

Kit Revision Date: 10/16/2023

# 832HDA General Purpose Epoxy Kit

## **MG Chemicals Multipart Product Kit**

This product is a kit made up of multiple parts. Each part is an independently packaged chemical component and has independent hazard assessments.

#### **Kit Content**

Part	Product Name	Product Use
Α	832HD-A	Epoxy resin for use with hardeners
В	832HD-B	Epoxy hardener for use with resins

Safety Data Sheets for each part listed above follow this cover sheet.

# **Transportation Instruction**

Before offering this product kit for transport, read Section 14 for <u>all</u> parts listed above.



**832HDA** 

(PART A)

# **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

+1-800-340-0772 +1-905-331-1396 FAX +1-905-331-2682

**E-MAIL** <u>support@mgchemicals.com</u> **WEB** <u>www.mgchemicals.com</u>

**E-MAIL** (Competent Person): <a href="mailto:sds@mqchemicals.com">sds@mqchemicals.com</a>

#### **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

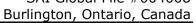
1 (Highest Severity) to up to 5 (Lowest Severity), which is opposite to HMIS and NFPA conventions. Severity category rankings do not allow comparisons between classes.

## **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.
P273	Avoid release to the environment.

Section continued on the next page

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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.

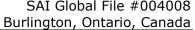
# **Hazards Not Otherwise Classified**

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) <sup>a)</sup>	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 ≤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	toms redness, irritation, dry skin, allergic contact dermatitis				
Response	Wash with plenty of water.				
	If skin irritation or rash occurs: Get medical advice or atten				
	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 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.
<b>Combustion Products</b>	Produces carbon oxides (CO,CO <sub>2</sub> ) 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,	ACGIH	100 ppm (525 mg/m <sup>3</sup> )	Not established
heavy distillate	U.S.A. OSHA PEL	500 ppm (2 900 mg/m <sup>3</sup> )	Not established
	Canada AB	572 mg/m <sup>3</sup>	Not established
	Canada BC	290 mg/m <sup>3</sup>	580 mg/m <sup>3</sup>
	Canada ON	100 ppm	Not established
	Canada QC	525 mg/m <sup>3</sup>	Not established
carbon black <sup>a)</sup>	ACGIH	3 mg/m <sup>3</sup>	Not established
	U.S.A. OSHA PEL	3.5 mg/m <sup>3</sup>	Not established
	Canada AB	3.5 mg/m <sup>3</sup>	Not established
	Canada BC	3 mg/m <sup>3</sup>	Not established
	Canada ON	3.5 mg/m <sup>3</sup>	Not established
	Canada QC	3.5 mg/m <sup>3</sup>	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.

Section continued on the next page



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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)
pH	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 contact with heat and open flame.

**Avoid** 

**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**

## **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

The product is a skin sensitizer based on animal (allergic reactions) studies on the epoxy components.

Carcinogenicity

The carbon black (CAS #1333-86-4) is possibly (risk of cancer) 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)

**STOT-single exposure** 

Based on available data, the classification criteria

are not met.

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<sup>2</sup>/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 (<a href="http://echa.europa.eu">http://echa.europa.eu</a>), 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

Part A of 832HDA-25ML; 832HDA-50ML; 832HDA-400ML, 832HDA-7.4L kits

**NOT REGULATED** in TDG per Special Provisions 99

Sizes 5 L and under

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

49 CFR: Sizes greater than 5 L

Part A of 832HDA-40L kits

**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



**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

**NOT REGULATED** 

On air waybill, write:

"Not Restricted, as per Special Provisions A197"

Sizes greater than 5 L Part A of 832HDA-40L kits

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





**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.

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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

**NOT REGULATED** 

per 2.10.2.7

Sizes greater than 5 L Part A of 832HDA-40L kits

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 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 trained and certified 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

20 February 2024 **Date of Review** 07 June 2023 **Supersedes** 

**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 www.mgchemicals.com.

Email: <a href="mailto:support@mgchemicals.com">support@mgchemicals.com</a>

Phone: +1-905-331-1396

Mailing Addresses Manufacturing & Support

1210 Corporate Drive

Burlington, Ontario, Canada

L7L 5R6

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

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.



**832HDA** 

(PART B)

# **Safety Data Sheet**

#### **Section 1: Identification**

#### **Product Identifier and Other Means of Identification**

**Product Name:** 832HDA (Part B)

**Other Means of Identification:** General Purpose Epoxy (Part B)

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

832HDA-40L

#### **Recommended Use and Restriction on Use**

**Use:** Epoxy hardener for use with resins **Uses Advised Against:** Not applicable.

# **Details of Manufacturer or Importer**

#### Manufacturer

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

**E-MAIL** <u>support@mgchemicals.com</u> **WEB** <u>www.mgchemicals.com</u>

**E-MAIL** (Competent Person): <a href="mailto:sds@mgchemicals.com">sds@mgchemicals.com</a>

## **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 the Chemical Material**

## **GHS Categories**

Criteria		Category	Signal Word	Pictograms
Skin Corrosion		1	Danger	Corrosion
Sensitization	Skin	1	Warning	Exclamation

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**

P264

Signal Word	DANGER
Pictograms	Hazard Statements
	H314: Causes severe skin burns and eye damage
<u>(!)</u>	H317: May cause an allergic skin reaction
Prevention	Precautionary Statements
P102	Keep out of reach of children.
P261	Avoid breathing fumes or vapors.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves, protective clothing, and eye protection.

Section continued on next page

Wash hands and exposed skin thoroughly after handling.

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Continued...

Response	Precautionary Statements
P310	For all routes of exposure: Immediately call a POISON CENTER or doctor.
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 + P361+ P352	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Wash with plenty of water.
P333 + P313	If skin irritation or rash occurs: Get medical advice or attention.
P363	Wash contaminated clothing before reuse.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Storage	Precautionary Statements
P405	Store locked up.
Disposal	Precautionary Statements
P501	Dispose of contents and container in accordance to local, regional, 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)
109-55-7	3-aminopropyldimethylamine	12%
26139-75-3	formaldehyde, polymer with 1,3, dimethylbenzene	10%
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	9%
8007-24-7	cashew (anacardium occidentale) nutshell extract, decarboxylated, distilled	9%
1477-55-0	1-[3-(aminomethyl)phenyl]methanamine	5%



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Section 4: First-Aid Mea	asures
Exposure Condition	GHS Code: Precautionary Statement
IF IN EYES	P305 + P351 + P338, P310
Immediate Symptoms	redness, severe irritation, pain, burns
Response	Rinse cautiously with water for 30 minutes or more. Remove contact lenses, if present and easy to do. Continue rinsing.
	Immediately call a POISON CENTER or doctor.
IF ON SKIN (or hair)	P302 + P361+ P352, P310, P333 + P313, P363
Immediate or Delayed Symptoms	redness, severe irritation, rash (allergic contact dermatitis), pain, chemical burns
Response	Take off immediately all contaminated clothing. Wash with plenty of water.
	Immediately call a POISON CENTER or doctor.
	If skin irritation or rash occurs: Get medical advice or attention.
	Wash contaminated clothing before reuse.
IF INHALED	P304 + P340, P310
Immediate or Delayed Symptoms	cough, irritation of the respiratory track, burning sensation, asthma, difficulty breathing
Response	Remove person to fresh air and keep comfortable for breathing.
	Immediately call a POISON CENTER or doctor.
IF SWALLOWED	P301 + P330 + P331, P310
Immediate Symptoms	irritation, abdominal pain, nausea, vomiting, burns to the digestive tract
Response	Rinse mouth. Do not induce vomiting.
	Immediately call a POISON CENTER or doctor.



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# **Section 5: Fire-Fighting Measures**

**Extinguishing Media** In case of fire: 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 and toxic fumes in fires or in contact with hot

surfaces.

**Combustion Products** Produces carbon oxides (CO, CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>).

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

turn-out gear.

#### **Section 6: Accidental Release Measures**

**Personal Protection** Use personal protection recommended in Section 8.

Precautions for

Response

Avoid breathing fumes and vapors.

**Environmental Precautions** 

Avoid releasing to the environment. Prevent spill from entering

drains and waterways.

**Containment Methods** 

Contain with inert absorbent (such as soil, sand, vermiculite).

**Cleaning Methods** 

Collect liquid in a sealable container. Sprinkle inert absorbent compound onto spill, then sweep into the container. Wipe residue with a paper towel and place dirty towels in container. Wash spill area with soap and water to remove the last traces of

residue.

**Disposal Methods** 

Dispose spill waste according to Section 13.

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# **Section 7: Handling and Storage**

**Prevention** Keep out of reach of children.

Avoid breathing fumes or vapors.

Contaminated work clothing should not be allowed out of the

workplace.

Avoid release to the environment.

**Handling** Wear protective gloves, protective clothing, and eye protection.

In case of inadequate ventilation, wear respiratory protection.

Use only outdoors or in a well-ventilated area.

Take off contaminated clothing and wash it before reuse. Wash hands and exposed skin thoroughly after handling.

**Storage** Store locked up.

# **Section 8: Exposure Controls/Personal Protection**

# **Substances with Occupational Exposure Limit Values**

Chemical Name	Country or Vendor	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
m-xylene $\alpha$ , $\alpha'$	ACGIH	0.1 mg/m³ (Skin)	Not established
diamine	U.S.A. OSHA PEL	Not established	Not established
	Canada AB	0.1 mg/m <sup>3</sup>	Not established
	Canada BC	0.1 mg/m <sup>3</sup>	Not established
	Canada ON	0.1 mg/m <sup>3</sup>	Not established
	Canada QC	0.1 mg/m <sup>3</sup>	Not established

Note: Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH<sup>1</sup>, 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) Skin—can be absorbed through the skin.

Note: m-xylene  $\alpha, \alpha'$  diamine is also known as 1-[3-(aminomethyl)phenyl]methanamine

Section continued on next page



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## **Engineering Controls**

**Ventilation** Keep airborne concentrations below the occupational exposure

limits (OEL).

If the product is heated at high temperatures or worker is allergic, use local ventilation and 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).

**Skin Protection** For likely contacts, use of protective butyl rubber, neoprene, 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 fumes, mists, dust, and

vapors, 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	Clear, amber	Upper Flammability Limit	Not available	
Odor	Mild, amine-like	Vapor Pressure @20 °C	Not available	
Odor Threshold	Not available	Vapor Density	Not available	
pH	Not available	Specific Gravity @25 °C	0.99	
Freezing/Melting Point	Not available	Solubility in Water	Slightly soluble	
<b>Boiling Point</b>	≥130 °C [≥266 °F]	Partition Coefficient	Not available	
Flash Point	Not available	Auto-ignition Temperature	382 °C [720 °F]	
Evaporation Rate	Not available	Decomposition Temperature	Not available	
Flammability (solid, gas)	Not available	Viscosity @25 °C	1 278 cP	

# **Section 10: Stability and Reactivity**

**Reactivity** Not reactive.

**Chemical Stability** Chemically stable at normal temperatures and pressures

**Conditions to** 

**Avoid** Avoid excessive heat and incompatible substances.

**Incompatibilities** Strong oxidizing agents, strong acids

**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**

## **Summary of Effects and Symptoms by Routes of Exposure**

Eyes May causes redness, severe irritation, pain, or corrosive eye damage.

**Skin** May cause redness, severe irritation, allergic contact dermatitis, pain

and chemical burns.

**Inhalation** Inhalation of vapors or mist may cause coughing, irritation of the

respiratory track, difficulty breathing.

**Ingestion** May cause irritation, abdominal pain, nausea, vomiting, burns to the

digestive tract.

**Chronic** Prolonged and repeated exposure to uncured epoxy hardener may

lead to skin and respiratory sensitization.

# **Acute Toxicity (Lethal Exposure Concentrations)**

Chemical Name	LD50 oral	LD50 dermal	LC50 inhalation
3-aminopropyldimethylamine	377 mg/kg	300 mg/kg	Not
	Rat	Rabbit	available
2,4,6-tris(dimethylaminomethyl)phenol	2 169 mg/kg	Not	Not
	Rat	available	available
formaldehyde, polymer with 1,3, dimethylbenzene	Not	Not	Not
	available	available	available
cashew (anacardium occidentale)	Not	Not	Not
nutshell extract, decarboxylated, distilled	available	available	available
1-[3-(aminomethyl)phenyl]methanamine	930 mg/kg Rat	3 100 mg/kg Rabbit	1.34 mg/L (4hr) Rat
Mixture ATE	2499 mg/kg	2472 mg/kg	29.8 mg/L

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

Section continued on the next page



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**Other Toxicological Effects** 

Skin corrosion/irritation The 3-aminopropyldimethylamine, 2,4,6-

> tris(dimethylaminomethyl)phenol (CAS# 109-55-7); Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled (CAS # 8007-24-7); and 1-[3-(aminomethyl)phenyl]methanamine (CAS# 1477-55-0)

ingredients cause skin burns.

Serious eye damage/irritation The 3-aminopropyldimethylamine, 2,4,6-

tris(dimethylaminomethyl)phenol; Formaldehyde, polymer with 1,3, dimethylbenzene, Cashew (Anacardium occidentale) Nutshell Extract,

decarboxylated, Distilled; and 1-[3-

(aminomethyl)phenyl]methanamine ingredients cause

eye damage.

mutagen.

Respiratory and skin

**sensitization** (allergic reactions)

The 3-aminopropyldimethylamine (CAS# 109-55-7), 2,4,6-tris(dimethylaminomethyl)phenol (CAS# 90-72-2), Cashew (Anacardium occidentale) Nutshell Extract, decarboxylated, Distilled (CAS # 8007-24-7), and 1-[3-(aminomethyl)phenyl]methanamine (CAS# 1477-55-0)

None of the ingredients are classified or listed as a

None of the ingredients are classified or listed as a

may cause skin sensitization.

Carcinogenicity (risk of cancer)

carcinogen by IARC, ACGIH, CA Prop 65, or NTP. Mutagenicity None of the ingredients are classified or listed as a

(risk of heritable genetic effects)

**Reproductive Toxicity** (risk to sex functions)

**Teratogenicity** 

(risk of fetus malformation)

**STOT-single exposure** 

**STOT-repeated exposure** 

Based on available data,

reproductive hazard.

the classification criteria are not met.

Based on available data,

the classification criteria are not met.

Based on available data,

the classification criteria are not met.

**Aspiration hazard** Based on available data, the classification criteria are

> not met. There is less than 10% category 1 component, and the kinematic viscosity is >20.5 mm<sup>2</sup>/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 (<a href="http://echa.europa.eu">http://echa.europa.eu</a>), and other reliable sources.

## **Acute Ecotoxicity**

None of the ingredients are acutely ecotoxic.

# **Chronic Ecotoxicity**

None of the ingredients are chronically ecotoxic.

#### **Biodegradability**

Not readily biodegradable

#### **Bioaccumulation**

Not available

#### Other Effects

Not available

## **Section 13: Disposal Information**

Dispose of contents and container 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 1 L and under Part B of 832HDA-25ML, 832HDA-50ML, and 832HDA-400ML kits

**Limited Quantity** 



Sizes greater than 1 L UN number: UN1760

Part B of 832HDA-7.4L and 832HDA-

40L kits

**Shipping Name:** Corrosive Liquid,

N.O.S. (3-

aminopropyldimethylamine)

Class: 8

**Packing Group**: II Marine Pollutant: Yes



#### Air

# Refer to ICAO-IATA Dangerous Goods Regulations.

Sizes 0.5 L and under Part B of 832HDA-25ML, 832HDA-50ML, and 832HDA-400ML kits

**Limited Quantity** 



Sizes greater than 0.5 L up to 1 L

UN number: UN1760

Part B of 832HDA-7.4L and 832HDA-

40L kits

Shipping Name: Corrosive Liquid,

N.O.S. (3-

aminopropyldimethylamine)

Class: 8

Packing Group: II Marine Pollutant: Yes

**Excepted Quantity** E2 ≤30 mL

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#### Sea

#### Refer to IMDG regulations.

Sizes 1 L and under Part B of 832HDA-25ML, 832HDA-50ML, and 832HDA-400ML kits Limited Quantity



Sizes greater than 1 L **UN number**: UN1760 Part B of 832HDA-7.4L and 832HDA-40L kits

Shipping Name: Corrosive Liquid,

N.O.S. (3-

aminopropyldimethylamine)

Class: 8

Packing Group: II Marine Pollutant: Yes



*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/NDSL.

#### 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:	*	3
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 that 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 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, 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.

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#### **Section 16: Other Information**

**SDS Prepared by** MG Chemicals Regulatory Department

Date 20 February 2024
Supersedes 15 August 2023
Reason for Changes: Update to section 3.

Volatile Organic Content

#### 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).

#### **Abbreviations**

VOC

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

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**Technical Queries** Contact us regarding any questions, improvement suggestions, or

problems with this product. Application notes, instructions, and FAQs

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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.