

MATERIAL SAFETY DATA SHEET

F04, F05, and F06

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: F04, F05, and F06
Product Use: Flexible geometric forms
Manufacturer/Supplier: Multi-Seals Inc.
540 North Main Street
Manchester, CT 06042
Phone Number: (860) 643-7188
Emergency Phone: (860) 643-7188
Date of Preparation: November 27, 2007 **Revision #:** 1.0

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS: See Section 15

WARNING

MAY CAUSE EYE IRRITATION.

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Skin contact, eye contact, and ingestion.

Eye: May cause eye irritation.
Skin: May cause sensitisation by skin contact.
Ingestion: May be harmful if swallowed. May result in obstruction and temporary irritation of the digestive tract.
Inhalation: Not a normal route of exposure.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation.

Signs and Symptoms: Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Medical Conditions Aggravated By Exposure: Asthma. Allergies.

Target Organs: Skin, eyes and gastrointestinal tract.

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Environmental Effects: May cause long-term adverse effects in the aquatic environment. See Section 12 for more information.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS #	Wt. %
Diglycidyl ether of bisphenol A-based epoxy resins, medium to high molecular weight solids	25036-25-3	10 - 30
Carbon black	1333-86-4	0.1 - 1

Section 4: FIRST AID MEASURES

Eye Contact: In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.

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Skin Contact: If irritation occurs, flush skin with plenty of water. Get medical attention if irritation persists.

Inhalation: Not a normal route of exposure. If symptoms develop, remove to fresh air. Get medical attention if condition worsens.

Ingestion: May result in obstruction and irritation if ingested. Get medical attention.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE FIGHTING MEASURES

Flammability: Not flammable by WHMIS/OSHA criteria.

Means of Extinction:

Suitable Extinguishing Media: Treat for surrounding material.

Unsuitable Extinguishing Media: Not available.

Products of Combustion: May include, and are not limited to: oxides of carbon.

Explosion Data:

Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: Not available.

Protection of Firefighters: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental Precautions: If large quantities enter a waterway, advise local authorities.

Methods for Containment: Contain spill, then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Clean-Up: Vacuum or sweep material and place in a disposal container.

Other Information: Not available.

Section 7: HANDLING AND STORAGE

Handling:

Avoid contact with eyes. Do not swallow. Wear gloves and safety glasses or goggles if handling large quantities. When using do not eat or drink. Wash hands before eating, drinking, or smoking.

Storage:

Keep out of the reach of children.

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Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Ingredient	Exposure Limits	
	OSHA-PEL	ACGIH-TLV
Diglycidyl ether of bisphenol A-based epoxy resins, medium to high molecular weight solids	Not available.	Not available.
Carbon black	Not available.	Not available.

Engineering Controls: Use ventilation adequate to keep exposures below recommended exposure limits.

Personal Protective Equipment:

HMIS: See Section 15

Eye/Face Protection: Wear eye/face protection.

Hand Protection: None necessary under normal conditions of use. Wear gloves if handling large quantities.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Wear appropriate NIOSH approved dust mask or filtering facepiece if dust is generated.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Flexible geometric forms
Color:	Various.
Odour:	Slight phenolic.
Odour Threshold:	Not applicable.
Physical State:	Solid.
pH:	Not applicable.
Viscosity:	Not available.
Freezing Point:	Not available.
Boiling Point:	Not available.
Flash Point:	Not applicable.
Evaporation Rate:	Not applicable.
Lower Flammability Limit:	Not available.
Upper Flammability Limit:	Not available.
Vapor Pressure:	Not available.
Vapor Density:	Not available.
Specific Gravity:	Not available.
Solubility in Water:	Insoluble.
Coefficient of Water/Oil Distribution:	Not available.
Auto-ignition Temperature:	This product will not ignite.
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	Not available.

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Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions.

Conditions of Reactivity: Heat. Incompatible materials.

Incompatible Materials: None known.

Hazardous Decomposition Products: May include, and are not limited to: oxides of carbon.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Section 11: TOXICOLOGY INFORMATION

EFFECTS OF ACUTE EXPOSURE

Component Analysis

Ingredient	LD ₅₀ (oral)	LC ₅₀
Diglycidyl ether of bisphenol A-based epoxy resins, medium to high molecular weight solids	Not available.	Not available.
Carbon black	> 15400 mg/kg, rat	Not available.

Eye: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Skin: May cause sensitisation by skin contact.

Ingestion: May be harmful if swallowed. May result in obstruction and temporary irritation of the digestive tract.

Inhalation: Not a normal route of exposure.

EFFECTS OF CHRONIC EXPOSURE

Target Organs: Not available.

Chronic Effects: Not hazardous by WHMIS/OSHA criteria.

Carcinogenicity: Hazardous by WHMIS/OSHA criteria.

Ingredient	Chemical Listed as Carcinogen or Potential Carcinogen *
Diglycidyl ether of bisphenol A-based epoxy resins, medium to high molecular weight solids	Not listed.
Carbon black	I-2B, CP65

* See Section 15 for more information.

Mutagenicity: Not hazardous by WHMIS/OSHA criteria.

Reproductive Effects: Not hazardous by WHMIS/OSHA criteria.

Developmental Effects:

Teratogenicity: Not hazardous by WHMIS/OSHA criteria.

Embryotoxicity: Not hazardous by WHMIS/OSHA criteria.

Respiratory Sensitization: Not hazardous by WHMIS/OSHA criteria.

Skin Sensitization: Hazardous by WHMIS/OSHA criteria.

Toxicologically Synergistic Materials: Not available.

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Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: May cause long-term adverse effects in the aquatic environment

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions:

This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

Section 14: TRANSPORTATION INFORMATION

DOT Classification

Not regulated

TDG Classification

Not regulated

Section 15: REGULATORY INFORMATION

Federal Regulations

Canadian: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

US: MSDS prepared pursuant to the Hazard Communication Standard (29 CFR 1910.1200).

SARA Title III

Ingredient

	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Diglycidyl ether of bisphenol A-based epoxy resins, medium to high molecular weight solids	Not listed.	Not listed.	Not listed.	Not listed.
Carbon black	Not listed.	Not listed.	Not listed.	Not listed.

State Regulations

California Proposition 65:

This product contains a chemical known to the state of California to cause cancer.

Global Inventories

Ingredient

	Canada DSL/NDL	USA TSCA
Diglycidyl ether of bisphenol A-based epoxy resins, medium to high molecular weight solids	DSL	Yes.
Carbon black	DSL	Yes.

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HMIS - Hazardous Materials Identification System

Health - 1* Flammability - 0 Physical Hazard - 0 PPE – B

NFPA - National Fire Protection Association:

Health - 1 Fire - 0 Reactivity - 0

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

WHMIS Classification(s):

Class D2A - Carcinogenicity
Class D2B - Skin Sensitization
Class D2B - Eye Irritant

WHMIS Hazard Symbols:



SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

OSHA (O) Occupational Safety and Health Administration.

ACGIH (G) American Conference of Governmental Industrial Hygienists.

A1 - Confirmed human carcinogen.
A2 - Suspected human carcinogen.
A3 - Animal carcinogen.
A4 - Not classifiable as a human carcinogen.
A5 - Not suspected as a human carcinogen.

IARC (I) International Agency for Research on Cancer.

1 - The agent (mixture) is carcinogenic to humans.
2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.
2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.
3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.
4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

NTP (N) National Toxicology Program.

1 - Known to be carcinogens.
2 - Reasonably anticipated to be carcinogens.

Section 16: OTHER INFORMATION

Disclaimer:

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

Expiry Date: November 27, 2010

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