

1. Identification

Product Identifier: **Shell Brush-On Resin A Side**
 Use: Component for Mold Making and Casting. For Industrial/Professional use only.
 Manufacturer: Alumilite
 315 E. North Street Kalamazoo, MI 49007 USA
 Phone Number: +1 800-447-9344 (9 a.m. to 5 p.m. EST)
 Emergency Phone: CHEMTREC 800-424-9300 or +1 703-527-3887
 E-mail: info@alumilite.com

2. Hazards Identification

GHS Classification:

Acute Toxicity - Oral Category 4
 Acute Toxicity - Dermal Category 4
 Acute Toxicity - Inhalation Category 4
 Skin Irritation Category 2
 Eye Irritation Category 2B
 Respiratory Sensitization Category 1
 Skin Sensitization Category 1B
 Reproductive Toxicity Category 2
 Specific Target Organ Toxicity-Single Exposure Category 3
 Specific Target Organ Toxicity-Repeat Exposure Category 2

Label Elements: Danger



Hazard Phrases

H302 Harmful if swallowed.
 H312 Harmful in contact with skin.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H320 Causes eye irritation.
 H332 Harmful if inhaled.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H335 May cause respiratory irritation.
 H361 Suspected of damaging fertility or the unborn child.
 H373 May cause damage to organs through prolonged and repeated exposure.

Precautionary Phrases

P202 Do not handle until all safety precautions have been read and understood.
 P261 Avoid breathing vapors or mists.
 P264 Wash thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves, protective clothing, eye protection, and face protection.
 P284 In case of inadequate ventilation, wear respiratory protection.
 P301+312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 P302+352 IF ON SKIN: Wash with plenty of soap and water.
 P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P304+340 IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
 P308+313 IF exposed or concerned: Get medical advice/attention.
 P312 Call POISON CENTER/doctor if you feel unwell.
 P330 Rinse mouth.
 P331 Do NOT induce vomiting.
 P332+313 If skin irritation occurs: Get medical advice/attention.

P337+313 If eye irritation persists: Get medical advice/attention.
 P342+311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
 P362+364 Take off contaminated clothing and wash before reuse.
 P403+233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents and container in accordance with local, regional and national regulations.

Supplemental Information: Individuals sensitized to isocyanates should discontinue use. This is one part of a two-part system. Read and understand the hazard information on part B before using.

3. Composition/Information on Ingredients

Chemical Name	CAS #	%
P-MDI	9016-87-9	20-60
Diphenylmethane-4,4'-diisocyanate (MDI)	101-68-8	10-50
2,2,4-Trimethyl-1,3-Pentanediol Diisobutyrate	6846-50-0	0-10
Diethyltoluenediamine	68479-98-1	0-20
Other ingredients are not classified as health, physical or environmental hazards, or are present below cut-off/concentration limits.		

4. First-Aid Measures

Eye Contact: Rinse thoroughly with water for at least 15 minutes, holding the eyelids open to be sure the material is washed out. Get prompt medical attention.

Skin Contact: Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation or symptoms of exposure develop. Launder clothing before reuse. Discard items that cannot be decontaminated.

Inhalation: Remove person to fresh air. Give artificial respiration if needed. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Rinse mouth. Get medical attention.

Most Important Symptoms/Effects: Causes skin and eye irritation. Vapors or mists may cause respiratory irritation. May cause allergic skin and/or respiratory reaction in sensitized persons. Symptoms include skin rash, wheezing, shortness of breath and other asthma symptoms. May be harmful if swallowed.

Indication of Immediate Medical Attention/Special Treatment: Immediate medical attention is required for asthmatic symptoms or serious inhalation exposures. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. Persons sensitized to Diisocyanates should consult a physician before working with respiratory irritants or sensitizers.

5. Fire-Fighting Measures

Extinguishing Media: Use water fog, foam, carbon dioxide or dry chemical. Do not use solid water stream. Solid stream of water into hot product may cause violent steam generation or eruption.

Specific Hazards: Not classified as flammable or combustible. Product will burn under fire conditions.

Special Protective Equipment & Precautions for Fire-Fighters: Wear positive pressure, self-contained breathing apparatus and full-body protective clothing. Cool fire-exposed containers with water.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Remove all ignition sources. Clear non-emergency

personnel from the area. Ventilate area. Wear appropriate protective clothing to prevent eye and skin contact and respiratory protection.

Methods and Materials for Containment and Cleanup: Cover with an inert absorbent material and collect into an appropriate container for disposal. Do not seal the container since CO₂ is generated on contact with moisture and dangerous pressure buildup can occur. Decontaminate floor area with a mixture of water (90%) plus household ammonia (8%), and detergent (2%).

7. Handling and Storage

Safe Handling: Avoid breathing vapors or mists. Use with adequate ventilation. Avoid contact with the eyes, skin and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep container closed when not in use.

Safe Storage: Store indoors at temperatures between 55°F and 95°F (13°C and 35°C). Store in original, unopened containers. Protect from atmospheric moisture and water.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits: For MDI:

OSHA PEL	0.02 ppm (C)
ACGIH TLV	0.005 ppm TWA

Ventilation: Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Respiratory Protection: If needed (i.e., ventilation is inadequate), use a NIOSH-approved air-purifying, tight-fitting, half-face respirator with organic vapor cartridges. Respirator selection and use should be based on contaminant type, form and concentration. For higher exposures or in an emergency, use a supplied-air respirator. Use respirators in accordance with OSHA's Respiratory Protection Standard (29 CFR 1910.134).

Skin Protection: Wear impervious gloves, such as butyl rubber or nitrile rubber.

Eye Protection: Wear chemical safety goggles/glasses.

Other Protective Measures: Wear impervious clothing to prevent skin contact and contamination of personal clothing. An eye wash and washing facility should be available in the work area. Follow good Industrial Hygiene practices.

9. Physical and Chemical Properties

Appearance: Liquid; color varies

Odor: Mild

Odor Threshold: Not determined

pH: Not applicable

Melting Point: No data available

Boiling Point: 200°C

Flash Point: >350°F (177°C) estimated

Evap. Rate: No data available

Flammable Limits: No data available

Vapor Pressure: ≤0.01 mm Hg @ 20°C

Vapor Density: No data available

Relative Density: No data available

Solubility: Insoluble in water

Partition Coefficient: n-octanol/Water: Reacts with water

Auto-Ignition Temp: No data available

Decomposition Temp: No data available

Viscosity: No data available

10. Stability and Reactivity

Reactivity: Diisocyanates react with many materials and the rate of reaction increases with temperature. Reaction with water generates carbon dioxide and heat.

Chemical Stability: Stable under recommended conditions.

Possibility of Hazardous Reactions: Elevated temperatures can cause hazardous polymerization. Polymerization can be catalyzed by strong

bases or water. Reaction with water generates carbon dioxide, and results in heat and pressure buildup in closed systems.

Conditions to Avoid: Avoid moisture and temperatures below 55°F (13°C) and above 95°F (35°C) to protect product integrity.

Incompatible Materials: Avoid contact with water, acids, bases, alcohols and strong oxidizers.

Hazardous Decomposition Products: Possibly isocyanate vapor, carbon monoxide, nitrogen oxides, and carbon dioxide.

11. Toxicological Information

Eye Contact: Causes serious eye irritation. May cause temporary corneal injury.

Skin Contact: May cause irritation. Repeated skin contact may cause an allergic skin reaction. Animal studies indicate that skin contact with isocyanates may elicit respiratory sensitization.

Inhalation: At room temperature, vapors are minimal due to low volatility. Vapors or aerosols (e.g., generated during heating or spraying) may cause respiratory irritation and possibly pulmonary edema, or respiratory sensitization. For individuals sensitized to isocyanates, exposure may result in allergic respiratory reactions (e.g., coughing, wheezing, difficulty breathing).

Ingestion: Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Chronic Health Effects: Repeated or prolonged exposure to isocyanates may cause an allergic sensitization of the respiratory tract causing an asthma-like response upon re-exposure. Repeated overexposure to isocyanates has been associated with decreased lung function. Repeated or prolonged dermal contact with this product may cause allergic skin sensitization in some individuals. No test data. Product is not expected to be a mutagen or reproductive toxin.

Acute Toxicity Values: For MDI: Oral rat LD₅₀ >2,000 mg/kg; Skin rabbit LD₅₀ >9,400 mg/kg; Inhalation rat LC₅₀ 2.0 mg/L

For Diethyltoluenediamine: Oral rat LD₅₀ 738 mg/kg; Inhalation rat LC₅₀ 2.45 mg/L/1 hr; Dermal rabbit LD₅₀ >2000 mg/kg

Carcinogenicity: Relevant components are not listed as known or suspected carcinogens by NTP, IARC or OSHA.

Reproductive Toxicity: Plasticizer component is listed as a reproductive toxin.

Specific Target Organ Toxicity: Single Exposure: Classified as STOT-SE Category 3 for respiratory irritation. Repeat Exposure: Classified as STOT-RE 2. Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to isocyanate aerosols. Diethyltoluenediamine may cause damage to the pancreas through repeated or prolonged exposure.

12. Ecological Information

Ecotoxicity: Diethyltoluenediamine (Fish LC₅₀ 200 mg/L/48 hr; Daphnia EC₅₀ 0.5 mg/L/48 hr). Do not release into waterways.

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. Disposal Considerations

Dispose according to local, state and federal regulations. Upon exposure to moisture, product forms an inert, non-hazardous solid. In the U.S., this product is not a RCRA hazardous waste (per 40 CFR 261).

14. Transport Information

Not regulated for transport in any mode.

EMERGENCY SHIPPING: CHEMTREC, 800-424-9300 or +1-703-527-3887

15. Regulatory Information

U.S. FEDERAL REGULATIONS:

CERCLA Reportable Quantity: RQ for MDI is 5000 lb. Some States have more stringent requirements. Report spills in accordance with local and state regulations.

SARA TITLE III Section 311/312: Acute Health, Chronic Health

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements:

Diphenylmethane-4,4'-diisocyanate CAS 101-68-8
P-MDI CAS 9016-87-9

EPA Toxic Substances Control Act (TSCA) Status: Components of this product are listed on the TSCA inventory.

STATE REGULATIONS:

California Proposition 65: This product is not known to contain substances known to the State of California to cause cancer and/or reproductive harm.

www.P65Warnings.ca.gov

16. Other Information

Training Advice: Train personnel using this product in proper chemical handling, engineering controls and protective equipment.

Recommended Uses and Restrictions: This product is intended for industrial/professional use only.

SDS Revision Notes: Updated GHS classification May 3, 2019

Disclaimer: The information contained herein is considered accurate; however, Alumilite makes no warranty regarding the accuracy of the information. The user must determine the suitability of the product for the intended use and accepts all risk and liability associated with that use.

1. Identification

Product Identifier: **Replicator 400 Casting Resin B Side**
Replicator 532 Casting Resin B Side
Ultra-Lite 400 Casting Resin B Side
Shell Brush-On Resin B Side
Vac-Master 25 Casting Resin B Side
Vac-Master 50 Casting Resin B Side

Use: Component for Mold Making and Casting. For Industrial/Professional use only.

Manufacturer: Alumilite
 315 E. North Street Kalamazoo, MI 49007 USA

Phone Number: +1 800-447-9344 (9 a.m. to 5 p.m. EST)

Emergency Phone: CHEMTREC 800-424-9300 or
 +1 703-527-3887

E-mail: info@alumilite.com

2. Hazards Identification

GHS Classification:
 Reproductive Toxicity 2

Label Elements: Warning



Hazard Phrases

H361 Suspected of damaging fertility or the unborn child.

Precautionary Phrases

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P308+313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents and container in accordance with local, regional and national regulations.

Supplemental Information: May cause eye and skin irritation.

3. Composition/Information on Ingredients

Chemical Name	CAS #	GHS Classification	%
Plasticizer	6846-50-0	Reproductive Toxicity 2	0-10

Other ingredients are not classified as health, physical or environmental hazards, or are present below cut-off/concentration limits.

4. First-Aid Measures

Eye Contact: Rinse thoroughly with water, holding the eyelids open to be sure the material is washed out. Remove contact lenses if safe and easy to do. Continue rinsing. Get medical attention if irritation persists.

Skin Contact: Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation persists.

Inhalation: Remove person to fresh air and keep at rest in a position comfortable for breathing. Get medical attention. If breathing is difficult, supply oxygen.

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

Most Important Symptoms/Effects: Treat symptomatically.

Indication of Immediate Medical Attention/Special Treatment: If product gets in eyes, immediately flush with water.

5. Fire-Fighting Measures

Extinguishing Media: Use water fog, foam, carbon dioxide or dry chemical. Do not use solid water stream. Solid stream of water into hot product may cause violent steam generation or eruption.

Specific Hazards: Not classified as flammable or combustible. Product will burn under fire conditions.

Special Protective Equipment & Precautions for Fire-Fighters: Wear positive pressure, self-contained breathing apparatus and full-body protective clothing. Cool fire-exposed containers with water.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency

Procedures: Clear non-emergency personnel from the area. Wear appropriate protective clothing to prevent eye and skin contact and avoid breathing vapors.

Methods and Materials for Containment and Cleanup: Cover with an inert absorbent material and collect into an appropriate container for disposal. Avoid releases to the environment.

7. Handling and Storage

Safe Handling: Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep container closed when not in use.

Safe Storage: Store indoors at room temperature 60-90°F. Protect from freezing. Keep containers tightly closed.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits: No OSHA or ACGIH exposure limits apply.

Ventilation: Use with adequate general or local exhaust ventilation to minimize exposure levels.

Respiratory Protection: Not needed under normal use conditions.

Skin Protection: Wear impervious gloves, such as butyl rubber or nitrile rubber.

Eye Protection: Wear chemical safety glasses/goggles.

Other Protective Measures: Avoid contamination of clothing. An eye wash facility and washing facility should be available in the work area. Follow applicable regulations and good industrial hygiene practice.

9. Physical and Chemical Properties

Appearance: Liquid, color varies

Odor: No data available

Odor Threshold: No data available

pH: No data available

Melting Point: No data available

Boiling Point: >400°F

Flash Point: No data available

Evap. Rate: No data available

Upper/Lower Flammability Limits: No data available

Vapor Pressure: <0.000001 hPa @ 68°F

Vapor Density: No data available

Relative Density: No data available

Solubility: Insoluble in water

Partition Coefficient: n-octanol/Water: No data available

Auto-Ignition Temp: No data available

Decomposition Temp: No data available

Viscosity: No data available

10. Stability and Reactivity

Reactivity: Not normally reactive.

Chemical Stability: Stable under recommended conditions.

Possibility of Hazardous Reactions: None known.

Conditions to Avoid: Avoid excessive temperatures and moisture.

Incompatible Materials: Avoid contact with strong acids and strong oxidizing agents.

Hazardous Decomposition Products: No data available.

11. Toxicological Information

Eye Contact: May cause eye irritation.

Skin Contact: May cause mild skin irritation.

Inhalation: Vapors and mists may cause respiratory irritation.

Ingestion: No data available.

Chronic Health Effects: No data available.

Acute Toxicity Values: No data available.

Skin Sensitization: Product is not classified as a skin sensitizer.

Respiratory Sensitization: Product is not classified as a respiratory sensitizer.

Germ Cell Mutagenicity: Components are not known mutagens.

Carcinogenicity: Relevant components are not listed as known or suspected carcinogens by NTP, IARC, or OSHA.

Reproductive Toxicity: Plasticizer component is classified as reproductive toxin.

Specific Target Organ Toxicity: Single Exposure: May cause skin or eye irritation. Repeat Exposure: No data available.

12. Ecological Information

Ecotoxicity: No data available. Do not allow to enter waterways.

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. Disposal Considerations

Dispose according to local, state and federal regulations. For U.S.: Upon disposal, this product is not a RCRA hazardous waste (per 40 CFR 261).

14. Transport Information

Not regulated for transport in any mode.

Emergency Shipping Information: CHEMTREC, 800-424-9300 or +1-703-527-3887

15. Regulatory Information

U.S. FEDERAL REGULATIONS:

CERCLA 103 Reportable Quantity: This product is not subject to reporting under CERCLA.

SARA TITLE III

Section 311/312: Acute, Chronic Health

Section 313 Toxic Chemicals: This product contains no chemicals above de minimis levels subject to SARA Title III Section 313 Reporting requirements.

Section 302 Extremely Hazardous Substances (TPQ): None

STATE REGULATIONS:

California Proposition 65: This product is not known to contain substances known to the State of California to cause cancer and/or reproductive harm.

www.P65Warnings.ca.gov

16. Other Information

Training Advice: All personnel using/handling this product should be trained in proper chemical handling and the need for and use of engineering controls and protective equipment.

Recommended Uses and Restrictions: This product is intended for industrial/professional use only.

SDS Revision Notes: Added Product, May 5, 2019; Added Products October 30, 2018; GHS format: October 8, 2018

Disclaimer: The information contained herein is considered accurate; however, Alumilite makes no warranty regarding its accuracy. The user must determine the suitability of the product for the intended use and accepts all risk and liability associated with that use.