



## SAFETY DATA SHEET

### SECTION 1

### MATERIAL IDENTIFICATION

**PRODUCT NAME / DESCRIPTION: ATS-300**

DISTRIBUTED / MANUFACTURED BY:

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Date: 9/23/2019 (Version 2)

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### SECTION 2

### HAZARD IDENTIFICATION

**CLASSIFICATION:**

Flammable liquids:	Category 3
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SIGNAL WORD:

**WARNING!**



**HAZARD STATEMENTS:**

Flammable liquid and vapor

**PRECAUTIONARY STATEMENTS:**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Take precautionary measures against static discharge.

Dispose of contents/container to waste disposal.

**Other hazards**

Product hydrolyses under formation of methanol (CAS no. 67-56-1). Methanol is toxic by inhalation, in contact with skin and if swallowed. Methanol causes damage to organs.

Methanol is highly flammable. Inhalation of aerosol spray may damage health.

**SECTION 3****HEALTH HAZARDS**

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Concentration (%)</u>
Organosilane	34396-03-7	100

**Information on ingredients:**

This material does not contain any reportable hazardous ingredients  
Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in this section are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for non-carcinogenic HAPS or they are inextricably bound in the product.

**SECTION 4****FIRST AID MEASURES**

General advice:	Get medical attention if irritation occurs or if breathing becomes difficult. Remove contaminated clothing and shoes. Show label.
If inhaled:	Remove to fresh air, keeping the victim laying down and restful. If not breathing: give artificial respiration. If breathing is difficult: give oxygen.
In case of skin contact:	Immediately flush skin with plenty of water and soap. Clean contaminated clothing and shoes before reuse.
In case of eye contact:	Immediately hold eyelids apart and flush with plenty of water for at least 15 minutes.
If swallowed:	If conscious, give several small portions of water to drink. Get medical attention immediately. Designate the product. Indicate the possible formation of: Methanol.
Note to physician:	Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches, vertigo and visual disorders, including blindness (irreversible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure.

**SECTION 5****FIRE FIGHTING MEASURES**

<b>Flammable Properties</b>		
<b>Property</b>	<b>Value</b>	<b>Method</b>

Flash point	52 °C (125 °F)	(ISO 2719)
Sustained combustibility	97 °C (206 °F)	(ISO 9038)
Boiling point/boiling range	90 °C (194 °F) at 13 hPa	
Lower explosion limit (LEL)	0.5%(V)	(DIN EN 1839)
Upper explosion limit (UEL)	No data available	
Ignition temperature	310 °C (590 °F)	(DIN 51794)
NFPA Hazard Class (comb./flam. liquid)	II	

### **Fire and explosion hazards**

This material will flash but does not sustain combustion. As a result of hydrolysis flammable vapors may accumulate in the container head space. Consider possible formation of explosive mixtures with air, for example in uncleaned containers by moisture.

### **Recommended extinguishing media**

Water-mist, carbon dioxide, sand, dry chemical or alcohol-resistant foam

### **Unsuitable extinguishing media**

Water-spray, sharp water jet

### **Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases**

Hazardous decomposition products: carbon monoxide, carbon dioxide, silicon dioxide, formaldehyde, incompletely burnt hydrocarbons

### **Firefighting procedures**

Cool endangered containers with water. Fire fighters should wear full protective clothing including a positive pressure self-contained breathing apparatus.

## **SECTION 6**

## **ACCIDENTAL RELEASE MEASURES**

### **Precautions**

Secure the area. Wear personal protection equipment (see section 8). Keep unprotected persons away. Avoid contact with eyes and skin. Do not inhale gases/vapors/aerosols. If material is released indicate risk of slipping. Do not walk through spilled material.

### **HAZWOPER PPR Level: D**

### **Containment**

Prevent material from entering surface waters, drains or sewers and soil. Contain any fluid that runs out using suitable material (e.g. earth). Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers.

Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free phone number (800) 424-8802.

### **Methods for cleaning up**

Do not flush away with water. For small amounts: absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner. Exhaust vapors.

### **Further information**

Eliminate all sources of ignition. Exhaust Vapours. Consider explosion protection. Observe notes under section 7.

**SECTION 7****HANDLING AND STORAGE****Handling****Precautions for safe handling**

Ensure adequate ventilation. Must be syphoned off in situ. Keep away from incompatible substances in accordance with section 10. Spilled substance increases risk of slipping. Avoid formation of aerosols. In case of aerosol formation special protective measures are required(exhausting by suction, respiratory protection). Observe information in section 8.

**Precautions against fire and explosion**

Product can separate methanol. Flammable vapors may accumulate and form explosive mixtures with air in containers, process vessels, including partial, empty and uncleaned containers and vessels, or other enclosed spaces. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging. Cool endangered containers with water.

**Storage****Conditions for storage rooms and vessels**

Make sure there is no possibility of entering the ground.

**Advice for storage of incompatible materials**

Not applicable

**Further information for storage**

Protect against moisture. Store in original container only. Keep container tightly closed

**SECTION 8****EXPOSURE CONTROLS/PERSONAL PROTECTION****Engineering controls****Ventilation**

Use only with adequate ventilation

**Local exhaust**

Yes

**Associate substances with specific control parameters such as limit value****Maximum airborne concentrations at the workplace**

CAS No.	Material	Type	mg/m <sup>3</sup>	ppm	Dust fract.
67-56-1	Methanol	OSHA PEL	260.0	200.0	
67-56-1	Methanol	ACGIH TWA		200.0	

Re Methanol (CAS-no. 67-56-1): STEL is 250 ppm, skin notation (ACGIH); STEL is 250 ppm, skin notation (NIOSH).

**Personal protection equipment (PPE)****Respiratory protection**

In case of long or strong exposure use a NIOSH approved respirator for organic vapors. Alternatively use a positive pressure, air-supplied respirator (regard TLV)

**Hand protection**

Butyl rubber protective gloves

### Eye protection

Tight fitting chemical safety goggles

### Other protective clothing or equipment

Protective clothing to cover exposed areas of arms, legs and torso. Provide emergency shower and eye-bath.

### General hygiene and protection measures

Do not breathe dust/vapor/mist/gas/aerosol. Avoid contact with eyes and skin. Do not eat, drink or smoke when handling. Wash thoroughly after handling.

## SECTION 9

## PHYSICAL AND CHEMICAL PROPERTIES

### Appearance:

Physical state/form:	Liquid
Color:	Colorless
Odor:	Slight

### Safety parameters

Property	Value	Method
Melting point / melting range:	Not determined	
Boiling point / boiling range:	90 °C (194 °F) at 13 hPa	
Flash point:	52 °C (125 °F)	(ISO 2719)
Sustained combustibility	97 °C (206 °F)	(ISO 9038)
Ignition temperature	310 °C (590 °F)	(DIN 51794)
Lower explosion limit (LEL)	0.5%(V)	(DIN EN 1839)
Upper explosion limit (UEL)	No data available	
Vapor pressure	< 10 hPa at 20 °C (68 °F)	
Vapor pressure	10 hPa at 50 °C (122 °F)	
Density	0.9 g/cm <sup>3</sup>	(DIN 51757)
Water solubility / miscibility	Virtually insoluble	
pH-value	Not applicable	
Viscosity (dynamic)	1.8 mPa.s	

### Further information

Re 9.2 solubility in water: Hydrolytic decomposition occurs. Explosion limits for released methanol: 5.5 – 44%(V). Re 9.2 pH Value: Product displays neutral reaction.

## SECTION 10

## STABILITY AND REACTIVITY

### General information

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

### Conditions to avoid

Moisture, heat, open flames, and other sources of ignition.

### Materials to avoid

Reacts with water, basic substances and acids. Reaction causes the formation of methanol.

### Hazardous decomposition products

By hydrolysis: Methanol. Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 °C (302°F) through oxidation.

**Further information**

Hazardous polymerization cannot occur

**SECTION 11**

**TOXICOLOGICAL INFORMATION**

**Information on toxicological effects**

**Acute toxicity**

**Product details**

Route of exposure	Result/Effect	Species/Test system	Source
Oral	LD50: > 2000 mg/kg	Rat	Test report OECD 423
Dermal	LD50: > 2000 mg/kg	Rat	Conclusion by analogy OECD 402
By Inhalation (spray)	LC50: > 11.2 mg/l; 4 h	Rat	Test report OECD 403

**Skin corrosion/irritation**

**Product details**

Route of exposure	Result/Effect	Species/Test system	Source
	Not irritating	Rabbit	Test report

**Serious eye damage/eye irritation**

**Product details**

Route of exposure	Result/Effect	Species/Test system	Source
	Not irritating	Rabbit	Test report

**Respiratory or skin sensitization**

**Product details**

Route of exposure	Result/Effect	Species/Test system	Source
Dermal	Not sensitizing	Guinea pig	Test report (read-across substance) OECD 406

**Germ cell mutagenicity**

**Assessment**

According to present knowledge, non-mutagenic. The evaluation is based of the whole data, including results of similar substances.

**Product details**

Route of exposure	Result/Effect	Species/Test system	Source
	Negative	Mutation assay (in vitro) Bacterial cells	Test report OECD 471
	Negative	Mutation assay (in vitro)	Test report (read-across substance) OECD 476

		Mouse lymphoma cells)	
	Negative	Chromosome aberration assay (in vitro) Mammalian cells	Test report (read-across substance) OECD 473
	Negative	Micro nucleus assay (in vitro) Mouse erythrocytes	Test report (read-across substance) OECD 474

### **Carcinogenicity**

#### **Assessment**

Based on the available toxicological data no specific evaluation of the carcinogenic potential is scientifically implicated.

### **Reproductive toxicity**

#### **Assessment**

On the basis of the available data no reproductive hazards are expected.

### **Product details**

<b>Result/Effect (examinations of developmental toxicity and teratogenicity)</b>	<b>Species/Test system</b>	<b>Source</b>
NOAEL (developmental): 1000 mg/kg NOAEL (maternal): 1000 mg/kg	Oral (gavage) rat	Test report (read-across substance) OECD 414

### **Specific target organ toxicity (single exposure)**

#### **Assessment**

No data known

### **Specific target organ toxicity (repeated exposure)**

#### **Assessment**

Based on the available data the criteria for classification as toxic after repeated exposure are not fulfilled.

### **Product details**

<b>Result/Effect</b>	<b>Species/Test system</b>	<b>Source</b>
NOAEC: >= 3 mg/l Exposure type: nose only	Subacute study Rat By inhalation (spray) 28 d; 5d/w; 6 hours/day Follow-up observation period: 14 d	Test report OECD 412

### **Aspiration hazard**

#### **Assessment**

No data known

### **Further toxicological information**

No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC. No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by

NTP. No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Other information: Hydrolysis product / impurity: Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as vomiting, nausea, headaches, vertigo and visual disorders, including blindness (irreversible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure.

## SECTION 12

## ECOLOGICAL INFORMATION

### Toxicity

#### Assessment

Up to the maximal solubility in the test medium the substance and its hydrolysis products do not show any acute effects on aquatic organisms that are relevant for classification and labelling. Based on hydrolysis characteristics of the substance the assessment is based on the hydrolysis of the products. For the silanols/siloxanols a conclusion was made by analogy (read-across) to structurally similar alkoxy silanes.

#### Product details

Result/Effect	Species/Test system	Source
LC50: > 100mg/l	Static rainbow trout (Oncorhynchus mykiss) (96 hrs)	Test report (read-across substance) OECD 203
NOEC: >= 100 mg/l	Pseudokirchneriella subcapitata (72 hrs)	Test report (read-across substance) OECD 201
EC50: > 100 mg/l	Sludge (3 h)	Test Report (read-across substance) OECD 209
NOEC (reproduction): 32 mg/l (measured)	Semistatic Daphnia magna (21 d)	Test report (read-across substance) OECD 211

### Persistence and degradability

#### Assessment

Contact with water liberates methanol and silanol- and/or siloxanol-compounds. Silanol- and/or siloxanol-compounds: Biologically not degradable. The hydrolysis product (Ethanol) is readily biologically degradable.

#### Product details

#### Biodegradation

Result	Test system/Method	Source
< 13% / 28 d Not readily biodegradable	Biological oxygen demand (BOD)	Conclusion by analogy OECD 310

#### Hydrolysis

Result	Test system/Method	Source
Half-life: 5.7 h	pH 7; 20 – 25 °C	Calc. value

### Bio accumulative potential

#### Assessment

Products of hydrolysis: Bioaccumulation is not expected to occur.

#### Mobility in soil



**Assessment**

No data known

**Other adverse effects**

None known

**SECTION 13****DISPOSAL CONSIDERATIONS****Resource Conservation and Recovery Act (RCRA):  
Product disposal**

This classification applies only to the material as it was originally pronounced.

Material that cannot be used, reprocessed or recycled should be disposed of in accordance with federal, state, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

**Packaging disposal**

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

**SECTION 14****TRANSPORT INFORMATION****U.S. DOT & CANADA TDG  
SURFACE**

Valuation:

Not regulated for transport

Other information:

This material has been tested and does not sustain combustion. No DOT flammable liquid class 3 diamond label required.

**Transport by sea IMDG-Code**

Valuation:

Not regulated for transport

Comment:

Not regulated in Class 3 – IMDG 2.3.1.3 – Substance does not contain combustion!

**Air transport ICAO-TI/ATA-DGR**

Valuation:

Not regulated for transport

Comment:

Not regulated in Class 3 – IATA 3.3.1.3 / ICAO 3.1.3 – Substance does not sustain combustion!  
Due to safety reasons no air transport in totes(IBC) or vented packaging.

**SECTION 15****REGULATORY INFORMATION****U.S. Federal regulations****TSCA inventory status and TSCA information**

This material and its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory.

**TSCA 12(b) Export Notification**

This material does not contain any TSCA 12(b) regulated chemicals.

**CERCLA Regulated Chemicals**

This material does not contain any CERCLA regulated chemicals.

**SARA 302 EHS Chemicals**

This material does not contain any SARA extremely hazardous substances.

**SARA 311/312 Hazard Class**

Fire hazard

**SARA 313 Chemicals**

This material does not contain any SARA 313 chemicals above de minimus levels.

**HAPS (Hazardous Air Pollutants)**

Chemical	CAS No.	Upper limit wt. %
Methanol	67-56-1	<=0.9000

**U.S. State regulations****California Proposition 65**

This material does not contain any chemicals known to the State of California to cause cancer.

**Carcinogens****California Proposition 65 Reproductive Toxins**

Methanol 67-56-1

**Massachusetts Substance List**

This material contains no listed components.

**New Jersey Right-to-Know Hazardous Substance List**

This material contains no listed components.

**Pennsylvania Right-to-Know Hazardous Substance List**

This material contains no listed components.

**Canadian regulations**

This product has been classified in accordance with the Hazard criteria of the CFR and the SDS contains all the information required by the CPR.

**WHMIS Hazard Classes**

B3

**DSL Status**

This material or its components are listed on the Canadian Domestic Substances List.

**Non-DSL Chemicals**

This material does not contain any non-DSL chemicals.

**Details of international registration status**

Relevant information about individual substance inventories, where available, is given below.

- |                                  |   |
|----------------------------------|---|
| South Korea (Republic of Korea): | <b>ECL</b> (Existing Chemicals List):<br>This product is listed in or complies with the substance inventory.                              |
| Australia:                       | <b>AICS</b> (Australian Inventory of Chemical Substances):<br>This product is listed in or complies with the substance inventory.         |
| People's Republic of China:      | <b>IECSC</b> (Inventory of Existing Chemical Substances in China):<br>This product is listed in or complies with the substance inventory. |
| Canada:                          | <b>DSL</b> (Domestic Substance List):   |

Philippines:	This product is listed in or complies with the substance inventory. <b>PICCS</b> (Philippines Inventory of Chemicals and Chemical Substances): This product is listed in or complies with the substance inventory.
United States of America (USA):	<b>TSCA</b> (Toxic Substance Control Act Chemical Substance Inventory): This product is listed in or complies with the substance inventory.
European Economic Area (EEA):	<b>REACH</b> (Regulation (EC) No 1907/2006): General note: the registration obligations for substances imported into the EEA or manufactured within the EEA by the supplier mentioned in Section 1 are fulfilled by the said supplier. The registration obligations for substances imported into the EEA by customers or other downstream users must be fulfilled by the latter.

## **SECTION 16**

## **OTHER INFORMATION**

### **Additional information**

This Safety Data Sheet (SDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR. This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee expressed or implied, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents. This SDS provides selected regulatory information on this product, including its components. This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws relating to the product being used.

#### **Glossary of terms:**

ACGIH - American Conference of  
Governmental Industrial Hygienists  
DOT - Department of Transportation  
  
hPa - Hectopascals  
mPa\*s - Milli Pascal-Seconds

ppm - Parts per Million  
  
SARA - Superfund Amendments and  
Reauthorization Act  
STEL - Short Term Exposure Limit  
TSCA - Toxic Substances Control Act

OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit

**Flash point determination methods**

ASTM D56

ASTM D92, DIN 51376, ISO 2592

ASTM D93, DIN 51758, ISO 2719

ASTM D3278, DIN 55680, ISO 3679

DIN 51755

**Conversion table:**

Pressure:

Viscosity:

TWA - Time Weighted Average

WHMIS - Canadian Workplace Hazardous Materials Identification System

**Common name**

Tagliabue (Tag) closed cup

Cleveland open cup

Pensky-Martens closed cup

Setaflash or Rapid closed cup

Abel-Pensky closed cup

1 hPa \* 0.75 = 1 mm Hg = 1 torr; 1 bar = 1000 hPa

1 mPa\*s = 1 centipoise (cP)