AP-Silane 32T

Section 1. Product and Company Identification

Product Name: AP-Silane 32T
Chemical Name/Family: Amino silane coupling agent
CAS No.: Mixture
Product Use: Surface treatment agent
Restrictions: For Industrial Use Only
Company: Advanced Polymer, Inc.
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:

Hazard Class                          Category
Acute toxicity, oral                  Category 4
Acute toxicity, inhalation            Category 4
Skin corrosion/irrititation           Category 1B
Sensitization, skin                  Category 1
Serious eye damage/eye irritation     Category 1
Hazardous aquatic environment, acute toxicity Category 2

GHS Label:

Symbol:

Signal Word: Danger

Hazard Classification:

Hazard Statement:
Harmful if swallowed
Harmful if inhaled
Causes severe skin burns and eye damage
May cause an allergic skin reaction
Causes serious eye damage
Toxic to aquatic life
Precautionary Statement:

Prevention
Wash hands and contaminated skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Do not breathe dust/fume/gas/mist/vapours/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.

Response
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Rinse mouth.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash contaminated clothing before reuse.
IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
Immediately call a POISON CENTER or doctor/physician.
Specific treatment (see Section 4: First Aid Measures on this SDS)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: 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

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-β(aminoethyl)-γ-aminopropyl-trimethoxy silane</td>
<td>1760-24-3</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>Organosilane</td>
<td>Trade Secret</td>
<td>Trade Secret</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

Skin Contact:
Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
advice/attention.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

**Ingestion:** Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting.

### Section 5. Firefighting Measures

<table>
<thead>
<tr>
<th>Specific Hazards in Case of Fire:</th>
<th>By heating and fire, harmful vapors/gases may be formed. Nitrogen oxides. (corrosive)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Extinguishing Media:</td>
<td>Use alcohol-resistant foam, dry chemical or carbon dioxide.</td>
</tr>
<tr>
<td>Unsuitable Extinguishing Media:</td>
<td>Water</td>
</tr>
<tr>
<td>Special Protective Equipment and Precaution for Firefighters:</td>
<td>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. Water runoff can cause environmental damage.</td>
</tr>
<tr>
<td>Unusual Fire &amp; Explosion Hazards:</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

### Section 6. Accidental Release Measures

<table>
<thead>
<tr>
<th>Personal Precautions:</th>
<th>Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands and contaminated skin thoroughly after handling.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protective Equipment:</td>
<td>Wear protective gloves/protective clothing/eye protection/face protection.</td>
</tr>
<tr>
<td>Environmental Precautions:</td>
<td>Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Shut off all sources of ignition.</td>
</tr>
<tr>
<td>Methods and Materials for Containment and Cleaning up:</td>
<td><strong>Large Spills:</strong> 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. Prevent entry into waterways, sewer, basements or confined areas. <strong>Small Spills:</strong> 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.</td>
</tr>
</tbody>
</table>

### Section 7. Handling and Storage

<table>
<thead>
<tr>
<th>Handling Conditions:</th>
<th>Avoid contact with eyes, skin and clothing. Avoid inhalation of vapor or mist. Wear suitable gloves and eye/face protection. Avoid contact with water or moisture.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Conditions:</td>
<td>Keep container tightly closed in a dry and well-ventilated place. Do not lay the container on its side. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Do not puncture or cut this container, and do not weld on or near this container. Keep out of reach of children.</td>
</tr>
</tbody>
</table>

### Section 8. Exposure Control/Personal Protection

<table>
<thead>
<tr>
<th>Exposure Limits:</th>
<th>No information available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriate engineering controls:</td>
<td>Provide adequate general and local exhaust ventilation.</td>
</tr>
</tbody>
</table>
Personal protective equipment:
Respiratory Protection: If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.
Hand Protection: Wear protective gloves.
Eye Protection: Tightly sealed safety glasses according to EN 166.
Skin and Body Protection: Wear suitable protective clothing.
Other Protective Equipment: Safety shower and eyewash station.
Hygiene Measures: Wash hands thoroughly after handling.

Section 9. Physical and Chemical Properties

Physical State: Liquid
Color: Light straw, transparent
Odor: Amine odor
Odor Threshold: No information available
% Non-volatile by Weight: No information available
pH: No information available
Specific Gravity (77°F): 0.99
% Volatile by Weight: 100
Melting Point: No information available
Freezing Point: No information available
Boiling point: 422.6 °F (217 °C)
Flash Point: 208.4 °F (98 °C) Open Cup
> 201.2 °F (> 94 °C) Closed Cup
Evaporation Rate (BuAc=1): <1
Flammability: No information available
Explosion Limits: No information available
Vapor Pressure (mmHg): < 1.3 kPa (25 °C)
Vapor Density (Air=1): 7.6
Solubility: Soluble in water
Partition Coefficient: No information available
Auto-ignition Temperature: > 392 °F (> 200 °C)
Viscosity: No information available
Decomposition Temperature: No information available

Section 10. Stability and Reactivity

Chemical Stability: Stable at normal condition.
Hazardous Polymerization: May not occur.
Conditions to Avoid: Store in a well-ventilated place at temperatures below 120°F.
Incompatible Materials: Will hydrolyze with water, but no hazard. Avoid contact with mineral acids and water. Slowly reacts with water, acids or bases.
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.
Section 11. Toxicological Information

Primary Routes of Entry:

<table>
<thead>
<tr>
<th>Eye:</th>
<th>Yes</th>
<th>Skin:</th>
<th>Yes</th>
<th>Inhalation:</th>
<th>Yes</th>
<th>Ingestion:</th>
<th>Yes</th>
</tr>
</thead>
</table>

Potential Health Effects:

- **Inhalation**: Harmful if inhaled.
- **Ingestion**: Harmful if swallowed.
- **Skin**: Causes severe skin burns.
- **Eyes**: Causes serious eye damage.
  
  Eye (Rabbit): 15 mg Severe

Signs and Symptoms of Exposures:

**Acute Toxicity:**

- **Organosilane (CAS #: Trade Secret)**
  - Dermal: LD50 (Rabbit) 4290 mg/kg
  - Oral: LD50 (Rat) 1570 – 3650 mg/kg; 1780 mg/kg
  - **3-(2-Aminoethylamino)propyltrimethoxysilane (CAS 1760-24-3)**
    - Dermal: LD50 (Rabbit) >2000 mg/kg; 16 ml/kg
    - Oral: LD50 (Rat) 2995 mg/kg; 2400 mg/kg
  - Inhalation: LC50 (Rat) 1.49 – 2.44 mg/l/4h

**Chronic Toxicity:**

May cause conjunctivitis, dizziness, sleeplessness and gastrointestinal and optical disturbances (Methanol – decomposed product)

**Skin Sensitization:**

May cause an allergic skin reaction.

Positive (Guinea Pig)

**Respiratory Sensitization**

No information available.

**Mutagenicity:**

Negative (Ames Test)

**Carcinogenicity:**

- IARC: No
- NTP: No
- OSHA: No

Section 12. Ecological Information

**Ecotoxicity (Aquatic and Terrestrial):** Toxic to aquatic life.

**Bioaccumulative Potential**

No information available

**Mobility in Soil:**

No information available

**PBT and vPvB Assessment**

No information available

**Other Adverse Effects:**

Easily causes hydrolysis in water or atmosphere.

Section 13. Disposal Considerations

**Product:**

Dispose of according to State, Local and EPA regulations.

**Disposing of Contaminated Packaging:**

Do not dispose if unopened. Do not disposed emptied container unless the contents have been completely removed and container has been flushed with a clean neutral solvent and then dried up. Do not dispose the emptied container unlawfully. Observe all federal state and local laws.
Section 14. Transport Information

Land Transport (DOT):

- UN Number: UN3267
- UN Proper Shipping Name: Corrosive liquid, basic, organic, n.o.s.
  (aminopropyltrialkoxy silane)
- Transport Hazard Class: 8
- Packing Group: II

Sea Transport (IMDG/IMO):

- UN Number: UN3267
- UN Proper Shipping Name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S
  (aminopropyltrialkoxy silane)
- Transport Hazard Class: 8
- Packing Group: II

Air Transport (IATA):

- UN Number: UN3267
- UN Proper Shipping Name: Corrosive liquid, basic, organic, n.o.s.
  (aminopropyltrialkoxy silane)
- Transport Hazard Class: 8
- Packing Group: II

Environmental Hazards (e.g., Marine pollutant):
- Contains organosilane

Section 15. Regulatory Information

International Inventories:

- TSCA (USA): Listed
- DSL (Canada): Listed
- ENCS (Japan): Listed
- EINECS (Europe): Listed
- IECSC (China): Listed
- KECL (Korea): Listed
- PICCS (Philippines): Listed
- AICS (Australia): Listed
- ERMA (New Zealand): 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: No information available
- New Jersey Right to Know Components: No information available
- Pennsylvania Right to Know Components: No information available
- California Proposition 65: None
# Section 16. Other Information

**WHMIS Classification:** No information available

**HMIS Rating:**
- Health Hazard: 3
- Flammability: 1
- Physical Hazard: 0
- Personal Protection Equipment: X

**NFPA Rating**
- Health Hazard: 3
- Fire Hazard: 1
- Reactivity Hazard: 0

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Date Prepared: September 1, 2017  
Prepared By: Advanced Polymer, Inc.  
Date Revised:  
Revised By: Advanced Polymer, Inc.

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