



ADVANCED POLYMER, INC.

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AP-SILANE 33W

AP-SILANE 33W is high solids aminoalkyl silane and silane oligomer in an aqueous solution. AP-SILANE 33W is ready to use, contains no alcohol, and is non-flammable. It is most often used in aqueous systems where the alcohol of hydrolysis causes instability of the formulation or where a high flash point additive is required. AP-SILANE 33W reduces the volatile organic content and does not contain any hazardous air polluting substances. AP-SILANE 33W can be used as an additive for adhesives, sealants and coatings.

CHARACTERISTICS

- Improved adhesion.
- Increased composite wet and dry tensile and modulus.
- Increased flexural strength.
- Increased wet and dry compressive strength.

APPLICATION

AP-SILANE 33W is recommended for fiberglass reinforced phenolic, acrylic, melamine and epoxy thermoset composites.

PACKAGING

AP-SILANE 33W is available in 8 oz. samples and 441-lb. drums.

TYPICAL PROPERTIES

Appearance:	Clear liquid
Specific Gravity (@ 25°C):	1.068
Viscosity:	2.84 cs
Amine Equivalent:	552 g/mol
Activity:	40%

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Revised July 23, 2010

AP-SILANE 33W

Section I Product Identity

Product Name	AP-SILANE 33W
Chemical Name/Family:	Aminoalkyl silane
CAS Registry	
24 Hour Emergency Number	800-424-9300
24 Hour Chemtrec Number	800-424-9300
All ingredients are listed in EPA's TSCA list of chemical substances	

Section II Hazardous Components/Composition Information

CHEMICAL :	CAS #:	USOS:	TWA:	STEL:	PERCENT:
Aminoalkyl silane					40

Section III Physical and Chemical Properties

Boiling Point	ND
Specific Gravity (H ₂ O=1)	0.95
Vapor Pressure	<10
Vapor Density (Air=1)	7.7
Percent Volatile By Weight	100%
Evaporation Rate (BuAc=1)	<1
Solubility in Water	Soluble
Appearance and Odor	Light straw, transparent liquid with slight amine odor.

Section IV Fire and Explosion Hazard Data

Flash Point (Method Used)	208°F (Open Cup)
Flammable Limits in Air (% By Volume)	ND
Extinguishing Media	Foam, dry chemical CO ₂
Special Fire Fighting Procedures:	Evacuate personnel to a safe area. Wear self-contained breathing apparatus. Wear full protective equipment
Unusual Fire and Explosion Hazard	Combustion can produce nitrogen oxides, toxic and corrosive gasses.

Section V Reactivity Data

Stability	Stable
Conditions to Avoid	Store in a well-ventilated place at temperatures below 120°F. Keep container tightly closed. Keep from freezing.
Incompatibilities	Will hydrolyze with water, but no hazard. Avoid contact with strong oxidizing agents and acid.
Hazardous Decomposition or By Products	Combustion may produce CO ₂ , CO and ethanol (flammable liquid)
Hazardous Polymerization	May Not Occur

Section VI Health hazard Data

Primary Routes of Entry	Inhalation: YES	Dermal: YES	Ingestion: YES
Acute Health hazard	LD50 (oral/rat) 2.02—2.43 ml/kg		
Chronic Health Hazard	No information available		
Carcinogenicity	No information available		
NTP: No	IARC Monograph: NO	OSHA Regulated: NO	

Signs and Symptoms of Exposure:

Skin Contact	Brief contact may cause slight irritation. Prolonged and repeated contact causes chemical burn with discomfort or pain.
Eye Contact	Causes severe irritation, experienced as discomfort or pain. Corneal injury may be severe and if not treated promptly could result in permanent impairment of vision.
Ingestion	Although ingestion is unlikely, liquid may irritate upper digestive tract if swallowed. May cause severe irritation.
Inhalation	May cause severe irritation.

Medical Condition Generally Aggravated by Exposure

None known

Emergency First Aid Procedures

Eyes	Immediately flush eyes with plenty of water. Seek medical attention.
Skin	Immediately wash skin with soap and water. Wash contaminated clothing before reuse.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.
Inhalation	Immediately remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Please note: Symptoms may be delayed; prompt medical attention may be required. Call a physician.

Section VII Precautions for Safe Handling and Use

Steps to be Taken in Case the Material is Released or Spilled:

Turn off ignition sources. Soak up with sand, oil dry or other absorbent material.

Waste Disposal Method:

Dispose of according to State, Local and EPA regulations.

Section VIII Special Precautions

Precautions to be Taken in Handling and Storage:

Store at temperatures between 40oF (4.4oC) to 105oF (40.6oC). Store in a tightly closed container. Store in a well ventilated area. Store away from oxidizing agents, sources of heat, direct sunlight or rain. No smoking in area of storage. **Agitate contents of container before using.**

Section IX Control Measures

Respiratory Protection		
Ventilation	Local exhaust	Recommended
	Mechanical	Adequate ventilation system
	Special	None required
	Other	None
Eye Protection	Safety glasses should be worn	
Protective Gloves	PVC –coated, butyl or neoprene gloves should be worn	
Protective Clothing	Rubber apron	
Other Protective Equipment	Eye wash equipment and safety shower should be available. NIOSH approved respirator as needed	
Other Precautions	Wear self contained breathing apparatus in high vapor concentrations. Wash hands after use.	

Section X SARA Title III

SECTION 313 SUPPLIER NOTIFICATION

This product contains the following toxic chemicals subject to the reporting requirements of SECTION 331 of the EMERGENCY PLANNING AND COMMUNITIY RIGHT-TO-KNOW ACT OF 1986 and of 40 CFR 371

CAS #	Chemical Name	Percent by Weight

THIS INFORMATION MUST BE INCLUDED IN ALL MSDS'S THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL

Section XI Transportation Information

SHIPPING INFORMATION

PRODUCT NAME	AP-SILANE 33W
DOT PROPER SHIPPING NAME	Corrosive Liquid NOS (contains 3-aminopropyltriethoxysilane CAS #919-30-2)
HAZARD CLASS	8
UN NUMBER	UN1760
PACKING GROUP	III
LABEL REQUIREMENTS	Corrosive

Hazard Ratings

Health	3
Flammability	1
Reactivity	2
PPI	X (personal protection rating to be supplied by user depending on use conditions)

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Prepared By API

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Revised By API

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