

AP Silane 51

Section 1. Product and Company Identification

Product Name:	AP Silane 51
Chemical Name/Family:	3-Glycidyloxypropyltrimethoxysilane
CAS No.:	2530-83-8
Product Use:	Coupling Agents, Synthetic Resin Modifier
Restrictions:	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	Not Classified
Health Hazards	
Serious eye damage/irritation	Category 1
Environmental Hazards	Not Classified

GHS Label:



Symbol:

Signal Word: **Danger**

Hazard Classification:

Hazard Statement:

Causes serious eye damage

Precautionary Statement:

Prevention

Wear eye protection/face protection.

Response

IF IN EYES: 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.

Storage

No storage statement required under GHS however refer to Section 7 for current storage conditions.

Disposal

No disposal statement required under GHS however refer to Section 13 for current disposal considerations.

Section 3. Hazardous Composition/Information on Ingredients

Ingredients	CAS No.	Percent
γ -Glycidoxypropyl-trimethoxy silane	2530-83-8	>99
Methanol(Impurity)	67-56-1	<1

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 water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
- Inhalation:** Move to fresh air. Call a physician if symptoms develop or persist.
- Ingestion:** Rinse mouth. Get medical attention immediately.

Section 5. Firefighting Measures

- Fire and Explosion Hazard:** No unusual fire or explosion hazards noted.
- Fire Extinguishing Media:** Foam. Dry chemical powder. Carbon dioxide (CO₂).
- Unsuitable Extinguishing Media:** Water.
- Specific Hazards in Case of Fire:** By heating and fire, harmful vapors/gases may be formed.
- Special Fire Fighting Information:** 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.

Section 6. Accidental Release Measures

- Personal Precautions:** Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Ensure adequate ventilation.
- Protective Equipment:** Wear appropriate personal protective equipment.
- Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Avoid release to the environment.
- 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 into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Section 7. Handling and Storage

Handling Conditions:	Provide adequate ventilation. Use care in handling/storage. Obtain special instructions before use. Wear appropriate personal protective equipment. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains. 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 get this material in contact with eyes. Avoid prolonged exposure. **Agitate contents of container before using**
Storage Conditions:	Store locked up. Keep container tightly closed. Keep out of the 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:	
US. OSHA Table Z-1	Methanol (Impurity) CAS# 67-56-1: PEL 260 mg/m ³ , 200 ppm
US. ACGIH	Methanol (Impurity) CAS# 67-56-1: STEL 250 ppm; TWA 200 ppm
US. NIOSH	Methanol (Impurity) CAS# 67-56-1: STEL 325 mg/m ³ ; TWA 250 ppm, 260 mg/m ³ , 200 ppm
Biological limit values ACGIH	Methanol (Impurity) CAS# 67-56-1: 15 mg/L
Appropriate engineering controls:	Provide adequate general and local exhaust ventilation. Provide eyewash station.
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:	Safety glasses/goggles.
Skin and Body Protection:	Wear suitable protective clothing.
Other Protective Equipment:	Provide eyewash and safety shower station.
Hygiene Measures:	When using, do not eat, drink or smoke. Do not get in eyes. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

Section 9. Physical and Chemical Properties

Physical State:	Liquid
Color:	Colorless, Clear
Odor:	Slight
Odor Threshold:	No information available.
% Active by Weight:	100
pH:	No information available.
Specific Gravity (77°F):	1.07
% Volatile by Weight:	100
Melting Point:	No information available.

Freezing Point:	No information available.
Boiling point:	554°F (290°C)
Flash Point:	> 201.2 °F (> 94 °C) Closed Cup 300.2 °F (149 °C) Open 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):	>1
Solubility (Water):	Insoluble (Hydrolyze with water)
Partition Coefficient:	No information available.
Auto-ignition Temperature:	> 392 °F (> 200 °C)
Viscosity:	3.05 mm ² /s (25 °C)
Decomposition Temperature:	No information available.

Section 10. Stability and Reactivity

Chemical Stability:	Stable under recommended storage conditions.
Hazardous Polymerization:	May not occur.
Conditions to Avoid:	None known.
Incompatible Materials:	Strong oxidizing agents. Water, acids or alkalis.
Hazardous Decomposition Products:	This product slowly reacts with water, acids or bases to evolve following compounds: Methanol 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.

Section 11. Toxicological Information

Primary Routes of Entry:

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

Inhalation	Prolonged inhalation may be harmful.
Ingestion:	Expected to be a low ingestion hazard.
Skin:	No adverse effects due to skin contact are expected.
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.

Signs and Symptoms of Exposures:

Acute Toxicity:	LD50 : Dermal – Rabbit 3.97 ml/kg LC50 : Inhalation – Rabbit 5.3 mg/l, 4hr LD50 : Oral - Rat – 7010 – 16,900 mg/kg
Chronic Toxicity:	No information available.
Serious eye damage/eye Irritation:	EYE-RABBIT: Irritation score 11.8 of max 110, corneal opacity not fully reversible.
Skin corrosion/irritation:	SKIN-RABBIT : P.I.I=1.94

Respiratory or Skin Sensitization: No information available.

Mutagenicity: Positive(Bacteria), Negative(Chromosome analysis)

Carcinogenicity:

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

Ecotoxicity (Aquatic and Terrestrial): Algae EC50 Algae 268 mg/l, 7 days; 119 mg/l, 7 days
Green Algae >420 mg/l, 72 hr; 350 mg/l, 72 hr (Growth Rate)

Crustacea LOEC Algae 50 mg/l, 7 days

EC50 Daphnia 710 mg/l, 48 hr

NOEC Daphnia 100 mg/l, 21 days

Fish LC50 Bluegill 276 mg/l, 96 hr

Oncorhynchus mykiss 237 mg/l, 96 hr

Bioaccumulative Potential No information available.

Mobility in Soil: No information available.

PBT and vPvB Assessment: No information available.

Other Adverse Effects: Causes easily hydrolysis in water or atmosphere.

Section 13. Disposal Considerations

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

Disposing of Contaminated Packaging: Dispose of as unused product.

Section 14. Transport Information

Land Transport (DOT): **Not Regulated**

UN Number:

UN Proper Shipping Name:

Transport Hazard Class:

Packing Group:

Sea Transport (IMDG): **Not Regulated**

UN Number:

UN Proper Shipping Name:

Transport Hazard Class:

Packing Group:

Air Transport (IATA): **Not Regulated**

UN Number:

UN Proper Shipping Name:

Transport Hazard Class:

Packing Group:

Environmental Hazards (e.g., Marine pollutant): None

Section 15. Regulatory Information

International Inventories:

TSCA (USA):	Yes
DSL (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:

SARA 313:	Methanol (Impurity) CAS# 67-56-1
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:	Methanol (Impurity) CAS# 67-56-1
New Jersey Right to Know Components:	Methanol (Impurity) CAS# 67-56-1
Pennsylvania Right to Know Components:	Methanol (Impurity) CAS# 67-56-1
California Proposition 65:	Warning: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm - Methanol (Impurity) CAS# 67-56-1

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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THE INFORMATION AND RECOMMENDATIONS HEREIN, ARE TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. NO



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