

Department of Administration **Purchasing Division** 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

## State of West Virginia **Solicitation Response**

Proc Folder:	1412760		
Solicitation Description:	Concrete Sealer		
Proc Type:	Agency Master Agreement		
Solicitation Closes		Solicitation Response	Version
2024-04-25 14:30		SR 0803 ESR0423240000006300	1

-					
VENDOR					
00000207543 GEORGE L WILSON & CO OF WV INC					
Solicitation Number:	ARFQ 0803 DOT2400000076				
Total Bid:	42125	Response Date:	2024-04-23	Response Time:	13:06:41
Comments:	Net 30				

FOR INFORMATION CONTACT THE BUYER Dusty J Smith 304-414-6859 dusty.j.smith@wv.gov

Vendor

Signature X

FEIN#

DATE

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc		Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	concrete sealant		2500.00	000 GL	16.850000	42125.00
Comm	Code	Manufacturer		Specifica	ation	Model #
312017	00					

**Commodity Line Comments:** We are submitting Sil-Act ATS-40. Data and Safety Data sheets are attached. This will delivered in 46 each 55 gallon drums. Please make the adjustment to 2530 gallons if possible. If no adjustment can be made just let me know and we can probably get 5 each 5 gallon pails to equal the 2500 gallons proposed.

## **Extended Description:**

Concrete Sealant

# SIL-ACT<sup>®</sup> Product Data

ATS-40 LEED Compliant

Alkyltrialkoxysilane



## **HIGH PERFORMANCE**

SIL-ACT<sup>®</sup> ATS-40 is a clear, penetrating silane treatment which causes concrete, masonry and many natural stones to become repellent to water, chloride, waterborne contaminants and weathering elements, preventing the premature deterioration of parking decks, bridge decks, pavements and other types of concrete and masonry structures. Performance testing makes SIL-ACT<sup>®</sup> ATS-40 an excellent choice for any project requiring the highest quality clear penetrating water repellent.

## **DURABLE**

SIL-ACT<sup>®</sup> ATS-40 can be applied to the surface by low-pressure spray, brush, roller or squeegee. It can be stored on the jobsite at temperature extremes, eliminating storage problems associated with emulsified silane products that can deteriorate on the jobsite, prior to use, if not properly stored. SIL-ACT<sup>®</sup> ATS-40 chemically bonds with the substrate forming a penetrated layer below the surface that acts as a one-way filter. Water, chloride and other waterborne contaminants are repelled without restricting the substrates natural vapor permeability.

## **FLEXIBLE**

**SIL-ACT® ATS-40** is an effective treatment for brick, masonry, cementious mortars, stucco, many natural stones and cast-in-place, precast, prestressed and architectural concretes.

Structures that can be treated include:

- Parking decks
- Bridges
- Commercial buildings
- Airport pavements
- Highways
- Median Bariers

- Stadiums
- Other horizontal and vertical structures
- Precast concrete
- Brick walls

**STOPS** WATER **CHLORIDE** WATERBORNE CONTAMINANTS **PERFORMANCE TESTED!** UNTREATED SIL-ACT PENETRATED LAYER

SIL-ACT<sup>®</sup>'s penetrated silane treatment layer stops water and salt intrusion into concrete, brick, masonry and many types of stone without affecting natural vapor permeability.

SIL-ACT<sup>™</sup> TREATED

TECHNICAL DATA				
PROPERTY	TEST	ATS-40		
Active Ingredient		Alkyltrialkoxysilane		
Specific Gravity		0.92		
Density	Method 24, ASTM D-5095	7.68 lb/gal		
VOC Content		< 600 g/L		
Appearance		Clear		
Surface Appearance after Application	Unchanged			
Drying time at 70°F		30 minutes		
Absorption Reduction	ASTM C-642	90.7% @ 48 hours		
Chloride Reduction	AASHTO T259/T260	90.6% @ 0.5 in. 87.7% @ 1.0 in.		
Scaling	ASTM C-672	0 @ 100 cycles		
Chloride Reduction	NCHRP 244 Series II	90.5% @ 5 days air dry		
Water Absorption	NCHRP 244 Series II	91.2% @ 5 days air dry		
Chloride Reduction	NCHRP 244 Series IV (Southern Climate)	90%		
Typical performance properties tested in house				

## INSTRUCTIONS

- 1. Test a small area prior to general application to ensure compatibility, desired results and coverage rates.
- Treatment is most effective when the surface to be treated is clean and dry. Remove dirt, dust, oil, grease, curing compounds, coatings and other surface contaminants. Water blasting, sandblasting or shotblasting may be required. Please refer to Advanced Chemical Technologies, Inc.'s CleanACT<sup>®</sup> line of concrete and masonry detergents and cleaners.
- 3. Do not proceed unless surface and air temperature is between 20°F and 110°F. Do not apply if frost, ice, or standing water are visible on the surface to be treated.
- 4. Windows, metals, etc. are not affected by SIL-ACT<sup>®</sup> ATS-40. No masking of windows is required. However, windows should be clean prior to application and avoid unnecessary overspray. Clean overspray areas with a dry cloth or alcohol. Protect plants and vegetation from overspray. Prior to SIL-ACT<sup>®</sup> ATS-40 application, check for preexisting contamination.
- 5. Spray, brush or roll on SIL-ACT<sup>®</sup> ATS-40 treatment on surface to be treated at the recommended application rate. Contact your Advanced Chemical Technologies rep for spray equipment options.

- 6. Apply to saturation. When spraying at low pressure, if necessary, follow with broom or squeegee for even distribution.
- 7. Coverage rate is approximately **125 250 square feet per** gallon. Coverage rates will vary greatly with the porosity of substrate.
- 8. Resealing bridge decks/ramps coverage rate is approximately 150 300 square feet per gallon.
- 9. Clean equipment with SIL-ACT<sup>®</sup> Equipment Cleaner.
- 10. Partially used containers should be properly sealed and protected from contamination by water or other foreign substances.

#### WARRANTY

Limited warranties are available for all SIL-ACT  $^{\circ}$  products. Contact ACT or your local SIL-ACT  $^{\circ}$  representative for details.

NOTICE: This brochure was prepared as an introduction to a product manufactured by Advanced Chemical Technologies, Inc. The information provided herein is based upon typical installation conditions and is believed to be reliable. However, due to the wide variety of possible intervening factors, Advanced Chemical Technologies, Inc. does not warrant the expected results to be obtained. Details concerning product specifications and warranty may be obtained from Advanced Chemical Technologies, Inc. Specifications are subject to change. Sale of subject system is limited to Advanced Chemical Technologies, Inc. and authorized applicator's conditions of sale including those limiting warranties and remedies.



"Protecting the World's Infrastructure"



## SAFETY DATA SHEET

MATERIAL IDENTIFICATION

SECTION 1 PRODUCT NAME/DESCRIPTION:

ATS-40

DISTRIBUTED / MANUFACTURED BY: Advanced Chemical Technologies 9608 N Robinson Oklahoma City, OK 73114

Date: 3/30/2018, Version 2 Phone: (405) 843-2585 Emergency Phone: (800) 255-3924

## **SECTION 2**

## HAZARD IDENTIFICATION

## **CLASSIFICATION:**

Flammability:	Category 1
Skin Corrosion/Irritation:	Category 2
Serious Eye Damage/Eye Irritation:	Category 2
Carcinogenicity:	Category 2
Reproductive Toxicity:	Category 1.5
TOST: Acute	Category 1
TOST: Chronic	Category 1
Aspiration:	Category 1
Aquatic Toxicity: Acute	Category 3

SIGNAL WORD: DANGER!

## HAZARD STATEMENTS:

Extremely flammable liquid and vapor.Causes damage to organs.Causes skin irritation.May damage fertility or the unborn child.Causes serious eye irritation.May be fatal if swallowed and enters airways.Suspected of causing cancer.Harmful to aquatic life.

Causes damage to organs through prolonged or repeated exposure.







#### PRECAUTIONARY STATEMENTS

Obtain Special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well ventilated area. Wash all exposed skin thoroughly after handling. Avoid release to the environment. If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Keep container tightly closed. Keep only in original container. Do not get in eyes, on skin, or on clothing. Do not eat, drink, or smoke when using this product. Keep away from heat/sparks/open flame/hot surfaces.-No smoking. Do not spray on an open flame of ignition source. Keep/store away from clothing/combustible materials. Take any precaution to avoid mixing with combustibles. Wear flame/fire resistant/retardant clothing. In case of fire, stop leak if safe to do so. In case of fire, eliminate all ignition sources if safe to do so. Ground/bond container and receiving equipment. Use explosion proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not subject to grinding/shock/friction. In case of fire, Evacuate area. Fight fire remotely due to the risk of explosion. Avoid contact during pregnancy/while nursing. TOXICITY:

See Section 11

SECTION	13	

#### **HEALTH HAZARDS**

CHEMICAL NAME	%W/W	CAS NUMBER
Isobutyl triethoxysilane	*35% to 45%	17980-47-1
Methanol	*10% to 15%	67-56-1
Dimethyl Carbonate	*20% to 30%	616-38-6
Naphtha, Medium Aliphatic	*0% to 10%	64742-88-7

(Proprietary Formula)

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4	FIRST AID
Potential acute h	nealth effects:
Eyes:	May cause severe irritation, burns, and/or damage
Skin:	May cause severe irritation, burns, and/or damage
Inhalation:	Inhalation may cause severe irritation
Ingestion:	Ingestion may cause irritation, corrosion/ulceration, nausea, and vomiting.
Medical conditio	ns aggravated by exposure:
None known.	
Eye Contact:	In case of contact, immediately flush eyes with cool running water. Lift and separate eyelids while flushing with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact:	Wash with soap and water. Get medical attention if irritation occurs. Wash clothing before reuse. Destroy contaminated shoes.
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms develop.
Ingestion:	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Give plenty of water.

## **SECTION 5**

FIRE FIGHTING MEASURES

Fire Hazard Classification (OSHA/NFPA):	3
Suitable extinguishing media: Unsuitable extinguishing media:	Water spray Alcohol resistant foam Carbon dioxide (CO2) Dry chemical. High volume water jet
Hazardous combustion products:	Carbon oxides Silicon oxides Formaldehyde
Specific hazards during firefighting:	Do not use a solid stream as it may scatter and spread fire. Flash back possible over considerable distance. Vapors ma form explosive mixtures with air. Exposure to combustion products may be a hazard to health.
Specific extinguishing methods:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so.

Evacuate area.

Special protective equipment for fire- fighters:	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.
ighters:	personal protective equipment.

## **SECTION 6**

## ACCIDENTAL RELEASE MEASURES

Personal Precautions, PPE, and Emergency Procedures:	Remove all sources of ignition. Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.
Environmental precautions:	Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up:	Non sparking tools should be used. Soak up with inert absorbent material. Suppress (knock down) gases/vapors/mists with a water spray jet. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

## **SECTION 7**

HANDLING AND STORAGE

Technical measures:	Ensure all equipment is electrically grounded before beginning transfer operations. This material can accumulate static charge due to inherent physical properties and can therefore cause an electrical ignition source to vapors. In order to prevent a fire hazard, as bonding and grounding may be insufficient to remove static electricity, it is necessary to provide an inert gas purge before beginning transfer operations. Restrict flow velocity in order to reduce the accumulation of static electricity.
Local/Total ventilation:	Use with local exhaust ventilation. Use only in an area equipped with explosion proof exhaust ventilation.
Advice on safe handling:	Do not get on skin or clothing. Do not breathe vapors or spray mist. Do not swallow. Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practice. Non-sparking. Tools should be used. Keep container tightly closed. Keep away from water. Protect from moisture. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Take care to prevent spills, waste and minimize release to the environment.
Conditions for safe storage:	Keep in properly labeled containers. Store locked up. Keep tightly closed. Keep in cool, well-ventilated place. Store in accordance with the particular national regulations.

	Keep away from heat and sources of ignition.
Materials to avoid:	Do not store with the following product types: Strong oxidizing agents Organic peroxides Flammable solids Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures Substances and mixtures Explosives Gases
	Explosives Gases

SECTION 8	PERSONAL PROTECTION / EXPOSURE CONTROLS
Ventilation System:	Always keep exposure below permissible exposure limits. In general dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use
Airborne Exposure Limits:	None Established.
Personal Protection: Eyes:	As prescribed in the OSHA Standard for Personal Protective Equipment (29 CFR 1920.132), employers must perform a Hazard Assessment for all workplaces to determine the need for, and selection of, proper protective equipment for each task performed. Wear face shield, safety glasses, or chemical goggles.
Hands & Skin:	For prolonged or repeated handling, use impervious gloves. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron and boots are recommended.
Respiratory:	If ventilation is not sufficient appropriate NIOSH/MSHA respiratory protection must be provided.
Work Practices:	Eye wash fountain and emergency showers are recommended.

## TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

Physical Form:	Liquid
Color:	Clear
Odor:	Solvent
Odor Threshold:	No data available.
pH:	No data available.
Boiling Point:	155.5° C
Melting Point:	No data available.
Flash Point:	32° C
Evaporation Rate (Butyl acetate=1):	No data available.
Flammability:	Flammable
Upper Explosion Limit (UEL):	16%(V)
Lower Explosion Limit (LEL):	0.92%(V)
Vapor Pressure:	No data available.
Vapor Density:	No data available.
Specific Gravity (Water=1):	0.92+/-0.05

Solubility Water:
Partition Coefficient: Auto ignition Temperature:

Decomposition Temperature: Viscosity (CPS):

## **SECTION 10**

Insoluble No data available. 267° C No data available. 17 sec #2 Zahn

#### **STABILITY AND REACTIVITY**

Reactivity:	Not classified as a reactivity hazard	
Chemical stability:	Stable under normal conditions	
Possibility of hazardous reactions:	Flammable liquid and vapor. Vapors may form explosive mixture with air. Use at elevated temperatures may form highly hazardous compounds. Can react with strong oxidizing agents. Hazardous decomposition products will be formed upon contact with water or humid air. Hazardous decomposition products will be formed at elevated temperatures	
Conditions to avoid:	Exposure to moisture. Handling operations that can promote accumulation of static charges. Heat, flames, sparks.	
Incompatible materials:	Oxidizing agents Water	
Hazardous decomposition products:	Unknown	
Contact with water or humid air:	Methanol	
Thermal decomposition:	Formaldehyde	

#### **SECTION 11**

Information on likely routes of exposure

Inhalation

Skin contact

Ingestion

Eye Contact

Acute toxicity Not classified based on available information

Product:	
Acute oral toxicity:	Acute toxicity estimate: > 5,000 mg/kg
-	Method: Calculation method
Acute inhalation toxicity:	Acute toxicity estimate: > 40 mg/l
	Exposure time: 4 h
	Test atmosphere: vapor
	Method: Calculation method
Acute dermal toxicity:	Acute toxicity estimate: > 5,000 mg/kg
-	Method: Calculation method

**TOXICOLOGICAL PROPERTIES** 

Ingredients:	
Dimethyl Carbonate	
Routes of Entry:	Absorbed through skin, eye contact, inhalation and ingestion
Toxicity to animals:	Acute oral toxicity: (LD50): 6000 mg/kg (mouse) Acute dermal toxicity (ld50): >5000 mg/kg (rabbit)
Chronic effect on humans:	May cause damage to the following organs: central nervous system (CNS)
Other toxic effects on humans: Special remarks on toxicity to animals:	Hazardous in case of skin contact (irritant). Slightly hazardous in case of skin contact (permeator), of ingestion, of inhalation Not available
Special remarks on chronic effects to humans:	Not available
Special remarks on other toxic	Causes skin irritation. It can be absorbed through the skin
SKIII.	
Eyes:	Causes eye irritation
Inhalation:	May cause respiratory tract irritation. May cause drowsiness, unconsciousness and central nervous system depression. Vapors may cause dizziness or suffocation. May cause irritation of the digestive tract. The toxicological properties of this substance
	have not been fully investigated.
Ingredients:	
Isobutyl triethoxysilane	
Acute oral toxicity:	LD50 (rat): 10,000 mg/kg Assessment: The substance or mixture has no acute oral toxicity Remarks: Based on test data
Acute inhalation toxicity:	LD50 (rat): >1525 ppm Exposure time: 4 h Test atmosphere: vapor Assessment: The substance or mixture has no acute inhalation toxicity Remarks: Based on test data
Methanol	Nemarks. Daseu on lest uala
Acute oral toxicity:	Acute toxicity estimate (Humans): 300 mg/kg Method: Expert judgment
Acute inhalation toxicity:	Acute toxicity estimate (Humans): 3 mg/l Test atmosphere: vapor
Acute dermal toxicity:	Method: Expert judgment Acute toxicity estimate (Humans): 300 mg/kg Method: Expert judgment
Skin corrosion/irritation	
Causes skin irritation	
Ingredients:	
Isobutyl triethoxysilane	
Species:	Rabbit
Result:	Skin irritation
Remarks:	Based on test data
Methanol	
Species:	Rabbit
Result:	No skin irritation

Serious eye damage/eye irritat	ion
Not classified based on available information Ingredients:	
Isobutyl triethoxysilane	
Species:	Rabbit
Result:	No eye irritation
Remarks:	Based on test data
Methanol	
Species:	Rabbit
Result:	No eye irritation
Respiratory or skin sensitizatio	n
Skin sensitization:	Not classified based on available information
Respiratory sensitization:	Not classified based on available information
Ingredients:	
Isobutyl triethoxysilane	
Assessment:	Does not cause skin irritation
Test Type:	Skin: test type not specified
Remarks:	No known sensitizing effect
Result:	Based on test data
Methanol	
Test Type:	Maximization Test (GPMT)
Routes of exposure:	Skin contact
Species:	Guinea pig
Result:	Negative
Germ cell mutagenicity	
Not classified based on available information <u>Ingredients:</u>	
Isobutyl triethoxysilane	
Genotoxicity in vitro:	
Test type:	Bacterial reverse mutation assay (AMES)
Result:	Negative
Remarks:	Based on test data
Methanol	
Genotoxicity in vitro:	
Test type:	Bacterial reverse mutation assay (AMES)
Method:	OECD Test Guideline 471
Result:	Negative
Genotoxicity in vivo:	

Test type:	Mammalian erythrocyte micronucleus test (in vivo cytogenic assay)
Species:	Mouse
Application route:	Intraperitoneal injection
Result:	Negative

Carcinogenicity

Not classified based on available information.

Ingredients:		
Methanol		
Species:	Mouse	
Application route:	Inhalation (vapor)	
Exposure time:	18 months	
Method:	OECD Test Guideline 453	
Result:	Negative	
IARC	No ingredients of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.	
OSHA	No ingredients of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.	
NTP	No ingredients of this product present at levels greater than or equal to 0.1 identified as probable, possible or confirmed human carcinogen by NTP	
Potential chronic health effects:		
Carcinogenicity		
Naphtha, Medium Aliphatic	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.	
Reproductive toxicity		
Not classified based on availabl	e information	
Ingredients:		
Methanol		
Effects on fertility		
Test type:	Fertility/early embryonic development	
Species:	Mouse	
Application route:	Ingestion	
Result:	Negative	
Effects on fetal development		
Test type:	Embryo-fetal development	
Species:	Mouse	
Application route:	Ingestion	
Method:	OECD Test Guideline 414	
Result:	Positive	
Remarks:	The effects were seen only in maternally toxic doses	

STOT – single exposure

May cause drowsiness or dizzir	ness
Ingredients:	
Isobutyl triethoxysilane	
Routes of exposure:	Inhalation (vapor)
Assessment:	May cause drowsiness or dizziness
Remarks:	Information taken from reference works and the literature
Methanol	
Target Organs:	Eyes, Central Nervous System
Assessment:	Causes damage to organs
STOT – repeated exposure	
Not classified based on availab	le information
Ingredients:	
Methanol	
Species:	Rat
NOAEL:	1.06 mg/l
Application route:	Inhalation (vapor)
Exposure time:	90 d
Aspiration toxicity	
Not classified based on availab	le information
Ingredients:	
Naphtha, Medium Aliphatic	
Routes of entry:	Absorbed through skin, eye contact, Inhalation, Ingestion.
Toxicity to animals:	WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE: Acute oral toxicity (LD50): 5 mg/kg [Rat]. Acute dermal toxicity (LD50): 3 mg/kg [Rabbit]. Acute toxicity of the vapor (LC50): 3400 4 hours [Rat]
Chronic Effects on Humans:	Causes damage to the following organs: skin, eyes central nervous system (CNS). May cause damage to the following organs: blood, kidneys, lungs, the nervous system, mucous membranes, peripheral nervous system, gastrointestinal tract, upper respiratory tract_ears
Other toxic effects on	Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly
humans:	hazardous in case of skin contact (permeator).
Special remarks on toxicity to animals:	NOT AVAIIADIE.
Special remarks on Chronic	Not available.
Effects on Humans:	Mederately taxis and parastic in high consentrations
Toxic Effects on Humans:	

**ECOLOGICAL INFORMATION** 

Ecotoxicity		
Ingredients:		

Isobutyl triethoxysilane	
Toxicity to fish	LC50 (Dani rerio (zebra fish)): > 100 mg/l
Toxicity to daphnia and other aquatic	EC50 (Daphnia sp.): >864 mg/l
invertebrates	Exposure time: 48 h
l oxicity to algae	EC50 (Scenedesmus subspicatus): 1,170 mg/l Exposure time: 72 h
Methanol	
Toxicity to fish	LC50 (Lepomis macrochirus (Bluegill sunfish)): >15,400 mg/l
Toxicity to daphnia and other aquatic	Exposure time: 96 h EC50 (Daphpia magpa (Water flea)): >10,000 mg/l
invertebrates	Exposure time: 48 h
Toxicity to algae	EC50 (Pseudokirchneriella subcapitata (green algae)): 22,000 mg/l
	Exposure time: 96 h Method: OPPTS 850 5400
Toxicity to fish (Chronic toxicity)	NOEC (Oryzias latipes (Orange-red killifish)): 15,800 mg/l
	Exposure time: 200 h
Toxicity to bacteria	EC50: 20,000 mg/l Exposure time: 15 h
Persistence and degradability	
Ingredients:	
Isobutyl triethoxysilane	
Biodegradability:	
Result:	Not readily biodegradable
Biodegradation:	36 – 47%
Exposure time:	28 d
Method:	OECD Test Guideline 301B
Stability in water:	Degradation half-life: 4.6 h pH:7
Methanol	
Biodegradability:	
Result:	Readily biodegradable
Biodegradation	95%
Exposure time:	20 d
Bioaccumulation:	
Ingredients:	
Isobutyl triethoxysilane	
Partition coefficient:	
n-octanol/water:	Log Pow: -0.77
Mobility in soil:	No data available
Other adverse effects:	No data available

Disposal methods

DISPOSAL CONSIDERATIONS

Resource Conservation and Recovery Act (RCRA): Waste Code:	When a decision is made to discard this material as supplied, it is classified as a RCRA hazardous waste. D001: Ignitability
Waste from residues:	Dispose of in accordance with local regulations.
Contaminated packaging:	Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not burn, or use cutting torch on, the empty drum.

**TRANSPORT INFORMATION** 

**REGULATORY INFORMATION** 

FLAMMABLE LIQUIDS, n.o.s.,

(Contains Dimethyl Carbonate, Alkoxysilane, Methanol, Medium Aromatic Naphtha) 3, UN1993, PGIII LABEL/PLACARD REQUIRED

## **SECTION 15**

US FEDERAL REGULATIONS

SARA (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

SARA 302 EXTREMELY HAZARDOUS SUBSTANCES LIST: N/A

SARA 312 HAZARD CATEGORY:

SARA 313 TOXIC CHEMICALS LIST:

N/A

N/A

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT): N/A

RCRA (RESOURCE CONSERVATION AND RECOVERY ACT) LISTED HAZARDOUS WASTES:

N/A

CWA (CLEAN WATER ACT) LISTED SUBSTANCES:

N/A

FDA (FOOD AND DRUG ADMINISTRATON):

N/A

TOXIC SUBSTANCES CONTROL ACT (TSCA):

ALL INGREDIENTS ARE LISTED.

#### NFPA HAZARD INFORMATION SIGN:

[2] HEALTH HAZARD (BLUE DIAMOND)

4-DEADLY3-EXTREME DANGER2-HAZARDOUS1-SLIGHTLY HAZARDOUS0-NORMAL MATERIAL

#### [3] FIRE HAZARD (RED DIAMOND)

FLASH POINTS: 4-BELOW 73 F 3-BELOW 100 F 2-BELOW 200 F 1-ABOVE 200 F 0-WILL NOT BURN

## [1] REACTIVITY HAZARD (YELLOW DIAMOND)

4-MAY DETONATE3-SHOCK AND HEAT MAY DETONATE2-VIOLENT CHEMICAL CHANGE1-UNSTABLE IF HEATED0-STABLE

- [] SPECIFIC HAZARD (WHITE DIAMOND)
  - OX OXIDIZER
  - ACID ACID
  - ALK ALKALI
  - COR CORROSIVE
  - W USE NO WATER

#### **SECTION 16**

OTHER INFORMATION

THIS INFORMATION 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 INTEDED USE AND DETERMINE WHETHER THEY ARE APPROPRIATE.



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