

24-Hour Emergency Phone: (800) 328-8501

Effective Date: 7/27/07

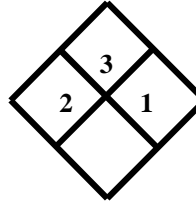
Material Safety Data Sheet

MSDS No: 33713

1. PRODUCT IDENTIFICATION

Trade Name: Araldite 2021 Resin

Chemical Family: Acrylate



NFPA RATING

| | |
|----------------------|----|
| Health: | 2* |
| Flammability: | 3 |
| Reactivity: | 1 |
| Personal Protection: | |

HMIS RATING

Intended Use or Product Type: Adhesive resin component

2. COMPOSITION / INFORMATION ON INGREDIENTS

| O S H A | CAS No. | CHEMICAL IDENTITY | EXPOSURE LIMITS | | | | CARCINOGEN STATUS | | | |
|------------------|---|--|-----------------|------|---------|------|-------------------|------|-----|------|
| | | | ACGIH | | OSHA | | MFR. | IARC | NTP | OSHA |
| | | | TWA | STEL | PEL | STEL | | | | |
| * | 128-37-0 Common Name: Concentration | Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-Butylated hydroxy toluene 1.00 - 5.00 % by wt | 10 mg/m3 | NE | NE | NE | NE | NR | NR | NR |
| * | 80-62-6 Common Name: Concentration | 2- Propenoic Acid, 2-Methyl-, Methyl Ester Methyl methacrylate 40.00 - 70.00 % by wt | 100 ppm | NE | 100 ppm | NE | NE | NR | NR | NR |
| | 79-41-4 Common Name: Concentration | 2- Propenoic Acid, 2-Methyl- Methacrylic acid 3.00 - 7.00 % by wt | 20 ppm | NE | NE | NE | NE | NR | NR | NR |

* = OSHA Hazardous Ingredient

3. HAZARDS IDENTIFICATION

Emergency Overview: Flammable. Causes irritation if inhaled and can cause skin irritation, eye irritation, and allergic skin reaction. May be harmful if absorbed through skin or if swallowed.

Primary Route(s) of Entry: Dermal; heated product may produce inhalable vapors.

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Chronic: Overexposure may have effects on heart, lungs, kidney, and liver.

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Skin: Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. Destroy contaminated shoes. Seek immediate medical attention.

Inhalation: Remove to fresh air. Seek immediate medical attention.

Eyes: Immediately flush eyes with water for at least 15 minutes. Seek immediate medical attention.

Overexposure Effects: Causes irritation if inhaled and can cause skin irritation, eye irritation, and allergic skin reaction. May be harmful if absorbed through skin or if swallowed.

Medical Conditions Aggravated by Exposure: Skin, eye and pulmonary conditions.

Additional Information: Referral to a physician is recommended if there is any question about the seriousness of any injury.

5. FIRE FIGHTING MEASURES

| | |
|---|---------------|
| Flash Point: | 50°F (10 °C) |
| Flash Point Method Used: | TCC |
| Flammable Limits in Air (Lower - % by volume): | 2.1 |
| Flammable Limits in Air (Upper - % by volume): | 12.5 |

Fire Fighting Extinguishing Media: Carbon dioxide, dry chemical, foam, water.

Fire Fighting Equipment: Use self-contained breathing apparatus.

Fire and Explosion Hazards: Decomposition and combustion products may be toxic.

6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Remove spillage by absorbing in absorbent material.

7. HANDLING AND STORAGE

Signal Word: Warning!

Precautions: Flammable liquid. Keep away from heat, sparks, and flame. Keep container closed when not in use. Use with adequate ventilation. Causes irritation if inhaled and can cause skin irritation, eye irritation, and allergic skin reaction. May be harmful if absorbed through skin or if swallowed. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing. Avoid tasting or swallowing. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling. Notice! Overexposure may have effects on heart, lungs, kidney, and liver.

Other Handling Information: Nuisance dust may be generated when sanding or sawing cured material.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Skin Protection: Wear impermeable gloves.

Respiratory Protection: Use NIOSH approved organic vapor cartridge respirator when vapor/mist exposure is likely.

Eye Protection: Wear splash-proof chemical goggles.

Engineering Controls: General mechanical and local exhaust in accordance with ACGIH recommendations.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|----------------------------------|--|
| Color: | Off White |
| Odor: | Pungent |
| Physical State: | Viscous Liquid |
| Solubility in Water: | Not Determined |
| Viscosity: | Not Determined |
| Vapor Pressure: | 28 mm Hg at 68°F (20 °C) |
| Specific Gravity: | 1.03 (water = 1) |
| Boiling Point: | 213°F (101 °C) |
| Melting Point: | Not Determined |
| Evaporation Rate: | 3 (Butyl Acetate = 1) |
| Density: | 1.03 g/cm ³ at 25°C (77 °F) |
| Vapor Density: | > 1 (Air = 1) |
| pH: | 7 |
| Coefficient of water/oil: | Not Determined |

Percent Volatile: Not determined.

10. STABILITY AND REACTIVITY

Conditions to Avoid: Excessive heat for prolonged periods of time.

Stability: Stable.

Incompatibility: Strong oxidizers, acids and bases.

Hazardous Decomposition Products: Combustion may form toxic materials, such as carbon dioxide, carbon monoxide.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral Effects (LD50): Component(s) are slightly toxic, 500 - 5000 mg/kg (rat).

Acute Dermal Toxicity (LD50): Component(s) are slightly toxic, 1000 - 2000 mg/kg (rabbit).

Acute Inhalation Exposure Effects: Respiratory irritant.

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Sensitization: Possible in susceptible individuals.**Skin Irritation:** Irritant.**Eye Irritation:** Irritant.**12. ECOLOGICAL INFORMATION****13. DISPOSAL CONSIDERATIONS****Waste Disposal Method:** Consult qualified local or corporate personnel for method that will comply with local, state and federal health and environmental regulations.**14. TRANSPORT INFORMATION****DOT: Non-Bulk**

| | |
|------------------------------|------------------|
| Proper Shipping Name: | Adhesives |
| Hazard Class: | 3 |
| ID Number: | UN 1133 |
| Packing Group: | PG II |
| Label: | Flammable liquid |

IATA: Non-Bulk

| | |
|------------------------------|------------------|
| Proper Shipping Name: | Adhesives |
| Hazard Class: | 3 |
| ID Number: | UN 1133 |
| Packing Group: | PG II |
| Label: | Flammable liquid |

IMDG: Non-Bulk

| | |
|------------------------------|------------------|
| Proper Shipping Name: | Adhesives |
| Hazard Class: | 3 |
| ID Number: | UN 1133 |
| Packing Group: | PG II |
| Label: | Flammable liquid |

TDG: Non-Bulk

| | |
|------------------------------|------------------|
| Proper Shipping Name: | Adhesives |
| Hazard Class: | 3 |
| ID Number: | UN 1133 |
| Packing Group: | PG II |
| Label: | Flammable liquid |

15. REGULATORY INFORMATION**US Federal Regulations:****Occupational Safety and Health Act (OSHA):** This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.**Resource Conservation and Recovery Act (RCRA):** D 001 ignitable.

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SARA Title III: Section 313 Toxic Chemical List (TCL): This product contains a toxic chemical(s) for routine annual toxic chemical release reporting under section 313 (40 CFR 372). This information must be included in all MSDS's copied or distributed for this material.

Chemical Name: 2- Propenoic Acid, 2-Methyl-, Methyl Ester
Common Name: Methyl methacrylate
Percent in Composition: 40 - 70 % by wt
Comment:

Chemical Name: 2-Propenoic Acid, Ethyl Ester
Common Name: Ethyl acrylate
CAS Number: 140-88-5
Percent in Composition: 0.1 - 1 % by wt
Comment:

TSCA Section 8(b) - Inventory Status: All chemical components of this product are in compliance with TSCA inventory requirements.

TSCA Section 12(b) - Export Notification: This product does not contain any chemical(s) that are subject to a Section 12(b) export notification.

International Regulations:

Canadian Inventory Status: This product contains only chemicals that are currently listed on the Canadian Domestic Substance List.

Canadian WHMIS: 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. B2, D2B

State Regulations:

California Proposition 65: The following is required composition information. This product contains the following chemical(s) which are currently listed on the California list of Known Carcinogens and Reproductive Toxins:

Chemical Name: 2-Propenoic Acid, Ethyl Ester
Common Name: Ethyl acrylate
CAS Number: 140-88-5
Percent in Composition: 0.1 - 1 % by wt
Comment: Warning! This chemical is known to the State of California to cause cancer.

Chemical Name: Methane, tetrachloro-
Common Name: Carbon tetrachloride
CAS Number: 56-23-5
Percent in Composition: 0 - 0.1 % by wt
Comment: Warning! This chemical is known to the State of California to cause cancer.

Pennsylvania Right-to-Know: The following is required composition information:

Chemical Name: 2- Propenoic Acid, 2-Methyl-, Methyl Ester
Common Name: Methyl methacrylate
CAS Number: 80-62-6
Comment: Environmental Hazardous Substance

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Chemical Name: Ethene, homopolymer, chlorinated, chlorosulfonated

Common Name: Chlorosulfonated polyethylene

CAS Number: 68037-39-8

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: 2-Propenoic Acid, 2-Methyl-, Methyl Ester, Polymer with 1,3-Butadiene and Ethenylbenzene

Common Name: Acrylic rubber polymer

CAS Number: 25053-09-2

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: 2- Propenoic Acid, 2-Methyl-

Common Name: Methacrylic acid

CAS Number: 79-41-4

Comment: Hazardous Substance

Chemical Name: Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-

Common Name: Butylated hydroxy toluene

CAS Number: 128-37-0

Comment: Hazardous Substance

Chemical Name: 2-Propenoic Acid, Ethyl Ester

Common Name: Ethyl acrylate

CAS Number: 140-88-5

Comment: Special Hazardous Substance

Chemical Name: Hydroperoxide, 1-methyl-1-phenylethyl-

Common Name: Cumene hydroperoxide

CAS Number: 80-15-9

Comment: Special Hazardous Substance

Chemical Name: Ethanone, 1-phenyl-

Common Name: Acetophenone

CAS Number: 98-86-2

Comment: Special Hazardous Substance

Chemical Name: Methane, tetrachloro-

Common Name: Carbon tetrachloride

CAS Number: 56-23-5

Comment: Special Hazardous Substance

16. OTHER INFORMATION

MSDS No: 33713
Approved By: Dianne Blessing
Title: EHS Specialist

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