

APS-327

Section 1. Product and Company Identification

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| Product Name: | APS-327 |
| Chemical Name/Family: | Reactive amino-modified silicone fluid |
| CAS No.: | Proprietary |
| Product Use: | Resin Modifier, Textile Treatment, Polishing Agent |
| Restrictions: | For Industrial Use Only |
| Company: | Advanced Polymer. |
| Address: | 400 Paterson Plank Road Carlstadt, NJ 07072 U.S.A. |
| Telephone: | 201-933-0600 |
| Fax: | 201-933-8442 |
| 24 Hour Emergency Number | 800-424-9300 |
| 24 Hour Chemtrec Number | 800-424-9300 |

Section 2. Hazards Identification

GHS Classification:**Physical Hazards**

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| Flammable liquids | Category 4 |
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Health Hazards

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| Skin corrosion/irritation | Category 2 |
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| Serious eye damage/eye irritation | Category 1 |
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| Reproductive toxicity | Category 2 |
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Environmental Hazards

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| Not classified |
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GHS Label:**Symbol:****Signal Word: Danger****Hazard Classification:****Hazard Statement:**

Combustible liquid
Causes skin irritation
Causes serious eye damage
Suspected of damaging fertility or the unborn child

Precautionary Statement:**Prevention**

Keep away from flames and hot surfaces. – No smoking
Wear protective gloves/ eye protection/face protection.
Wash skin and other exposed areas thoroughly after handling.
Obtain special instructions before use.

Response

In case of fire: Use suitable extinguishing media for extinction. See Section 5.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this SDS).
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Get medical help.
IF exposed or concerned, get medical advice.

Storage

Store in a well-ventilated place.
Store locked up.

Disposal

Dispose of contents/ container in accordance with local/regional/national/international regulations.

Section 3. Composition/Information on Ingredients

| Ingredients | CAS No. | Percent |
|---|-------------|---------|
| Amino Modified organopolysiloxane | Proprietary | >95 |
| Octamethylcyclotetrasiloxane (impurity) | 556-67-2 | 3 - < 5 |

Section 4. First Aid Measures

Skin Contact: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.
If skin irritation occurs: Get medical advice/attention.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Inhalation: If inhaled, remove to fresh air. Get medical attention if symptoms occur.

Ingestion: If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

Section 5. Firefighting Measures

Specific Hazards in Case of Fire: Combustible liquid. By heating and fire, harmful vapors/gases may be formed. Nitrogen oxides. (corrosive)

Fire Extinguishing Media: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable Extinguishing Media: Do not use a solid water stream as it may scatter and spread fire.

Special Protective Equipment and Firefighters must use standard protective equipment including flame

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| Precaution for Firefighters: | retardant coat, helmet, gloves, rubber boots, and self-contained breathing apparatus. Move containers from fire area if you can do so without risk. |
| Unusual Fire & Explosion Hazards: | No information available. |

Section 6. Accidental Release Measures

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| Personal Precautions: | Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Do not touch or walk-through spilled material. Ensure adequate ventilation. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. |
| Protective Equipment: | Wear appropriate personal protective equipment. |
| Environmental Precautions: | Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. |
| Methods and Materials for Containment and Cleaning up: | <p>Large Spills: Stop the flow of material if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.</p> <p>Small Spills: Wipe up with absorbent material (e.g., cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills in original containers for re-use.</p> |

Section 7. Handling and Storage

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| Handling Conditions: | Provide adequate ventilation. Use adequate ventilation when this product is heated at approximately 150°C (300°F) and above in the presence of air. Use care in handling/storage. Obtain special instructions before use. Keep away from open flames, hot surfaces, and sources of ignition. Do not smoke. Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Pregnant or breastfeeding women must not handle this product. Do not breathe mist or vapor. Avoid contact with skin. Avoid contact with eyes. Do not use this product for consumers' spray. *** Agitate contents of container before using*** |
| Storage Conditions: | Keep container tightly closed in a cool, well-ventilated place. Keep in properly labeled containers in accordance with the national regulations. Keep away from heat and sources of ignition. *** Agitate contents of container before using*** |

Section 8. Exposure Control/Personal Protection

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| Exposure Limits: | None Established |
| Appropriate engineering controls: | Explosion-proof general and local exhaust ventilation. |
| Personal protective equipment: | |
| Respiratory Protection: | In case of insufficient ventilation, wear suitable respiratory equipment. |
| Hand Protection: | Wear protective gloves. |
| Eye Protection: | Tightly sealed safety glasses. |
| Skin and Body Protection: | Wear suitable protective clothing. Wear appropriate thermal protective clothing, when necessary. |
| Other Protective Equipment: | Provide safety shower and eyewash station. |
| Hygiene Measures: | Avoid contact with skin. Avoid contact with eyes. When using, do not eat, drink or smoke. Keep away from food and drink. Wash hands before |

breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice. This product can generate formaldehyde at approximately 150 °C (300 °F) and above in the presence of air. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard. So, use adequate ventilation or wear protective equipment such as gloves, goggles, organic vapor respirator or protective clothing when this product is heated at approximately 150 °C (300 °F) and above in the presence of air.

Section 9. Physical and Chemical Properties

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| Physical State: | Liquid |
| Color: | Colorless, clear |
| Odor: | Slight |
| Odor Threshold: | No Information Available |
| % Non-volatile by Weight: | No Information Available |
| pH: | N/A |
| Specific Gravity (77°F): | 0.98 |
| % Volatile by Weight: | <5 |
| Melting Point: | No Information Available |
| Freezing Point: | No Information Available |
| Boiling point: | No Information Available |
| Flash Point: | > 141.8 °F (> 61 °C) Closed Cup 212 °F (100 °C) Open Cup |
| Evaporation Rate (BuAc=1): | Negligible |
| Flammability: | No Information Available |
| Explosion Limits: | No Information Available |
| Vapor Pressure (25°C): | Negligible |
| Vapor Density (Air=1): | No Information Available |
| Solubility: | Not soluble in water |
| Partition Coefficient: | No Information Available |
| Auto-ignition Temperature: | No Information Available |
| Viscosity (25 °C): | 65 mm ² /s |
| Decomposition Temperature: | No Information Available |

Section 10. Stability and Reactivity

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| Chemical Stability: | Stable under normal conditions. |
| Hazardous Polymerization: | May not occur. |
| Conditions to Avoid: | None known. |
| Incompatible Materials: | Strong oxidizing agents. |
| Hazardous Decomposition Products: | Thermal breakdown of this product during fire or very high heat condition may evolve the following hazardous decomposition product: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Nitrogen oxides. Formaldehyde. |

Section 11. Toxicological Information

Primary Routes of Entry:

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| Eye: | Yes | Skin: | Yes | Inhalation: | No | Ingestion: | No |
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Potential Health Effects:

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| Inhalation | No significant effects are expected. |
| Ingestion: | No significant effects are expected. |
| Skin: | Causes skin irritation |
| Eyes: | Causes serious eye damage. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. |

Signs and Symptoms of Exposures: No information available

Acute Toxicity: Amino modified organopolysiloxane (CAS #: Proprietary)
 LD50 Oral (Mouse): > 50 ml/kg
 Octamethylcyclotetrasiloxane (Impurity) (CAS 556-67-2)
 LC50 Inhalation (Rat): > 5000 mg/m³, 4 hours
 LD50 Oral (Rat): > 5000 mg/kg

Chronic Toxicity: No Information Available

Skin corrosion/irritation: Amino modified organopolysiloxane: Causes skin irritation
 Octamethylcyclotetrasiloxane: SKIN-RABBIT: 500mg/24 hr. MILD

Serious eye damage/eye irritation: Amino modified organopolysiloxane: Causes serious eye damage.
 Octamethylcyclotetrasiloxane: EYE-RABBIT: MILD

Respiratory Sensitization: No Information Available

Skin Sensitization: Octamethylcyclotetrasiloxane: No evidence of sensitization

Reproductive toxicity: Octamethylcyclotetrasiloxane administered to rats by whole body inhalation at concentrations of 500 and 700 ppm for 70 days prior to mating, through mating, gestation and lactation resulted in decreases in live litter size. Additionally, increases in the incidence of deliveries of offspring extending over an unusually long period (dystocia) were observed at these concentrations. Statistically significant alterations in these parameters were not observed in the lower concentrations evaluated (300 and 70 ppm). In a previous range-finding study, rats exposed to vapor concentrations of 700 ppm had decreased in the number of implantation sites and live litter size.
 Octamethylcyclotetrasiloxane: The significance of these findings to humans is not known.

Mutagenicity: Octamethylcyclotetrasiloxane: Negative(Bacteria)

Carcinogenicity:

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| IARC: | No | NTP: | No | OSHA: | No |
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Section 12. Ecological Information

Ecotoxicity (Aquatic and Terrestrial): No Information Available

Bioaccumulative Potential No Information Available

Mobility in Soil: No Information Available

PBT and vPvB Assessment: No Information Available

Other Adverse Effects: No Information Available

Section 13. Disposal Considerations

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| Product: | Dispose of contents/ container in accordance with local/regional/national/international regulations. |
| Disposing of Contaminated Packaging: | Contaminated packaging should be as empty as possible. Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not burn or use a cutting torch on the empty drum. |

Section 14. Transport Information

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| Land Transport (DOT): | Classified as a "combustible liquid" according to 49 CFR 173.120 (b)(1). Not regulated for ground shipments in the U.S. in non-bulk packaging (≤ 119 gallons). |
| UN Number: | NA1993 |
| UN Proper Shipping Name: | Combustible liquid, n.o.s. (Octamethylcyclotetrasiloxane) |
| Transport Hazard Class: | Combustible liq |
| Packing Group: | III |
| Sea Transport (IMDG): | Not regulated as dangerous goods. |
| UN Number: | N/A |
| UN Proper Shipping Name: | N/A |
| Transport Hazard Class: | N/A |
| Packing Group: | N/A |
| Air Transport (IATA): | Not regulated as dangerous goods. |
| UN Number: | N/A |
| UN Proper Shipping Name: | N/A |
| Transport Hazard Class: | N/A |
| Packing Group: | N/A |
| Environmental Hazards (e.g., Marine pollutant): | No |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code is not applicable. | |

Section 15. Regulatory Information

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| International Inventories: | |
| TSCA (USA): | Yes |
| DSL (Canada): | No |
| NDSL (Canada): | Yes |
| ENCS (Japan) | Yes |
| EINECS (Europe): | Yes |
| IECSC (China): | Yes |
| KECL (Korea): | Yes |
| PICCS (Philippines): | Yes |
| AICS (Australia): | Yes |
| ERMA (New Zealand): | Yes |

Federal Regulations:

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|--|--------------------------|
| SARA 313: | None |
| SARA 311/312: | No Information Available |
| Clean Water Act: | No Information Available |
| Clean Air Act, Section 112 HAPs (See 40CFR61): | No Information Available |

State Regulations:

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| Massachusetts Right to Know Components: | Not regulated |
| New Jersey Right to Know Components: | Not listed |
| Pennsylvania Right to Know Components: | Not listed |
| California Proposition 65: | None |

Section 16. Other Information

WHMIS Classification: No information available

HMIS Rating:

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| Health Hazard | 3 |
| Flammability: | 2 |
| Physical Hazard: | 0 |
| Personal Protection Equipment: | X |

NFPA Rating

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|--------------------|---|
| Health Hazard: | 3 |
| Fire Hazard: | 2 |
| Reactivity Hazard: | 0 |

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