

SAI Global File #004008

Burlington, Ontario, Canada

TRANSLUCENT EPOXY Encapsulating and Potting Compound 832C-Part A

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-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

+1-800-340-0772 FAX +1-800-340-0773 E-MAIL support@mgchemicals.com WEB www.mgchemicals.com MG Chemicals (Head Office)

9347-193 Street

Surrey, British Columbia V4N 4E7

CANADA

+1-905-331-1396

FAX +1-905-331-2682

E-MAIL info@mgchemicals.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 **2**: +1-613-996-6666 or *666 on cellular phones

SAI Global File #004008

Burlington, Ontario, Canada

TRANSLUCENT EPOXY Encapsulating and Potting Compound 832C-Part A

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
Environmental Hazard	Chronic Aqua. Tox.	2	none	Environment
Environmental Hazard	Acute Aqua. Tox.	2	none	none

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

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)

Section continued on the next page

^{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.

SAI Global File #004008 Burlington, Ontario, Canada

TRANSLUCENT EPOXY Encapsulating and Potting Compound 832C-PART A

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/mist/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.
Prevention	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.

Section continued on the next page

SAI Global File #004008

Burlington, Ontario, Canada

TRANSLUCENT EPOXY Encapsulating and Potting Compound 832C-Part A

Hazards Not Otherwise Classified

No other known hazards

Section 3: Composition/Information on Ingredients

CAS #	Chemical Name	%(wt/wt)
25068-38-6	bisphenol-A epoxy resin (reaction product) a)	89%
68609-97-2	alkyl glycidyl ether	11%
00005 37-2	arkyr gryciayr ether	1170

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, P312, P308 + P313
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
Response	Rinse mouth. Do NOT induce vomiting.



SAI Global File #004008

Burlington, Ontario, Canada

TRANSLUCENT EPOXY ENCAPSULATING AND POTTING COMPOUND 832C-PART A

Section 5: Fire-Fighting Measures

In case of fire P370 + P378

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,CO₂) and toxic fumes.

Fire-Fighter Wear self-contained breathing apparatus and full fire-fighting

turn-out gear.

Section 6: Accidental Release Measures

Personal Protection See personal protection recommendations in Section 8.

Precautions for

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



SAI Global File #004008

Burlington, Ontario, Canada

TRANSLUCENT EPOXY Encapsulating and Potting Compound 832C-Part A

Section 7: Handling and Storage

Prevention Keep out of reach of children.

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

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

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

Routes of Entry

Skin contact and Eye contact

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 of the Canadian Centre for Occupational Health and Safety (CCOHS) a data from suppliers' SDS were also consulted.



SAI Global File #004008 Burlington, Ontario, Canada

TRANSLUCENT EPOXY Encapsulating and Potting Compound 832C-Part A

Engineering Controls

Ventilation General ventilation is adequate for normal use; keep overall

exposure as low as possible.

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 Not normally required under normal conditions.

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 your respirator has a NIOSH (U.S.) approved filter cartridges appropriate for the ingredients listed in section 3 of this SDS, 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.



TRANSLUCENT EPOXY Encapsulating and Potting Compound 832C-Part A

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)
рH	Not available	Specific Gravity @25 °C	1.13
Freezing/Melting	Not	Solubility in	Negligible
Point	available	Water	
Boiling Point a)	≥150 °C	Partition	Not
	[≥302 °F]	Coefficient	available
Flash Point b)	>142 °C	Auto-ignition	≥235 °C
	[>287 °F]	Temperature ^{b)}	[≥455 °F]
Evaporation	Not	Decomposition	Not
Rate	available	Temperature	available
Flammability	Not	Viscosity	1 700 mm²/s
(solid, gas)	available	@25 °C	

- a) Component with the lowest value—bisphenol-A epoxy resin (reaction product)
- b) Component with the lowest value—alkyl glycidyl ether closed cup

Section 10: Stability and Reactivity

Reactivity Reacts exothermically with amines.

Chemical Chemically stable at normal temperatures and pressures

Stability

Avoid

Avoid ignition sources, open flames, and incompatible substances.

_

Conditions to

Incompatibilities Strong oxidizing agents, strong acids, alkaly

Polymerization Will not occur

Decomposition Will not decompose under normal conditions. For thermal

decomposition, see combustion products in Section 5.

SAI Global File #004008

Burlington, Ontario, Canada

TRANSLUCENT EPOXY Encapsulating and Potting Compound 832C-Part A

Section 11: Toxicological Information

Routes of Exposure

Skin contact and Eye contact

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 oral	LD50 dermal	LC50 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 Rat	4 500 mg/kg Rat	Not available

Note: Toxicity data from the RTECS database accessed through the Canadian Centre for Occupational Health and Safety (CCOHS)² were consulted. The data from supplier (M)SDS were also consulted.

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



SAI Global File #004008

Burlington, Ontario, Canada

TRANSLUCENT EPOXY ENCAPSULATING AND POTTING COMPOUND 832C-PART A

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

based on animal studies. (allergic reactions)

Carcinogenicity None of the ingredients are classified or listed as a (risk of cancer) carcinogen by IARC, ACGIH, CA Prop 65, or NTP.

Mutagenicity Based on available data,

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

Reproductive Toxicity Based on available data,

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

Teratogenicity Based on available data,

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

STOT-single exposure Based on available data,

the classification criteria are not met.

Based on available data, STOT-repeated exposure

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

The IMDG Code criteria, the raw-material safety data sheets, and supporting data from the European Chemical Agency database (http://echa.europa.eu) were used to support the classification.

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 \leq 10 mg/L.

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



SAI Global File #004008

Burlington, Ontario, Canada

TRANSLUCENT EPOXY Encapsulating and Potting Compound 832C-Part A

Acute Ecotoxicity

Category 2

H402: Toxic to aquatic life

Chronic Ecotoxicity

Category 2

H412: 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.

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 5 liters and under

Limited Quantity



Sizes greater than 5 liters

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





SAI Global File #004008

Burlington, Ontario, Canada

TRANSLUCENT EPOXY Encapsulating and Potting Compound 832C-Part A

Air

Refer to ICAO-IATA Dangerous Goods Regulations.

Sizes 5 liters and under

Limited Quantity



Sizes greater than 5 liters

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



Excepted Quantity E2 ≤30 mL

Sea

Refer to IMDG regulations.

Sizes 5 liters and under

Limited Quantity



Sizes greater than 5 liters

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



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



SAI Global File #004008

Burlington, Ontario, Canada

TRANSLUCENT EPOXY Encapsulating and Potting Compound 832C-Part A

Section 15: Regulatory Information

Canada

WHMIS 1988 Classification



D2B – Toxic Other (Skin Sensitizer, Eye and Skin Irritant)

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.

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, June 06, 2014 revision, USA).

This product does not contain any listed substances in California.



SAI Global File #004008

Burlington, Ontario, Canada

TRANSLUCENT EPOXY Encapsulating and Potting Compound 832C-Part A

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** 28 May 2015 **Supersedes** 14 August 2013

Reason for Changes: Formating change to better meet HCS 2012 and WHMIS 2015 requirements and removal of spurious statements in section 2 and 4.

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®)

Abbreviations

ACGIH EC50	American Conference of Governmental Industrial Hygienists (USA) 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

Section continued on the next page



SAI Global File #004008

Burlington, Ontario, Canada

TRANSLUCENT EPOXY ENCAPSULATING AND POTTING COMPOUND 832C-PART A

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 Head Office

> 1210 Corporate Drive 9347-193rd Street

Surrey, British Columbia, Canada Burlington, Ontario, Canada

V4N 4E7 L7L 5R6

This material safety data sheet is provided as an information resource only. Disclaimer

> M.G. Chemicals, Ltd. believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to query and verify any information seeming suspect where doubt on the validity may exist. The buyer assumes all responsibility of using and handling the product in accordance with local, regional, national, and international

regulations.