

MATERIAL SAFETY DATA SHEET

Identity (as used on label and list):	SIL-ACT™ ATS-42
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Section 1	
Manufacturer's Name Advanced Chemical Technologies, Inc. Address 100 West Wilshire, Suite C-1 Oklahoma City, Oklahoma 73116	Emergency Telephone Number (800) 255-3924 Telephone Number for Information (405) 843-2585 Date Prepared: February 1, 2010

Section 2 - Hazardous Ingredients / Identity Information			
Hazardous Components : Specific Chemical Identity; Common Name(s)	OSHA PEL	ACGIH TLV	Other Limits
Alkoxysilanes - CAS No. 18395-30-7	NE	NE	NE
Isopropanol - CAS No. 67-63-0	400 ppm	400 ppm	NE
Methanol - CAS No. 67-56-1	200 ppm	200 ppm	NE

Section 3 - Physical / Chemical Characteristics			
Boiling Point:	82C	Specific Gravity:	0.83 @ 25C
Vapor Pressure (mm Hg)	33 mm	Percent Volatile by Volume:	>99%
Vapor Density (Air = 1)	2.1	Evaporation Rate:	<1
Solubility in Water:	Reacts with Water	pH (Concentrate):	NA
Appearance and Odor:	Liquid, Colorless - Alcohol Odor		

Section 4 - Fire and Explosion Hazard Data		FLAMMABILITY: NFPA 3	
Flash Point (Method Used): 53F (Closed Cup)	Flammable Limits:	LEL	UEL
		NE	NE
Extinguishing Media: Dry Chemical, Polymer Foam, Carbon Dioxide			
Special Fire Fighting Procedures: Self Contained Breathing Apparatus (SCBA) and Protective Clothing Should be Worn with Fires Involving Chemicals			
Unusual Fire and Explosion Hazards: None Known			

Section 5 - Reactivity Data		REACTIVITY: NFPA 1	
Stability:	Unstable:		Conditions to Avoid:
	Stable:	X	NA
Incompatibility: Material Reacts with Water, Strong Oxidizers and Reducers			
Hazardous Decomposition or By-Products: Silicon Dioxide, Carbon Dioxide and other Hydrocarbons			
Hazardous	May Occur		Conditions to Avoid:
Polymerization:	Will Not Occur	X	NA

VOC Content, as applied, less than 600 g/L (Method 24, ASTM D-5095)

Section 6 - Health Hazard Data

HEALTH: NFPA 2

Health Hazards (Acute and Chronic):

Lungs: Inhalation May Cause Nausea. Ingestion: Harmful or Fatal if Swallowed**Eyes: Irritation, Reddening, Burns. Skin: Irritation, Drying Effects**Carcinogenicity: **NE** NTP? **NE** IARC Monographs? **NO** OSHA Regulated? **NO**

Signs and Symptoms of Exposure:

Lungs: Aggravating to Upper Respiratory System**Eyes: Irritation, Reddening, Burns.****Skin: Irritation, Drying Effects.**Medical Conditions Generally Aggravated by Exposure: **None Known**

Emergency and First Aid Procedures:

Lungs: Move to Fresh Air.**Eyes: Flush with Water for 15 Minutes.****Skin: Wash with Plenty of Water.****Internal: See Physician.****Section 7 - Precautions for Safe Handling and Use**

Steps to Be Taken in Case Material is Released or Spilled:

Use Absorbent Material to Collect and Contain for Salvage or Disposal.

Waste Disposal Method:

Review all Local, State and Federal Regulations Concerning Health and Pollution to Determine Approved Disposal Procedures.

Precautions to Be Taken in Handling and Storage:

Store in Cool, Dry Area Away from Water, Strong Oxidizers and Reducers.

Other Precautions:

Keep Out of Reach of Children.**Section 8 - Control Measures**

Respiratory Protection (Specific Type):

Provide Adequate Ventilation.**Use Approved Half-Face Respirator with Organic Vapors Cartridge or SCBA.**Ventilation: Local Exhaust: **Recommended** Special: **None**
Mechanical (General) **Recommended** Other: **None**

Protective Gloves:

Rubber or Plastic.

Eye Protection:

Chemical Goggles

Other Protective Clothing or Equipment:

As Required for Intended Use.

Work / Hygienic Practices:

Wash Thoroughly with Soap and Water After Handling.**Section 9- Handling and Storage**

Use with adequate ventilation. When product is exposed to water or humid air, product evolves flammable methyl alcohol. To control exposure within Section 8 guidelines, provide ventilation during use or use air-supplied or self-contained breathing apparatus. Do not breathe vapor. Keep container closed. Avoid eye and skin contact. Do not take internally.

Static electricity will accumulate and may ignite vapors. Prevent a possible fire hazard by bonding and grounding or inert gas purge. Keep container closed and store away from water or moisture. Keep container closed and away from heat, sparks, and flame.

Section 10- Toxicological Information

Special hazard information on components

No known applicable information.

Section 11- Ecological Information

Environmental Fate and Distribution

Complete information in not yet available.

Environmental Effects

Complete information in not yet available.

Fate and Effects in Waste Water Treatment Plants

Complete information in not yet available.

Ecotoxicity Classification Criteria

Hazard parameters (LC50 or EC50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity	<=100	>100 and <=2000	>2000

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34, 1993.

This table can be used to classify the exotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

Section 12- Disposal Considerations

RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? Yes

Characteristic Waste:

Ignitable: D001

State or local laws may impose additional regulatory requirements regarding disposal.

Call Advanced Chemical Technologies, Inc., (405) 843-2585 if additional information is required.

Section 13- Transport Information

DOT Road Shipment Information (49 CFR 172.101)

Proper Shipping Name: FLAMMABLE LIQUID, n.o.s.
Hazard Technical Name: Alkoxysilane, Isopropanol, Methanol
Hazard Class: 3
UN/NA Number: UN1993
Packing Group: II
Hazard Label(s): FLAMMABLE LIQUID LABEL

Ocean Shipment (IMDG)

Proper Shipping Name: FLAMMABLE LIQUID, n.o.s.
Hazard Technical Name: Alkoxysilane, Isopropanol, Methanol
Hazard Class: 3
UN/NA Number: UN1993
Packing Group: II
Hazard Label(s): FLAMMABLE LIQUID LABEL
Marine Pollutant: Not Applicable

Air Shipment (IATA)

Proper Shipping Name: FLAMMABLE LIQUID, n.o.s.
Hazard Technical Name: Alkoxysilane, Isopropanol, Methanol
Hazard Class: 3
UN/NA Number: UN1993
Packing Group: II
Hazard Label(s): FLAMMABLE LIQUID LABEL

Call Advanced Chemical Technologies, Inc., (405) 843-2585 if additional information is required.

Section 14- Regulatory Information

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910, 1200

TSCA Status: All Chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances

EPA SARA Title III Chemical Listings**Section 302 Extremely Hazardous Substances:**

None.

Section 304 CERCLA Hazardous Substances:

<u>CAS Number</u>	<u>Wt%</u>	<u>Component Name</u>
67-56-1	2.0	Methyl alcohol

Section 312 Hazard Class:

Acute: Yes
Chronic: Yes
Fire: Yes
Pressure: No
Reactive: No

Section 313 Toxic Chemicals:

<u>CAS Number</u>	<u>Wt%</u>	<u>Component Name</u>
67-56-1	2.0	Methyl alcohol

Supplemental State Compliance Information**California**

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.

Section 15- Other Information

Prepared by: Advanced Chemical Technologies, Inc.

THIS DATA IS OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS A PRODUCT SPECIFICATION. NO WARRANTY EXPRESSED OR IMPLIED, IS HEREBY MADE. THE RECOMMENDED INDUSTRIAL HYGIENE AND SAFE HANDLING PROCEDURES ARE BELIEVED TO BE GENERALLY APPLICABLE. HOWEVER, EACH USER SHOULD REVIEW THESE RECOMMENDATIONS IN THE SPECIFIC CONTEXT OF THE INTENDED USE AND DETERMINE WHETHER THEY ARE APPROPRIATE.