



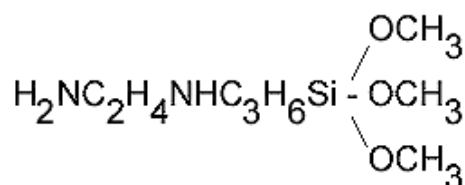
ADVANCED POLYMER, INC.

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AP-SILANE 32

AP-SILANE 32 is a N-β(aminoethyl)-γ-aminopropyl-trimethoxy silane coupling agent. AP-SILANE 32 has both organic and inorganic reactivity. Due to its unique functionality AP-SILANE 32 will impart superior adhesion and strength properties.

CHEMICAL STRUCTURE



CHARACTERISTICS

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

APPLICATION

AP-SILANE 32 is recommended for epoxy, phenolic and melamine resins.

PACKAGING

AP-SILANE 32 is available in 4 oz. samples and 441-lb. drums.

Advanced Polymer, Inc.

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I want to know more!

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TYPICAL PROPERTIES

Appearance:	Clear liquid
Molecular Weight:	222.4
Specific Gravity (@ 25°C):	1.02
Purity:	>98.0%
Refractive Index (@ 25°C):	1.445
Minimum Coverage Area:	351 m ² /g

You may also be interested in . . .

- AP-SILANE 20
- AP-SILANE 21

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Revised June 7, 2010

AP-SILANE 32

Section I Product Identity

Product Name	AP-SILANE 32
Chemical Name/Family:	N-β(aminoethyl)-γ-aminopropyl-trimethoxy silane
CAS Registry	#1760-24-3
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:
N-β(aminoethyl)-γ-aminopropyl-trimethoxy silane	1760-24-3				>98

Section III Physical and Chemical Properties

Boiling Point	498°F
Specific Gravity (H ₂ O=1)	1.02
Vapor Pressure	<0.1
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)	186°F (Closed 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: NO	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	Contact with skin may cause severe irritation.
Eye Contact	May cause irreversible damage and burns to the eyes
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 in a well-ventilated place at temperatures below 120°F. Keep container tightly closed. Keep from freezing *** 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 Rubber or plastic 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 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 COMMUNITY 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 32
DOT PROPER SHIPPING NAME	Non-Regulated for DOT
HAZARD CLASS	None
UN NUMBER	None
PACKING GROUP	None
LABEL REQUIREMENTS	None

Hazard Ratings

Health	2
Flammability	1
Reactivity	0

Date Prepared April 18, 2005

Prepared By API

Date Revised June 7, 2010

Revised By API

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