

Safety Data Sheet

Section 1: Identification

Product Identifier and Other Means of Identification

Product Name: 832HDA (Part A)

Other Means of Identification: General Purpose Epoxy (Part A)

Related Part # 832HDA-25ML, 832HDA-50ML, 832HDA-400ML, 832HDA-7.4L, 832HDA-40L

Recommended Use and Restriction on Use

Use: Epoxy resin for use with hardeners

Uses Advised Against: Not applicable

Details of Manufacturer or Importer

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

A	+1-800-340-0772	a	+1-905-331-1396
FAX	+1-800-340-0773	FAX	+1-905-331-2682
E-MAIL	<u>support@mgchemicals.com</u>		
WEB	www.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 Verisk 3E at **+1-866-519-4752** or **+1-760-476-3962** (Service access code: 335388)

For emergencies involving the transport of dangerous goods; 24/7 service CANADA—Call CANUTEC collect at **+1-613-996-6666** or ***666** on cellular phones

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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 the 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
	H317: May cause an allergic skin reaction
	H319: Causes serious eye irritation
·	H315: Causes skin irritation
¥2	H411: Toxic to aquatic life with long lasting effects
Prevention	Precautionary Statements
P102	Keep out of reach of children.
P261	Avoid breathing vapors.
P280	Wear protective gloves and eye protection.
P264	Wash hands thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.

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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 or attention.		
P302 + P352	IF ON SKIN: Wash with plenty of water.		
P333 + P313	If skin irritation or rash occurs: Get medical advice or attention.		
P362 + P364	Take off contaminated clothing and wash it before reuse.		
P391	Collect spillage.		
Disposal	Precautionary Statements		
P501	Dispose of contents and container in accordance to local, regional, national, and 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)}	91%
68609-97-2	alkyl glycidyl ether	6%
64741-65-7	naphtha, petroleum, heavy alkylate	2%
1333-86-4	carbon black	0.4%

a) Average molecular weight of \leq 700



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Section 4: First-Aid Measures			
Exposure Condition	GHS Code/Symptoms/Precautionary Statements		
IF IN EYES	P305 + P351 + P338, P337 + P313		
Immediate Symptoms	redness, serious irritation, pain		
Response	Rinse cautiously with water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.		
	If eye irritation persists: Get medical advice or attention.		
IF ON SKIN	P302 + P352, P333 + P313, P362 + P364		
Immediate Symptoms	redness, irritation, dry skin, allergic contact dermatitis		
Response	Wash with plenty of water.		
	If skin irritation or rash occurs: Get medical advice or attention.		
	Take off contaminated clothing and wash it before reuse.		
IF INHALED	P304 + P340		
Immediate Symptoms	Low toxicity: cough, mild irritation of the respiratory track		
Response	Remove person to fresh air and keep comfortable for breathing.		
IF SWALLOWED	P301 + P330, P331		
Immediate Symptoms	Low toxicity: irritation		
Response	Rinse mouth. Do NOT induce vomiting.		
Section 5: Fire-Fighting	g Measures		
Extinguishing Media	In case of fire: Use extinguishing media suitable for surrounding materials.		
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 Response	Avoid breathing vapors. Remove or keep away 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.

Section 7: Handling and Storage

Prevention	Keep out of reach of children.
	Avoid breathing vapors.
	Avoid release to the environment.
	Contaminated work clothing should not be allowed out of the workplace.
Handling	Wear protective gloves, protective clothing, and eye protection.
	Take off contaminated clothing and wash it before reuse.
	Wash hands thoroughly after handling.
	Collect spillage.
Storage	Recommendation: Keep in a dry and clean area between 5 to 35 °C, away from incompatible substances.



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Section 8: Exposure Controls/Personal Protection

Substances with Occupational Exposure Limit Values

Chemical Name	Country	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
naphtha, petroleum, heavy distillate	ACGIH U.S.A. OSHA PEL Canada AB Canada BC Canada ON Canada QC	100 ppm (525 mg/m ³) 500 ppm (2 900 mg/m ³) 572 mg/m ³ 290 mg/m ³ 100 ppm 525 mg/m ³	Not established Not established S80 mg/m ³ Not established Not established
carbon black ^{a)}	ACGIH U.S.A. OSHA PEL Canada AB Canada BC Canada ON Canada QC	3 mg/m ³ 3.5 mg/m ³ 3.5 mg/m ³ 3 mg/m ³ 3.5 mg/m ³ 3.5 mg/m ³	Not established Not established Not established Not established Not established Not established

Note: Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH¹, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from suppliers' SDS were also consulted. Short term exposure limits (STEL) are for 15 min and long term permissible exposure limits (PEL) for 8 h.

a) Respirable airborne particles

Engineering Controls

Ventilation

Keep airborne concentrations below the occupational exposure limits (OEL).

Because the carbon black is bound to the liquid mixture, it does not present an airborne hazard under normal use. Ensure adequate ventilation if the product is mechanically misted or aerosolized.

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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	For over-exposures up to 10 x OEL of mist, vapors and spray, wear respirator such as a half-mask respirator with organic vapor cartridges.
	Above 10 x OEL, use a positive-pressure, air-supplied respirator or a self-contained breathing apparatus.
	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.

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Section 9: Physical and Chemical Properties				
Physical State	Liquid	Lower Flammability Limit	Not available	
Appearance	Black	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	Relative Density @25 °C	1.16	
Freezing/Melting Point	Not available	Solubility in Water	soluble	
Initial Boiling Point	≥150 °C [≥302 °F]	Partition Coefficient n-octanol/water	Not available	
Flash Point	Not available	Auto-ignition Temperature	≥315 °C [≥599 °F]	
Evaporation Rate	Not available	Decomposition Temperature	Not available	
Flammability	Not available	Viscosity @25 °C	3 213 cP	

Section 10: Stability and Reactivity

Reactivity	Oxidizing agents, strong acids and bases, amines.
Chemical Stability	Chemically stable at normal temperatures and pressures
Conditions to Avoid	Avoid contact with heat and open flame.
Incompatibilities	Strong oxidizing agents, strong acids, strong bases.
Polymerization	Will not occur
Decomposition	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5.

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Section 11: Toxicological Information

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Summary of Effects and Symptoms by Routes of Exposure		
Eyes	May cause redness, irritation, or pain.	
Skin	May cause skin redness, irritation, dry skin, or allergic contact dermatitis.	
Inhalation	May cause cough, sore throat and respiratory irritation.	
Ingestion	May cause irritation.	
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-	>2 000 mg/kg	>2 000 mg/kg	Not
(epichlorhydrin) and epoxy resin	Rat	Rat	available
alkyl glycidyl ether	19 200 mg/kg	4 500 mg/kg	Not
	Rat	Rat	available
naptha, petroleum, heavy alkylate	>7 600 mg/kg	>3 000 mg/kg	>5.9 mg/L
	Rat	Rabbit	(4hr) Rat
carbon black	>15 g/kg	>3 g/kg	Not
	Rat	Rabbit	available
Mixture ATE	>2 000 mg/kg	>2 000 mg/kg	>100 mg/L

Note: Toxicity data from ECHA was consulted. The data from supplier SDS were also consulted.

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Other Toxicological Effects		
Skin corrosion/irritation	The Naphtha (petroleum), heavy alkylate (CAS# 64741-65-7), the reaction products of bisphenol-A- (epichlorhydrin) (CAS# 25068-38-6), and the alkyl glycidyl ether (CAS# 68609-97-2) are known serious skin irritants.	
Serious eye damage/irritation	The Naphtha (petroleum), heavy alkylate (CAS# 64741-65-7) and the reaction products of bisphenol-A-(epichlorhydrin) (CAS# 25068-38-6) are known serious eye irritants.	
Sensitization (allergic reactions)	The product is a skin sensitizer based on animal studies on the epoxy components.	
Carcinogenicity (risk of cancer)	The carbon black (CAS #1333-86-4) is possibly carcinogenic by airborne routes of exposures under WHMIS.	
	Because the carbon black (CAS #1333-86-4) is bound in the epoxy liquid mixture, it is not available as an airborne hazard (dust, mist, or spray) under normal use.	
	Carbon Black [1333-86-4]	
	IARC Group 2B: Possibly carcinogenic to humans	
	ACGIH A4: Not classified as a human carcinogen	
	CA Prop 65: Listed as a carcinogen (airborne, as unbound particles of respirable size)	
	NTP: Not listed	
Mutagenicity (risk of heritable genetic effects)	Based on available data, the classification criteria are not met.	
Reproductive Toxicity (risk to sex functions)	Based on available data, the classification criteria are not met.	
Teratogenicity (risk of fetus malformation)	Based on available data, 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. less than 10% category 1 components, and the kinematic viscosity is 20.5 mm ² /s at 40 °C.	
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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 (<u>http://echa.europa.eu</u>), and other reliable sources.

In Europe, similar epoxy resin mixtures with CAS# 25068-38-6 have an 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, carbon black and alkyl glycidyl ether are not classified as environmental hazards according to GHS criteria.

Acute Ecotoxicity

Available toxicity data does not meet classification thresholds.

Chronic Ecotoxicity

Category 2 Toxic to aquatic life with long lasting effects Avoid release to the environment. Collect spillage. **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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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 L and under	49 CFR: Sizes greater than 5 L	
Part A of 832HDA-25ML; 832HDA-50ML; 832HDA-400ML, 832HDA-7.4L kits	Part A of 832HDA-40L kits	
NOT REGULATED in TDG per Special Provisions 99	UN number: UN3082 Shipping Name: ENVIRONMENTALLY HAZARDOUS	
Sizes 5 L and under	SUBSTANCE, LIQUID,N.O.S. (reaction products: bisphenol-A- (epichlorhydrin) and epoxy resin) Class: 9	*
NOT REGULATED in 49 CFR per exception 171.4 (c)(2)	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 832HDA-25ML; 832HDA-50ML; 832HDA-400ML, 832HDA-7.4L kits	Sizes greater than 5 L Part A of 832HDA-40L kits
NOT REGULATED	UN number: UN3082
On air waybill, write: "Not Restricted, as per Special Provisions A197"	Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction products: bisphenol-A- (epichlorhydrin) and epoxy resin) Class: 9 Packing Group: III Marine Pollutant: Yes
packagings containing net quantity pe liquids or having a net mass of 5 kg c	stances when transported in single or combination er single or inner packaging of less than 5 L or less for or less for solids, are not subject to any other ded the packagings meet the general provisions

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Sea

Refer to IMDG regulations.		
Sizes 5 L and under: Part A of 832HDA-25ML; 832HDA-50ML; 832HDA-400ML; 832HDA-7.4L kits	Sizes greater than 5 L Part A of 832HDA-40L kits	
NOT REGULATED per 2.10.2.7	UN number: UN3082 Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction products: bisphenol-A- (epichlorhydrin) and epoxy resin) Class: 9 Packing Group: III Marine Pollutant: Yes	
2 10 2 7. Marine pollutants package	red in single or combination packagings	containing a

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.

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.

Hazardous Products Act (R.S.C., 1985, c. H-3)

The safety data sheet and label comply with the Hazardous Product Act and WHMIS 2015.

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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.

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

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

This product contains carbon black, but it is bound and exposures during normal conditions of uses are below the Safe Harbor Threshold.

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Europe

RoHS (Restriction of Hazardous Substances Directive)

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, PBDE's, DEHP, BBP, DBP, or DIBP 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	MG Chemicals Regulatory Department
Date of Review	20 February 2024
Supersedes	07 June 2023
Reason for Changes:	Changes to section 3.

Reference

1) ACGIH 2024 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 (2024).

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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>.

Email: support@mgchemicals.com

Phone: +1-905-331-1396

- Mailing Addresses Manufacturing & Support 1210 Corporate Drive Burlington, Ontario, Canada L7L 5R6
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