

Material Safety Data Sheet

Glass Separator 54J Series

MSDS No. 16018.2

Date of Preparation: 10/26/05

Revision: 3/30/06

Section 1 - Chemical Product and Company Identification

Product: Glass Separator 54J Series

Manufacturer: Marshall Additive Technologies

Division of the R. J. Marshall Company

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Date Revised: 3/30/06

Preparer: Stephanie Nichols

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number
Diodomethyl-p-tolylsulfone	20018-09-1
Adipic Acid	124-04-9
Glycols, polyethylene, mono{(1,1,3,3-tetramethylbutyl)phenyl] ether	9036-19-5
Polyethylene Glycol	25322-68-3

Ingredient	OSHA PEL		ACGIH TLV	
	TWA	STEL	TWA	STEL
Diodomethyl-p-tolylsulfone	none estab.	none estab.	none estab.	none estab.
Adipic Acid	none estab.	none estab.	5 mg/m ³	none estab.
Glycols, polyethylene, mono{(1,1,3,3-tetramethylbutyl)phenyl] ether	none estab.	none estab.	none estab.	none estab.
Polyethylene Glycol	none estab.	none estab.	none estab.	none estab.

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

HMIS

H 2

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R 0

PPE†

†Sec. 8

Potential Health Effects

Primary Entry Routes: Inhalation, Ingestion, and Skin.

Acute Effects

Inhalation: May cause respiratory tract irritation, coughing, sneezing, chest pain. Low hazard for usual industrial handling.

Eye: Causes severe eye irritation, excess redness and swelling of the conjunctiva, and chemical burns of the cornea. Iritis may occur.

Skin: May irritate the skin. Prolonged or repeated skin contact may cause dermatitis.

Ingestion: Moderately toxic. May cause abdominal discomfort, nausea, vomiting, and diarrhea. Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury.

Carcinogenicity: Ethyl acrylate is considered to be a carcinogen by the IARC and ACGIH.

Medical Conditions Aggravated by Long-Term Exposure: none known.

Section 4 - First Aid Measures

Inhalation: If person experiences labored breathing or shortness of breath remove from area of exposure. If condition persists, contact physician or emergency medical service.

Eye Contact: Wash with large amounts of water for 15 minutes periodically lifting the upper and lower lids. Do not remove contact lenses if worn. Get medical attention without delay, preferably from an ophthalmologist.

Skin Contact: Wash skin thoroughly with soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists.

Ingestion: Get medical attention. If victim is conscious and alert, give 2-4 cupfuls of water. Do not induce vomiting.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Section 5 - Fire-Fighting Measures

Flash Point: 385F (196C)

Flash Point Method: n/a

Burning Rate: Not determined.

Auto-ignition Temperature: 788F (420C)

Extinguishing Media: Water spray, dry chemical, alcohol foam, or CO₂.

Unusual Fire or Explosion Hazards: Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Minimum explosive concentration in air (dust): 10-15mg/L. Do not direct a solid stream of water or foam into hot, burning pools; this may cause frothing and increase fire intensity.

Hazardous Combustion Products: Carbon monoxide and/or carbon dioxide.

Fire-Fighting Instructions: Wear self-contained breathing apparatus and protective clothing.

Section 6 - Accidental Release Measures

Spill /Leak Procedures: Evacuate all unnecessary personnel. Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment. Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Pick up spill for recovery or disposal and place in a closed container. To avoid gelling and foaming problems, do not use water to flush away spills.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling and Storage Precautions: Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Avoid dust formation and control ignition sources. Employ grounding, venting, and explosion relief provisions in accord with accepted engineering practices in any process capable of generating dust and/or static electricity. Empty only into inert or non-flammable atmosphere where flammable vapors may be present could cause a flash fire or explosion due to electrostatic discharge.

This product may contain trace amounts of ethylene oxide (CAS# 75-21-8), a condition which creates the potential for accumulation of ethylene oxide in the head space of shipping and storage containers and in enclosed areas where the product is being handled or used. Ethylene oxide is listed by OSHA as probably carcinogenic to humans, IARC as carcinogenic to humans, and NTP as known to be a human carcinogen. OSHA considers that, at excessive levels, ethylene oxide may present reproductive, mutagenic, genotoxic, neurologic and sensitization hazards. If this product is handled with adequate ventilation, the presence of these trace amounts is not expected to result in any short or long term hazard. This product may not be exempt from OSHA's ethylene oxide standard, 29 CFR 1910.1047. Users should comply with all applicable provisions. Personnel should be monitored to determine levels of exposure to ethylene oxide. If necessary, protective measures should be taken. The OSHA permissible exposure limit for ethylene oxide is 1ppm TWA8, the action level is 0.5ppm TSW8, the ACGIH TLV is 1ppm TWA8 and OSHA has established an excursion limit of 5 ppm (15 minute average).

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: A well-ventilated area to control dust levels. Dust tight conveying and handling equipment is recommended to minimize airborne dust levels. A system of local and/or general exhaust is recommended.

Administrative Controls:

Respiratory Protection: If the exposure limit is exceeded, a full face-piece with dust/mist filter may be worn. Where the exposure limits are not known, use a full face-piece positive-pressure, air-supplied respirator.

Protective Clothing/Equipment: Use chemical safety goggles and/or full face-shield where dusting is possible. Maintain eye wash fountain and quick drench facilities in work. Rubber gloves and lab coat, apron, or coveralls.

Work Hygiene: Wash hands after each exposure especially before and after using sanitary facilities.

Section 9 - Physical and Chemical Properties

Physical State: solid

Appearance and Odor: white.

Odor Threshold: mild

Vapor Pressure: .106mmHg @ 77F (25C)

Vapor Density (Air=1): 5.04

Formula Weight: n/a

Density: n/a

Specific Gravity (H₂O=1, at 4 °C): approx. 1.3

pH: n/a

Water Solubility: partially soluble.

Other Solubilities: n/a

Boiling Point: >392F (>200C) @ 760mmHg

Freezing/Melting Point: n/a

Viscosity: n/a

Refractive Index: n/a

Surface Tension: n/a

% Volatile: .0065 Wt%

Evaporation Rate: n/a

Section 10 - Stability and Reactivity

Stability: This product is stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: None anticipated under normal or recommended handling and storage conditions.

Chemical Incompatibilities: strong oxidizers, bases, reducing agents, materials reactive with hydroxyl compounds, strong acids. Corrosive to mild steel at room temperature.

Conditions to Avoid: incompatible materials, dust generation, heating to decomposition, extreme heat, sparks, flame.

Hazardous Decomposition Products: CO, CO₂.

Section 11- Toxicological Information**Toxicity Data:***

Oral rat LD50:>11g/kg. Eye: Rabbit (Irritation) 20mg/24H moderate.

Section 12 - Ecological Information

The material is expected to slightly toxic to aquatic life. The LC50/96 hour values for fish are between 10 and 100mg/L. When released into the soil, this material may biodegrade to a moderate extent. When released into the soil, this material is not expected to evaporate significantly. When released into water, this material is expected to readily biodegrade. When released into water, this material is expected to have a half-life between 1 and 10days. This material has a log Octanol-water partition coefficient of less than 3.0. This material is not expected to bioaccumulate. When released into the water, this material is not expected to evaporate significantly. When released into the air, this material may be moderately degraded by reaction with photo chemically produced hydroxyl radicals.

Section 13 - Disposal Considerations

Disposal: Dispose as solid waste in sanitary landfill or incinerate according to Federal, State, and local regulations.

Section 14 - Transport Information**DOT Transportation Data (49 CFR 172.101):**

Proper Shipping Name: Adipic Acid, Not regulated if less than 5,000lbs/pkg or RQ, Environmentally Hazardous Substance, Solid, N.O.S. (Adipic Acid)
Hazard Class: 9 (if >5,000lbs/pkg)
ID Number: UN3077 (if >5,000lbs/pkg)
Packing Group: PGIII (if >5,000lbs/pkg)

Section 15 - Regulatory Information**EPA Regulations:**

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)

RCRA Hazardous Waste Classification: Not classified

CERCLA Hazardous Substance (40 CFR 302.4)

- Adipic Acid RQ 5000# (Release of more than 5,000lbs requires notification to the National Response Center (800-424-8802).

-Glycol Ethers $\leq 2.0\%$

-1,4-Dioxane CAS# 123-01-1 $\leq 0.0055\%$

-Ethylene Oxide CAS# 75-21-8 $\leq 0.0010\%$

SARA Toxic Chemical (40 CFR 372.65): Glycol Ethers $\leq 2.0\%$

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed

CWA: Under the provisions of Section 311, Adipic Acid is designated as a hazardous substance if discharged in navigable waters. RQ for notification is 5000#.

CAA: This substance is designated as a Volatile Organic Compound (VOC) subject to compliance with the emission standards set forth in the following subparts of 40 CFR Part 60: VV, NNN, RRR.

California Proposition 65: 1,4-Dioxane CAS#123-91-1 ($\leq 0.0055\%$) is known to the state of California to cause cancer.

Ethylene Oxide CAS#75-21-8 ($\leq 0.0010\%$) is known to the state of California to cause cancer and birth defects or other reproductive harm.

California SCAQMD Rule 443.1 (Labeling of materials containing organic solvents): VOC: Vapor Pressure <math>< 0.01\text{mmHg @ } 20\text{C } 0\text{g/L}</math>

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

TSCA

This substance or all of its components are on the Chemical Substances Inventory of the Toxic Substance Control Act (TSCA Inventory [USA]). Please note that this product is not subject to any legal reporting requirements under these acts.

Section 16 - Other Information

Prepared By: Stephanie Nichols

Revision Notes: changed AFA to MAT

Product Grades Available from the R. J. Marshall Company (this list may be incomplete):

APC54JA

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