

MATERIAL SAFETY DATA SHEET 3M  
 3M Center  
 St. Paul, Minnesota  
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DIVISION: TELECOM SYSTEMS DIVISION  
 TRADE NAME:  
 4442 HIGH GEL REENTERABLE ENCAPSULANT

ID NUMBER/U.P.C.:

78-8093-1552-2	-	-	-	78-8093-1553-0	-	-	-
78-8093-1554-8	-	-	-	78-8093-1555-5	-	-	-
78-8096-0198-8	-	-	-	80-6108-4957-4	00-51138-36284-3		
80-6108-5936-7	00-51138-36444-1			80-6108-5937-5	00-51138-36445-8		
80-6108-5938-3	00-51138-36446-5			80-6108-5939-1	00-51138-36447-2		
80-6108-5940-9	00-51138-36448-9			80-6108-5941-7	00-51138-36449-6		
80-6108-5942-5	00-51138-36450-2			80-6108-5943-3	00-51138-36451-9		
80-6108-5944-1	00-51138-36452-6			80-6108-5945-8	00-51138-36453-3		
80-6108-5975-5	00-51138-36509-7			80-6108-5976-3	00-51138-36508-0		
80-6108-5977-1	00-51138-36507-3			80-6108-5978-9	00-51138-36510-3		
80-6108-5979-7	00-51138-36511-0			80-6108-5980-5	00-51138-36512-7		
80-6108-6065-4	00-51138-36611-7			80-6109-3585-2	00-51138-58160-2		
80-6109-3588-6	00-51138-58163-3			80-6109-3589-4	00-51138-58164-0		
80-6109-3590-2	00-51138-58165-7			80-6109-3591-0	00-51138-58166-4		
80-6109-3669-4	00-51138-58243-2			80-6109-3670-2	00-51138-58244-9		
80-6110-0934-3	00-51138-70890-0			80-6110-2036-5	00-51138-89323-1		
80-6110-2113-2	00-51138-89400-9						

ISSUED: October 21, 1999  
 SUPERSEDES: September 08, 1999  
 DOCUMENT: 07-2730-5

1. INGREDIENT	C.A.S. NO.	PERCENT	
PART A:	None	50	
VEGETABLE OIL	8001-22-7	50.0	- 70.0
POLYBUTADIENE POLYMER	25655-35-0	30.0	- 50.0
HYDROTREATED NAPHTHENIC DISTILLATES	64742-52-5	5.0	- 10.0
PART B:	None	50	
HYDROTREATED NAPHTHENIC DISTILLATES	64742-52-5	35.0	- 55.0
POLYBUTADIENE RESIN	69102-90-5	30.0	- 40.0
EPOXIDIZED FATTY ACID ESTERS	71302-79-9	5.0	- 15.0
DIDECYL TERTIARY AMINE	7396-58-9	5.0	- 10.0

The components of this product are in compliance with the chemical notification requirements of TSCA.

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

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1. INGREDIENT	C.A.S. NO.	PERCENT
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Ingredient 64742-52-5 is a Severely Hydrotreated Naphthenic Distillate. It is a Group 3 material and is not classifiable as a human carcinogen according to IARC.

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2. PHYSICAL DATA

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BOILING POINT:..... N/D  
VAPOR PRESSURE:..... Est. < 5mm Hg @ 68F  
VAPOR DENSITY:..... N/D  
EVAPORATION RATE:..... N/A  
SOLUBILITY IN WATER:..... nil  
SPECIFIC GRAVITY:..... Water=1; Parts A and B: 0.9  
PERCENT VOLATILE:..... N/A  
pH:..... N/A  
VISCOSITY:..... Part A: ca 700 cps; Part B: ca 600 cps  
MELTING POINT:..... N/D

APPEARANCE AND ODOR:

Part A: Clear, amber liquid; mild odor. Part B: Clear, light amber liquid; mild odor.

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3. FIRE AND EXPLOSION HAZARD DATA

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FLASH POINT:..... > 230 F PMCC  
Parts A and B  
FLAMMABLE LIMITS - LEL:..... N/D  
FLAMMABLE LIMITS - UEL:..... N/D  
AUTOIGNITION TEMPERATURE:..... N/D

EXTINGUISHING MEDIA:

Water spray, Carbon dioxide, Dry chemical, Foam

SPECIAL FIRE FIGHTING PROCEDURES:

Not applicable

UNUSUAL FIRE AND EXPLOSION HAZARDS:

No unusual fire or explosion hazards are anticipated.

NFPA HAZARD CODES: HEALTH: 1 FIRE: 0 REACTIVITY: 0  
UNUSUAL REACTION HAZARD: none

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4. REACTIVITY DATA

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STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:  
Strong Acids, Strong Oxidizing Agents.

HAZARDOUS POLYMERIZATION: Hazardous polymerization may occur:  
Temperatures >400F.

HAZARDOUS DECOMPOSITION PRODUCTS:  
Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Oxides of  
Sulfur, Aldehydes, Hydrocarbons.

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5. ENVIRONMENTAL INFORMATION

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SPILL RESPONSE:

Observe precautions from other sections. Cover with inorganic  
absorbent material. Collect spilled material. Clean up residue with  
an appropriate organic solvent. Read and follow safety precautions on  
the solvent label and MSDS. Place in a closed container.

RECOMMENDED DISPOSAL:

Incinerate uncured waste in an industrial or commercial incinerator.  
Dispose of empty cans in a sanitary landfill. Disposal alternative:  
Dispose of waste product in a facility permitted to accept chemical  
waste. For quantities less than 100 lbs. (50 kg.): Dispose of  
completely cured (or polymerized) material in a sanitary landfill.  
For larger quantities: Incinerate in an industrial or commercial  
facility in the presence of a combustible material.

ENVIRONMENTAL DATA:

Not applicable.

REGULATORY INFORMATION:

Volatile Organic Compounds: N/A.  
VOC Less H<sub>2</sub>O & Exempt Solvents: N/A.

Since regulations vary, consult applicable regulations or authorities  
before disposal. U.S. EPA Hazardous Waste Number = None (Not U.S.  
EPA Hazardous).

EPCRA HAZARD CLASS:

FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: Yes CHRONIC: No

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6. SUGGESTED FIRST AID  
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EYE CONTACT:

Immediately flush eyes with large amounts of water. Get immediate medical attention.

SKIN CONTACT:

Immediately flush skin with large amounts of water. Remove contaminated clothing. If irritation persists, call a physician. Wash contaminated clothing before reuse.

INHALATION:

If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

IF SWALLOWED:

Drink two glasses of water. Call a physician.

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7. PRECAUTIONARY INFORMATION  
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EYE PROTECTION:

Avoid eye contact. Wear safety glasses with side shields.

SKIN PROTECTION:

Avoid skin contact. Wear appropriate gloves when handling this material.

RECOMMENDED VENTILATION:

Use in a well-ventilated area.

RESPIRATORY PROTECTION:

Not applicable.

PREVENTION OF ACCIDENTAL INGESTION:

Wash hands after handling and before eating.

RECOMMENDED STORAGE:

Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Not applicable.

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
PART A:.....	NONE	NONE	NONE	NONE	
VEGETABLE OIL:.....	NONE	NONE	NONE	NONE	
POLYBUTADIENE POLYMER:.....	NONE	NONE	NONE	NONE	

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EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
HYDROTREATED NAPHTHENIC DISTILLATES.....	5	MG/M3	TWA	CMRG	
HYDROTREATED NAPHTHENIC DISTILLATES.....	10	MG/M3	STEL	CMRG	
PART B:.....	NONE	NONE	NONE	NONE	
HYDROTREATED NAPHTHENIC DISTILLATES.....	5	MG/M3	TWA	CMRG	
HYDROTREATED NAPHTHENIC DISTILLATES.....	10	MG/M3	STEL	CMRG	
POLYBUTADIENE RESIN.....	NONE	NONE	NONE	NONE	
EPOXIDIZED FATTY ACID ESTERS.....	NONE	NONE	NONE	NONE	
DIDECYL TERTIARY AMINE.....	NONE	NONE	NONE	NONE	

\* SKIN NOTATION: Listed substances indicated with 'Y' under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

SOURCE OF EXPOSURE LIMIT DATA:

- CMRG: Chemical Manufacturer Recommended Exposure Guidelines
- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:

Mild Eye Irritation: signs/symptoms can include redness, swelling, pain, and tearing.

SKIN CONTACT:

Moderate to severe skin irritation: Signs/symptoms can include redness, swelling, itching, cracking, blistering and pain.

INHALATION:

No adverse health effects are expected from inhalation exposure.

IF SWALLOWED:

Ingestion is not a likely route of exposure to this product.

SECTION CHANGE DATES

INGREDIENTS SECTION CHANGED SINCE September 08, 1999 ISSUE

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