



Safety Data Sheet

Section 1: Identification

Product Identifier and Other Means of Identification

Product Name: Translucent Epoxy Encapsulating and Potting Compound

SDS Code: 832C-Part A

Related Part # 832C-375ML, 832C-450ML, 832C-3L, 832C-60L

Recommended Use and Restriction on Use

Use: Epoxy resin for use with hardeners

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

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FAX +1-800-340-0773

E-MAIL support@mgchemicals.com

WEB www.mgchemicals.com

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Surrey, British Columbia V4N 4E7

CANADA

+1-905-331-1396

FAX +1-905-331-2682

E-MAIL info@mqchemicals.com

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

Emergency Phone Number

For hazardous material incidents ONLY—leaks, spills, fires, exposures or accidents

USA or CANADA: Call CHEMTREC ☎: +1-800-424-9300

For emergencies involving dangerous goods; Collect 24/7

CANADA: Call CANUTEC : +1-613-996-6666 or *666 on cellular phones



Section 2: Hazard(s) Identification

Classification of Hazardous Chemical

GHS Categories

Criteria		Category	Signal Word	Pictograms
Sensitization	Skin	1	Warning	Exclamation
Eye Irritation		2	Warning	Exclamation
Skin Irritation		2	Warning	Exclamation
Hazardous to Aquatic Environment	Chronic	2	none	Environment

Note: The degree of severity is ranked within each hazard class from

1 (Highest Severity) to up to 5 (Lowest Severity), which is opposite to HMIS and NFPA conventions. Severity category rankings do not allow comparisons between classes.

Label Elements

Signal Word	WARNING
Pictograms	Hazard Statements
	H319: Causes serious eye irritation
	H315: Cause skin irritation
•	H317: May cause an allergic skin reaction
*	H411: Toxic to aquatic life with long lasting effects
Prevention	Precautionary Statements
P102	Keep out of reach of children.
P261	Avoid breathing fumes/vapors.
P280	Wear protective gloves/eye protection/face protection.
P272	Contaminated work clothing should not be allowed out of the workplace.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.



Continued...

Response	Precautionary Statements
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
Storage	Precautionary Statements
None	None
Disposal	Precautionary Statements
P501	Dispose of contents/container in accordance to local/regional/international regulations.

Hazards Not Otherwise Classified

Other Criteria	Hazard Statements/Precautionary Statement	Signal Word	Pictograms
None	None	None	None

Section 3: Composition/Information on Ingredients

CAS #	Chemical Name	%(weight)
25068-38-6	bisphenol-A epoxy resin (reaction product) a)	89%
68609-97-2	alkyl glycidyl ether	11%

a) Average molecular weight of ≤700



Section 4: First-Aid Measures				
Exposure Condition	GHS Code/Symptoms/Precautionary Statements			
IF IN EYES	P305 + P351 + P338, P337 + P313			
Immediate Symptoms	redness, irritation, pain			
Response	Rinse cautiously with water for 15 minutes or more. Remove contact lenses, if present and easy to do. Continue rinsing.			
	If eye irritation persists: Get medical advice/attention.			
IF ON SKIN	P302 + P352, P333 + P313, P362 + P364			
Immediate or Delayed Symptoms	redness, irritation, dry skin, allergic contact dermatitis			
Response	Wash with plenty of water.			
	If skin irritation or rash occurs: Get medical advice/attention.			
	Take off contaminated clothing and wash it before reuse.			
IF INHALED	P304 + P340			
Immediate Symptoms	cough, irritation of the respiratory track			
Response	Remove person to fresh air and keep comfortable for breathing.			
IF SWALLOWED	P301 + P330, P331			
Immediate Symptoms	irritation			
	"Thatien			

Section 5: Fire-Fighting Measures

Extinguishing Media	Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish.
Specific Hazards	Not flammable or combustible, but burns if involved in a fire. Produces irritating smoke of unknown toxicity in fires.
	Prevent fire-fighting wash from entering waterway or sewer system.
Combustion Products	Produces carbon oxides (CO,CO ₂) and toxic fumes.
Fire-Fighter	Wear self-contained breathing apparatus and full fire-fighting turn-out gear.



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Section 6: Accidental Release Measures

Personal Protection See personal protection recommendations in Section 8.

Precautions for

Avoid breathing the fumes/vapors. Remove or keep away all

Response

sources of extreme heat or open flames.

Environmental Precautions

Avoid releasing to the environment. Prevent spill from entering

drains and waterways.

Containment Methods Contain with inert and non-flammable absorbent (such as soil,

sand, vermiculite).

Cleaning Methods Collect liquid in a sealable, chemical-resistant container.

Sprinkle inert absorbent compound onto spill, then sweep into the container. Wash residue with a paper towel wetted with alcohol, ethyl lactate, or another suitable organic solvent; and place dirty towels in container. Use soap and water to remove

the last traces of residue.

Disposal Methods Dispose of spill waste according to Section 13.

Section 7: Handling and Storage

Prevention Keep out of reach of children.

Avoid breathing fumes/vapors or contact with skin or eyes.

Avoid release to the environment.

Handling Wear protective gloves/clothing/eye protection.

Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the

workplace.

Wash hands thoroughly after handling.

Collect spillage.

Storage Keep away from incompatible materials.



Section 8: Exposure Controls/Personal Protection

Substances with Occupational Exposure Limit Values

Contains no substances with occupational exposure limits.

Note: The ACGIH¹, OSHA, and Canadian provinces exposure limits were consulted. Limits from by RTECS database² and data from suppliers' SDS were also consulted.

Engineering Controls

Ventilation Keep airborne concentrations below the occupational exposure

limits (OEL).

Personal Protective Equipment

Eye protection Wear appropriate protective eyeglasses or chemical safety

goggles.

Recommendation: Ensure that glasses have side shields for

lateral protection.

Skin Protection For likely contacts, use of protective butyl rubber or other

chemically resistant gloves.

For incidental contacts, use nitrile or other chemically resistant

gloves.

Respiratory Protection Generally, for emergencies and exposure above 0.5 mg/m³,

use a self-contained breathing apparatus with full face piece

operated in a pressure positive mode.

If the product is heated or worker has a known allergic reaction, consider using a full mask with organic vapor

cartridge or with an independent air supply.

RECOMMENDATION: Consult your local safety supply store to ensure that your respirator has a NIOSH (U.S.) approved filter

cartridges appropriate for the ingredients listed in Section 3. The respirator should be 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	Lower Flammability Limit	Not available
Appearance	Clear	Upper Flammability Limit	Not available
Odor	Mild	Vapor Pressure @20 °C	Not available
Odor Threshold	Not available	Vapor Density	>>1 (Air =1)
рН	Not available	Specific Gravity @25 °C	1.13
Freezing/Melting Point	Not available	Solubility in Water	Negligible
Boiling Point a)	≥150 °C [≥302 °F]	Partition Coefficient	Not available
Flash Point b)	>142 °C [>287 °F]	Auto-ignition Temperature ^{b)}	≥235 °C [≥455 °F]
Evaporation Rate	Not available	Decomposition Temperature	Not available
Flammability (solid, gas)	Not available	Viscosity @25 °C	1 700 mm ² /s

a) Component with the lowest value—bisphenol-A epoxy resin (reaction product)

Section 10: Stability and Reactivity

Reactivity Reacts exothermically with amines.

Will not occur

Chemical Stability Chemically stable at normal temperatures and pressures

Conditions to Avoid

Polymerization

Avoid ignition sources, open flames, and incompatible substances.

Incompatibilities Strong oxidizing agents, strong acids, alkalies

Decomposition Will not decompose under normal conditions. For thermal

decomposition, see combustion products in Section 5.

b) Component with the lowest value—alkyl glycidyl ether closed cup



Section 11: Toxicological Information

Routes of Exposure

Skin Contact, Eye Contact, Inhalation, and Ingestion

Symptoms Summary

Eyes May cause redness, severe irritation, or pain.

Skin May cause skin redness, irritation, dry skin, or allergic contact

dermatitis.

Inhalation May cause cough and respiratory irritation.

Ingestion May cause irritation (see inhalation symptoms).

Chronic Prolonged and repeated exposure may lead to skin sensitization.

Acute Toxicity (Lethal Exposure Concentrations)

Chemical Name	LD50	LD50	LC50
	oral	dermal	inhalation
reaction products: bisphenol-A-(epichlorhydrin) and epoxy resin ^{a)}	11 400 mg/kg Rat	Not available	Not available
alkyl glycidyl ether	19 200 mg/kg	4 500 mg/kg	Not
	Rat	Rat	available

Note: Toxicity data from the RTECS² and ECHA were consulted. The data from supplier (M)SDS were also consulted.

a) Referred to as bisphenol-A epoxy resin (reaction product)



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Other Toxicological Effects

Skin corrosion/irritation Moderate skin irritant.

Serious eye Serious to moderate eye irritant

damage/irritation

Sensitization The epoxy resin tested positive as a skin sensitizer

(allergic reactions) based on animal studies.

CarcinogenicityNone of the ingredients are classified or listed as a carcinogen by IARC, ACGIH, CA Prop 65, or NTP.

Mutagenicity Based on available data,

(risk of heritable genetic effects) the classification criteria are not met.

Reproductive Toxicity Based on available data,

(risk to sex functions) the classification criteria are not met.

Teratogenicity Based on available data,

(risk of fetus malformation) the classification criteria are not met.

STOT-single exposure Based on available data,

the classification criteria are not met.

STOT-repeated exposure Based on available data,

the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are

not met. There is no category 1 components, and the

kinematic viscosity is >20.5 mm²/s at 40 °C.

Section 12: Ecological Information

Ecological classifications are based on the IMDG/GHS criteria in conjunction with ecotoxicological data from our suppliers, the European Chemical Agency database (http://echa.europa.eu), and other reliable sources.

In Europe, similar epoxy resin mixtures with CAS# 25068-38-6 and average molecular weight of less than 700 are generally classified as chronic category 2 marine pollutant due to LC50 96 h of >1 mg/L but ≤ 10 mg/L.

Based on available data, alkyl glycidyl ether is not classified as environmental hazard according to GHS criteria.



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Acute Ecotoxicity

Category 2

Toxic to aquatic life

Chronic Ecotoxicity

Category 2

Toxic to aquatic life with long lasting effect

Avoid release to the environment.

Biodegradability

Not available

Bioaccumulation

Not available

Section 13: Disposal Information

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



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TRANSLUCENT EPOXY ENCAPSULATING AND POTTING COMPOUND 832C-PART A

Section 14: Transport Information

Ground

Refer to TDG regulations (Canadian Transportation of Dangerous Goods regulations); USA DOT 49 CFR (Parts 100 to 185) Regulations.

Sizes under 450 L

Part A of all 832C kits

NOT REGULATED in TDG per Special Provisions 99

Sizes 5 L and under

Part A of 832C-375ML, 832C-3L kits

NOT REGULATED in 49 CFR per exception 171.4 (c)(2)

49 CFR: Sizes greater than 5 L

Part A of 832C-60L kit

UN number: UN3082 Shipping Name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Reaction product: bisphenol-A-

(epichlorhydrin))

Class: 9

Packing Group: III

Marine Pollutant: Yes





Special Provision 99 (2): These Regulations, except for Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases) and Part 2 (Classification), do not apply to the handling, offering for transport or transporting of less than 450 kg of UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., or less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., on a road vehicle or a railway vehicle. The dangerous goods must be contained in one or more small means of containment designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no accidental release of the dangerous goods that could endanger public safety.



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Air

Refer to ICAO-IATA Dangerous Goods Regulations.

Sizes 5 L and under:

Part A of 832C-375ML, 832C-3L kits

NOT REGULATED

Not Restricted, as per Special Provisions A197 Sizes greater than 5 L:

Part A of 832C-60L kit

UN number: UN3082

Shipping Name:

ENVIRONMENTALLY HAZARDOUS

SUBSTANCE, LIQUID, N.O.S. (Reaction product: bisphenol-A-

(epichlorhydrin))

Class: 9

Packing Group: III Marine Pollutant: Yes





Special Provision A197: These substances when transported in single or combination packagings containing net quantity per single or inner packaging of less than 5 L or less for liquids or having a net mass of 5 kg or less for solids, are not subject to any other provisions of these Regulations provided the packagings meet the general provisions 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

Sea

Refer to IMDG regulations.

Sizes 5 L and under:

Part A of 832C-375ML, 832C-3L kits

NOT REGULATED

per 2.10.2.7

Sizes greater than 5 L:

Part A of 832C-60L kit

UN number: UN3082

Shipping Name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Reaction product: bisphenol-A-

(epichlorhydrin))

Class: 9

Packing Group: III Marine Pollutant: Yes





2.10.2.7: Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to any other provision of this Code relevant to marine pollutants provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. In the case of marine pollutants also meeting the criteria for inclusion in another hazard class, all provisions of this Code relevant to any additional hazards continue to apply.

Section continued on the next page



Note: Shipper must be appropriately <u>trained and certified</u> before involvement with the transport of dangerous goods.

Section 15: Regulatory Information

Canada

Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)

All hazardous ingredients are listed on the DSL.

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.

USA

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)

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.



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TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity, June 06, 2014 revision, USA).

This product does not contain any listed substances in California.

Europe

RoHS (Restriction of Hazardous Substances Directive)

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

WEEE (Waste Electrical and Electronic Equipment Directive)

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

Section 16: Other Information

SDS Prepared by Michel Hachey

Date of Review 13 December 2016

Supersedes 25 May 2016

Reason for Changes: Added new part number

Reference

- 1) ACGIH 2013 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 (2013).
- 2) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)



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TRANSLUCENT EPOXY Encapsulating and Potting Compound 832C-Part A

Abbreviations

ACGIH American Conference of Governmental Industrial Hygienists (USA)

EC50 Half maximal effective concentration

EL50 Half maximal effective loading

IARC International Agency for Research on Cancer

NOELR No observable effect loading ratio
NTP National Toxicology Program

GHS Globally Harmonized System of Classification of Labeling of Chemicals

LC50 Lethal Concentration 50%

LCLo Lowest published lethal concentration

LD50 Lethal Dose 50%

OEL Occupational Exposure Limit PEL Permissible Exposure Limit

SDS Safety Data Sheet

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 <u>www.mgchemicals.com</u>.

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