodegradability

The content is not biodegradable.

Section 13: Disposal Information

P501: Dispose of contents in accordance with all local, regional, national, and international regulations.

Section 14: Transport Information**Ground**

Refer to TDG regulations (Canadian Transportation of Dangerous Goods regulations); **USA CFR 49 Regulations** (Parts 100 to 185). **ADR** (European Agreement Concerning the International Carriage of Dangerous Goods by Road, and **ADN** (Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways).

Sizes 5 liter and under

Limited Quantity

Note: The 832C-375ML, 832C-3L and 832C-12L are composed of separate containers which meet this inner packaging limit.

All sizes greater than 5 liter

UN number: UN3082

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, N.O.S. (Reaction product: bisphenol-A-(epichlorhydrin))

Class: 9**Packing Group:** III

Marine Pollutant: Yes

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TRANSLUCENT EPOXY**832C-PART A****Air**

Refer to IATA Dangerous Goods Regulations.

All sizes

UN number: UN3082

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, N.O.S. (Reaction product: bisphenol-A-(epichlorhydrin))

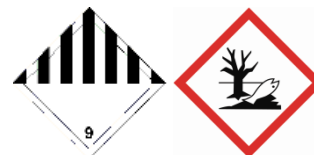
Class: 9

Packing Group: III

Marine Pollutant: Yes

Pkg Inst: 964. ERG Code: 9L

Flash Point: >142 °C [>287 °F]

**Sea**

Refer to IMDG regulations.

Sizes 5 liter and under

Limited Quantity

Note: The 832C-375ML, 832C-3L and 832C-12L are composed of separate containers which meet this inner packaging limit.



All sizes greater than 5 liter

UN number: UN3082

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, N.O.S. (Reaction product: bisphenol-A-(epichlorhydrin))

Class: 9

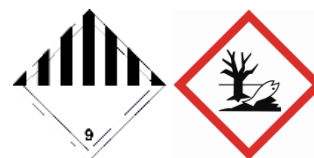
Packing Group: III

Marine Pollutant: Yes

EmS#: F-A, S-F

Stowage and Segregation: Category A

Flash Point: >142 °C [>287 °F]



Note: Component supplier SDS transportation sections and labeling were consulted. All involved staff of shipper must be appropriately trained before involvement with the transport of this product, or work under direct supervision of a trained person.

Section 15: Regulatory Information**Canada****Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)**

All hazardous ingredients are listed on the DSL/NDSL.

Industry and Science Canada

MG Labels products intended for the workplace to conform to WHMIS labeling regulations. Product identification, net quantity declaration, minimum printing type size heights, and packaging of this product are in compliance.

Health Canada

Products produced by MG Chemicals intended for retail display conform to the Canadian Consumer Labeling Regulations.

USA**CAA** (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product does not contain substances that are listed as hazardous air pollutants.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product does not contain substances which are subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity, Sept 2, 2011 revision, USA).

This product contains carbon black (airborne, unbound particles of respirable size), which is listed as a carcinogen.

Europe**RoHS**

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, and complies with European RoHS regulations.

WEEE

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

TRANSLUCENT EPOXY**832C-PART A****Section 16: Other Information****MSDS Prepared by** Michel Hachey**Date of Issue** 14 August 2013**Supersedes** 05 March 2013**Reason for Changes:** Format changes in accordance to OSHA-GHS final rules and product name correction**References**

- 1) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)
- 2) ACGIH 2011 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2011).

Abbreviations

ACGIH American Conference of Governmental Industrial Hygienists

GHS: Globally Harmonized System of Classification of Labeling of Chemicals

LC50 Lethal Concentration 50%

LCLo Lowest published lethal concentration

LD50 Lethal Dose 50%

N/A Not Applicable

N/E Not Estimated

PEL Permissible Exposure Limit

STEL Short-Term Exposure Limit

TCLo Lowest published toxic concentration

TWA Time Weighted Average

VOC Volatile Organic Content

Technical Queries Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at www.mgchemicals.com.Email: support@mgchemicals.com**Mailing Addresses** *Manufacturing & Support*
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