

APS-340

Section 1. Product and Company Identification

Product Name:	APS-340
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:

Reproductive toxicity

Category 2

GHS Label:**Symbol:****Signal Word:** **Warning****Hazard Classification:****Hazard Statement:**

Suspected of damaging fertility or the unborn child

Precautionary Statement:**Prevention**

Obtain special instructions before use.

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

Use personal protective equipment as required.

Response

If exposed or concerned: Get medical advice/attention.

Storage

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	≤100.0
Octamethylcyclotetrasiloxane (Impurity)	556-67-2	0.3-1.0

Section 4. First Aid Measures

- Skin Contact:** Wash skin with soap and water. Get medical attention if irritation develops and persists
- Eye Contact:** Rinse immediately with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
- Inhalation:** Move to fresh air. Call a physician if symptoms develop or persist.
- Ingestion:** Rinse mouth. Get medical attention immediately.
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Section 5. Firefighting Measures

- Specific Hazards in Case of Fire:** 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 Precaution for Firefighters:** Firefighters must use standard protective equipment including flame 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.
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Section 6. Accidental Release Measures

- Personal Precautions:** Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Eliminate sources of ignition.
- 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:** 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 it into a container for later disposal.
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.

Section 7. Handling and Storage

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. 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. Do not use this product for consumer spray. **Agitate contents of container before using**
Storage Conditions:	Store locked up. Keep container tightly closed. Keep out of reach of children. Store in a cool, dry place out of direct sunlight. Keep in original container.

Section 8. Exposure Control/Personal Protection

Exposure Limits:	No exposure limits noted for ingredient(s).
Appropriate engineering controls:	Provide adequate 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 according to EN 166.
Skin and Body Protection:	Wear suitable protective clothing. Wear appropriate thermal protective clothing, when necessary.
Other Protective Equipment:	Eye wash equipment and safety shower.
Hygiene Measures:	When using, do not eat, drink, or smoke. 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

Physical State:	Liquid
Color:	Colorless, slightly hazy
Odor:	Slight amine odor
Odor Threshold:	No information available
% Non-volatile by Weight:	100
pH:	No information available
Specific Gravity (77°F):	0.98
% Volatile by Weight:	0
Melting Point:	No information available
Freezing Point:	No information available
Boiling point:	No information available
Flash Point:	> 201.2°F (> 94°C) Closed Cup

	> 572°F (> 300°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:	19,000 mPa.s (25 °C)
Decomposition Temperature:	No information available

Section 10. Stability and Reactivity

Chemical Stability:	Stable at normal conditions.
Hazardous Polymerization:	May Not Occur
Conditions to Avoid:	Store in a well-ventilated place at temperatures below 120°F. Keep container tightly closed. Keep from freezing.
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:

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

Inhalation	No significant effects are expected.
Ingestion:	No significant effects are expected.
Skin:	Causes skin irritation.
Eyes:	Direct contact with eyes may cause temporary irritation.
Signs and Symptoms of Exposures:	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.
Acute Toxicity:	Octamethylcyclotetrasiloxane (CAS # 556-67-2) Impurity Inhalation-Rat, LC50: > 5000 mg/m ³ , 4 hours Oral-Rat, LD50: > 5000mg/kg
Chronic Toxicity:	No information available.
Skin Sensitization:	No evidence of skin sensitization [Octamethylcyclotetrasiloxane]
Respiratory Sensitization:	No information available.
Mutagenicity:	Negative (Bacteria) [Octamethylcyclotetrasiloxane]
Reproductive toxicity:	Octamethylcyclotetrasiloxane was 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

**Specific target organ toxicity -
single exposure**
**Specific target organ toxicity -
repeated exposure**

offspring extending over an unusually long time 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. The significance of these findings to humans is not known. [Octamethylcyclotetrasiloxane] Not available.

Repeated inhalation or oral exposure of mice and rats to octamethylcyclotetrasiloxane produced an increase in liver size. No gross histopathological or significant clinical chemistry effects were observed. An increase in liver metabolizing enzymes, as well as a transient increase in the number of normal cells (hyperplasia) followed by an increase in cell size (hypertrophy) were determined to be the underlying causes of the liver enlargement. The biochemical mechanisms producing these effects are highly sensitive in rodents, while similar mechanisms in humans are insensitive. A two-year combined chronic and carcinogenicity assay was conducted on octamethylcyclotetrasiloxane. Rats were exposed to whole-body vapor inhalation 6hrs/day, 5days/week for up to 104weeks to 0, 10, 30, 150 or 700ppm of octamethylcyclotetrasiloxane. The increase in incidence of (uterine) endometrial cell hyperplasia and uterine adenomas (benign tumors) were observed in female rats at 700ppm. Since these effects only occurred at 700ppm, a level that greatly exceeds typical workplace or consumer exposure, it is unlikely that industrial, commercial or consumer uses of products containing octamethylcyclotetrasiloxane would result in a significant risk to humans. [Octamethylcyclotetrasiloxane]

Carcinogenicity:

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

Ecotoxicity (Aquatic and Terrestrial):	May cause long lasting harmful effects to aquatic life. [Octamethylcyclotetrasiloxane]
Bioaccumulative Potential	Bio concentration Factor(BCF) / (Fathead minnows) : 12400 [Octamethylcyclotetrasiloxane]
Mobility in Soil:	No information available
PBT and vPvB Assessment:	No information available
Other Adverse Effects:	No information available

Section 13. Disposal Considerations

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

Land Transport (DOT):	Not Regulated
UN Number:	Not Applicable
UN Proper Shipping Name:	Not Applicable
Transport Hazard Class:	Not Applicable
Packing Group:	Not Applicable
Sea Transport (IMDG):	Not Regulated
UN Number:	Not Applicable
UN Proper Shipping Name:	Not Applicable
Transport Hazard Class:	Not Applicable
Packing Group:	Not Applicable
Air Transport (IATA):	Not Regulated
UN Number:	Not Applicable
UN Proper Shipping Name:	Not Applicable
Transport Hazard Class:	Not Applicable
Packing Group:	Not Applicable
Environmental Hazards (e.g., Marine pollutant):	No information available.

Section 15. Regulatory Information

International Inventories:	
TSCA (USA):	Listed
DSL (Canada):	Not listed
NDSL (Canada):	Not listed
ENCS (Japan)	Listed
EINECS (Europe):	Listed
ELINCS (Europe):	Not listed
IECSC (China):	Listed
KECL (Korea):	Listed
PICCS (Philippines):	Not listed
AICS (Australia):	Not listed
ERMA (New Zealand):	Not listed
Federal Regulations:	
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:	
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:

Health Hazard 1

Flammability: 1

Physical Hazard: 0

Personal Protection Equipment: X

NFPA Rating

Health Hazard: 1

Fire Hazard: 1

Reactivity Hazard: 0

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