

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: 832FX-A

Other Means of Identification: Black Flexible Epoxy Encapsulating and Potting Compound (Part A)

Related Part Number:

832FX-A, 832FX-A-450ML, 832FX-A-1.7L, 832FX-A-7.4L, 832FX-A-40L, 832FX-A-360L (MTO)

UFI: FUF0-F01U-700Q-U68K

1.2 Relevant identified uses of the substance or mixture and uses advised against

Application of the substance / the mixture Epoxy resin

Uses advised against Not applicable

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

MG Chemicals Ltd. (Head Office)
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADA
+(1) 905-331-1396
info@mgchemicals.com

MG Chemicals
Heame House, 23 Bliston Street
Sedgely Dudley DY3 1JA.
United Kingdom
+(44) 1663 362888

MG Chemicalst Ltd.
Level 2, Vision Exchange, Building Territorials Street,
Zone 1, Central Business, District,
Birkirkara CBD 1070,
MALTA

Further information obtainable from: sds@mgchemicals.com

1.4 Emergency telephone number:

Members of the public seeking specific information on poisons should contact:

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

Verisk 3E (Access code: 335388)

+(44) 20 3514787

+(1) 760 476 3961

UK Toll free: +(0) 800 680 0425

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

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GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

Hazard pictograms



GHS07



GHS09

Signal word Warning

Hazard-determining components of labelling:

oxirane,2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer
Carbon black

Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing fumes and vapors.
P264 Wash thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection / face protection.
P391 Collect spillage.
P501 Dispose of contents and container in accordance with local, regional, and national regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

Determination of endocrine-disrupting properties Endocrine Disruptor substance ≥ 0.1% = none

SECTION 3: Composition/information on ingredients

3.2 Mixtures

• **Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 25085-99-8	oxirane,2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1B, H317	74.0%
CAS: 41638-13-5	polyglycol, epichlorohydrin polymer ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	13.0%

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CAS: 68609-97-2 EINECS: 271-846-8 Index number: 603-103-00-4	oxirane, mono[(C12-14-alkyloxy)methyl] derivs ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	11.0%
CAS: 25068-38-6 NLP: 500-033-5 Index number: 603-074-00-8	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight $\leq$ 700) Alternative CAS number: 1675-54-3 ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317, EUH205 Specific concentration limits: Eye Irrit. 2; H319: C $\geq$ 5 % Skin Irrit. 2; H315: C $\geq$ 5 %	1.0%
CAS: 1333-86-4 EINECS: 215-609-9	Carbon black ⚠ Carc. 2, H351	0.4%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

Wash with plenty water.

If skin irritation or rash occurs: Get medical advice or attention.

Take off contaminated clothing and wash it before reuse.

· **After eye contact:**

Rinse cautiously with water for 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice or attention.

· **After swallowing:**

Rinse mouth.

Do NOT induce vomiting.

If symptoms persist consult doctor.

· 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

· 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

· 5.2 Special hazards arising from the substance or mixture

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.

· **Hazardous combustion products:**

Carbon Oxides (COx)

other toxic fumes

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· **5.3 Advice for firefighters**

- **Protective equipment:** Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

- Ensure adequate ventilation
- Avoid breathing the fumes or vapors.
- Remove or keep away all sources of extreme heat or open flames.

· **6.2 Environmental precautions:**

- Avoid release to the environment.
- Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**

- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Collect liquid in a sealable, chemical-resistant container.
- Wash residue with a paper towel and place dirty towels in container.
- Use soap and water to remove the last traces of residue.

· **6.4 Reference to other sections**

- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols.
- Wear protective gloves and eye protection.
- Wash hands and exposed skin thoroughly after handling.
- Take off contaminated clothing and wash it before reuse.
- Collect spillage.
- Contaminated work clothing should not be allowed out of the workplace.
- **Information about fire - and explosion protection:** No special measures required.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

- **Requirements to be met by storerooms and receptacles:**
 - Keep in a dry and clean area, away from incompatible substances
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.

· **7.3 Specific end use(s)** See section 1.2

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:	
1333-86-4 Carbon black	
WEL	Short-term value: 7 mg/m ³ Long-term value: 3.5 mg/m ³

Additional information:

The lists valid during the making were used as basis.

Refer to the national or regional occupational exposure limit regulation for abbreviations and acronyms.

8.2 Exposure controls

• **Appropriate engineering controls** No further data; see section 7.

• **Individual protection measures, such as personal protective equipment**

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Advice should be sought from respiratory protection specialists.

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.

Hand protection

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.



Protective gloves: EN374

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• **Eye/face protection**



Safety glasses or tightly sealed goggles: EN 166

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

· Physical state	Liquid
· Form:	Viscous
· Colour:	Black
· Odour:	Mild
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	≥150 °C
· Flammability	Non flammable
· Lower and upper explosion limit	
· Lower:	Not applicable
· Upper:	Not applicable
· Flash point:	142 °C
· Auto-ignition temperature:	≥235 °C
· Decomposition temperature:	Not determined.
· pH	Not determined.
· Viscosity:	
· Kinematic viscosity	Not determined.
· Solubility	
· water:	Not miscible or difficult to mix.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Relative density at 25 °C:	1.13
· Vapour density (air=1):	>1
· Particle characteristics	Not applicable.

9.2 Other information

· 9.2.1 Information with regard to physical hazard classes	Not applicable
· 9.2.2 Other safety characteristics	
· Evaporation rate	Not determined.
· Ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent content:	
· Organic solvents:	Not available
· VOC (EC)	0.00 %
· Solids content:	26.0 %

SECTION 10: Stability and reactivity

- **10.1 Reactivity** Reacts exothermically with amines.
- **10.2 Chemical stability** Chemically stable at normal temperatures and pressures.
 - **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Avoid ignition sources, open flames, and incompatible substances.
- **10.5 Incompatible materials:**
Strong oxidizing agents

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Strong acids
alkali

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· **10.6 Hazardous decomposition products:**

No dangerous decomposition products known.

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

· **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:		
68609-97-2 oxirane, mono[(C12-14-alkyloxy)methyl] derivs		
Oral	LD50	19,200 mg/kg (rat)
Dermal	LD50	4,500 mg/kg (rat)
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)		
Oral	LD50	11,400 mg/kg (rat)
1333-86-4 Carbon black		
Oral	LD50	>15,400 mg/kg (rat)
Dermal	LD50	>3,000 mg/kg (rabbit)

· **Primary irritant effect:**

· **Skin corrosion/irritation** Causes skin irritation.

· **Serious eye damage/irritation** Causes serious eye irritation.

· **Respiratory or skin sensitisation** May cause an allergic skin reaction.

· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

· **Carcinogenicity** Based on available data, the classification criteria are not met.

· **Reproductive toxicity** 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.

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

· **Eyes:**

redness, serious irritation

pain

· **Skin:**

rash, allergic contact dermatitis

redness, irritation

· **Inhalation:**

cough

may cause mild respiratory irritation

· **Swallowed:**

irritation

see inhalation symptoms

· **Additional toxicological information:**

· **Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Prolonged and repeated exposure to uncured epoxy hardener may lead to skin sensitization.

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· **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

Toxic to aquatic life with long lasting effects.

Avoid release to the environment.

Collect spillage.

25085-99-8 oxirane,2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer	
LC50 96h	>1 mg/L (N/Av)
1333-86-4 Carbon black	
EC50/ 24 h	>5,600 mg/L (aquatic invertebrates)
EC50/ 72 h	>10,000 mg/L (aquatic algae and cyanobacteria)
EC0/ 3 h	>800 mg/L (microorganisms)
LC50	>1,000 mg/L (fish)

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**

· **Remark:** Toxic for fish

· **Additional ecological information:**

· **General notes:**

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation** This material and its container must be disposed of as hazardous waste.

European waste catalogue	
HP4	Irritant - skin irritation and eye damage
HP13	Sensitising

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HP14	Ecotoxic	(Contd. of page 8)
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· **Uncleaned packaging:**

· **Recommendation:**

Containers may still present a chemical hazard/ danger when empty.
Dispose of contents in accordance with all local, regional, national, and international regulations.
Where possible retain label warnings and SDS and observe all notices pertaining to the product.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· 14.1 UN number or ID number	
· ADR, IMDG, IATA	UN3082
· 14.2 UN proper shipping name	
· ADR	NOT REGULATED by Road ADR Special Provision 375 for sizes 5L or less. ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))
· IMDG	NOT REGULATED by Sea IMDG according to 2.10.2.7 for sizes of 5L or less. ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))
· IATA	NOT REGULATED by Air IATA Special Provision A197 for sizes 5L or less. Environmentally hazardous substance, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))
· 14.3 Transport hazard class(es)	
· ADR, IMDG	
	
· Class	9 Miscellaneous dangerous substances and articles.
· Label	9
· IATA	
 	
· Class	9 Miscellaneous dangerous substances and articles.
· Label	9

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· 14.4 Packing group · ADR, IMDG, IATA	III
· 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA):	MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS ENVIRONMENTALLY HAZARDOUS Symbol (fish and tree)
· 14.6 Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Stowage Category	Not applicable. 90 F-A,S-F A
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category · Tunnel restriction code	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3 (-)
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL-A-(EPICHLORHYDRIN) EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT ≤ 700)), 9, III

SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Poisons Act**

· Regulated explosives precursors (Part 1)
None of the ingredients is listed.
· Regulated poisons (Part 2)
None of the ingredients is listed.

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· Reportable explosives precursors (Part 3)
None of the ingredients is listed.
· Reportable poisons (Part 4)
None of the ingredients is listed.
· Directive 2012/18/EU
· Named dangerous substances - ANNEX I None of the ingredients is listed.
· Seveso category E2 Hazardous to the Aquatic Environment
· Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
· Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II
None of the ingredients is listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.
- H411 Toxic to aquatic life with long lasting effects.
- EUH205 EUH205: Contains epoxy constituents. May produce an allergic reaction.

· Classification according to Regulation (EC) No 1272/2008	
Skin corrosion/irritation Serious eye damage/irritation Skin sensitisation Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· **Department issuing SDS:** Regulatory department

· **Contact:** sds@mgchemicals.com

· **Date of previous version:** 04.06.2024

· **Version number of previous version:** 7.00

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1

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Safety data sheet
according to UK REACH

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Skin Sens. 1B: Skin sensitisation – Category 1B

Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

· *** Data compared to the previous version altered.**

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