

## U-217 Part A

### 1 PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** U-217 Part A  
**Common Name:** Polysiloxane  
**SDS Number:** I153  
**Revision Date:** 10/22/2018  
**Version:** 1  
**Chemical Family:** Polysiloxane  
**Supplier Details:** Coatings for Industry, Inc.  
 319 Township Line Road  
 Souderton, PA 18964  
  
**Emergency:** Infotrac  
**Contact:** USA: 1-800-535-5053 / International :352-323-3500  
**Phone:** 215-723-0919  
**Fax:** 215-723-0911  
**Email:** cs@cficoatings.com  
**Web:** www.cficoatings.com

### 2 HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

Physical, Flammable Liquids, 2  
 Health, Serious Eye Damage/Eye Irritation, 1  
 Health, Reproductive toxicity, 2

#### GHS Label elements, including precautionary statements

**GHS Signal Word:** **DANGER**

**GHS Hazard Pictograms:**



##### GHS Hazard Statements:

H225 - Highly flammable liquid and vapor  
 H318 - Causes serious eye damage  
 H361 - Suspected of damaging fertility or the unborn child

##### GHS Precautionary Statements:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P233 - Keep container tightly closed.  
 P240 - Ground and bond container and receiving equipment.  
 P241 - Use explosion-proof [electrical/ventilating/lighting/...] equipment.  
 P242 - Use non-sparking tools.  
 P243 - Take action to prevent static discharges.  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
 P303+361+353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
 P370+378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.  
 P403+235 - Store in a well-ventilated place. Keep cool.  
 P501 - Dispose of contents/container to ...

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients:

Cas#	%	Chemical Name
82985-35-1	10-15%	1-Propanamine, 3-(trimethoxysilyl)-N-[3-(trimethoxysilyl)propyl]-
616-38-6	80-90%	Carbonic acid, dimethyl ester

### 4 FIRST AID MEASURES

<b>Inhalation:</b>	If inhaled, remove to fresh air. Give oxygen or artificial respiration if needed. Get immediate medical attention. Doctor: administration of corticoid spray.
<b>Skin Contact:</b>	Remove contaminated clothing and footwear immediately, and wash before reuse. Discard clothing and footwear which cannot be decontaminated. Wash immediately with lots of water (15 minutes)/shower. Do not apply (chemical) neutralizing agents. Rinse skin with water/shower. Get medical attention if irritation develops and persists.
<b>Eye Contact:</b>	Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. Then remove contact lenses, if easily removeable, and continue irrigation for not less than 15 minutes. Get immediate medical attention.
<b>Ingestion:</b>	Rinse mouth with water. Do not induce vomiting. Seek immediate medical attention

### 5 FIRE FIGHTING MEASURES

**Flash Point:** 64.0° F. (18.0° C.)

#### Extinguishing media

Suitable extinguishing media: Preferably: alcohol resistant foam. Water spray. Polyvalent foam. AFFF foam. Polymer foam. BC powder. Carbon dioxide.

Unsuitable extinguishing media: Solid water jet ineffective as extinguishing medium.

#### Special hazards arising from the substance or mixture

Fire hazard: DIRECT FIRE HAZARD. Highly flammable. Gas/vapor flammable with air within explosion limits. INDIRECT FIRE HAZARD. May be ignited by sparks. Gas/vapor spreads at floor level: ignition hazard. Reactions involving a fire hazard: see "Reactivity Hazard". Highly flammable liquid and vapor.

Explosion hazard: DIRECT EXPLOSION HAZARD. Gas/vapor explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD. may be ignited by sparks.

Reactivity: Upon combustion: CO and CO<sub>2</sub> are formed. Reacts violently with (strong) oxidizers: (increased) risk of fire. Highly flammable liquid and vapor.

#### Advice for firefighters

Firefighting instructions: Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

<b>6</b>	<b>ACCIDENTAL RELEASE MEASURES</b>
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Evacuate nonessential personnel.  
 Keep away from drains and ground water.  
 Pick up excess with inert absorbant material and place into separate waste container.  
 Do not attempt to take action without suitable protective equipment.  
 Keep upwind. Mark the danger area. Consider evacuation. Seal off low-lying areas. Close doors and windows of adjacent premises. Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment. Keep containers closed. Wash contaminated clothes.

<b>7</b>	<b>HANDLING AND STORAGE</b>
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**Handling Precautions:**

Precautions for safe handling:  
 Ensure good ventilation of the work station. Comply with the legal requirements. Clean contaminated clothing. Handle uncleaned empty containers as full ones. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Do not use compressed air for pumping over. Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Observe normal hygiene standards. Keep container tightly closed. Measure the concentration in the air regularly. Work under local exhaust/ventilation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment.

Hygiene measures:

Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Avoid breathing vapors or mist. Avoid contact with eyes, skin, or clothing.

**Storage Requirements:**

Ground storage container; Keep container tightly sealed. Keep away from heat, sparks, and flames. Store in cool/dry area.

<b>8</b>	<b>EXPOSURE CONTROLS/PERSONAL PROTECTION</b>
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**Engineering Controls:**

Exhaust ventilation sufficient to keep the airborne concentrations of the solvents in the workplace below their respective TLVs.

Respirator that is recommended or approved for use in organic vapor containing environments (air purifying or fresh air supplied) may be necessary. In spray applications an organic vapor/particulate respirator or air supplied air unit is necessary. The use of a positive pressure supplied air respirator is mandatory when; airborne concentrations are not known; when levels are 10 times the appropriate TLV; or if spraying is performed in a confined space or area with limited ventilation. Take into account other materials being used concurrently, the type of application and environmental concentrations when selecting a respirator. Observe OSHA regulations for respirator use (29 CFR 1910.134).

**Personal Protective Equipment:**

Personal protective equipment

Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact: Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min  
 Material tested: Butoject (KCL 897 / Aldrich Z677647, Size M)

Splash contact: Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min  
 Material tested: Butoject (KCL 897 / Aldrich Z677647, Size M) data source: KCL GmbH, D-36124

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Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection: impervious clothing, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Carbonic acid, dimethyl ester (616-38-6)** : no exposure limits set

**1-Propanamine, 3-(trimethoxysilyl)-N-[3-(trimethoxysilyl)propyl]- (82985-35-1)**: no exposure limits set

<b>9</b>	<b>PHYSICAL AND CHEMICAL PROPERTIES</b>
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<b>Appearance:</b>	clear to slightly yellow	<b>Odor:</b>	mild ester
<b>Physical State:</b>	liquid	<b>Percent Volatile:</b>	By Volume: 90%-97%
<b>Spec Grav./Density:</b>	1.0-1.1	<b>Flash Point:</b>	64.0° F. (18.0° C.)

<b>10</b>	<b>STABILITY AND REACTIVITY</b>
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<b>Reactivity:</b>	Reacts with water and strong oxidizers.
<b>Chemical Stability:</b>	Avoid sources of ignition such as sparks, hot spots, welding flames and lighted cigarettes which may yield toxic and/or corrosive decomposition products.
<b>Conditions to Avoid:</b>	Moisture, contact with hot surfaces, heat, flames, or sparks. Eliminate all sources of ignition.
<b>Materials to Avoid:</b>	Strong Acids; Strong Oxidizing Agents. Reacts with water or moisture to form: Methanol Siloxane gel.
<b>Hazardous Decomposition:</b>	In case of fire, gives off (emits): Carbon oxides Oxides of silicon. Nitrogen Oxides Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant. Acute overexposure to the products of combustion may result in irritation of the respiratory tract.
<b>Hazardous Polymerization:</b>	Will not occur.

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**TOXICOLOGICAL INFORMATION****Carbonic acid, dimethyl ester (616-38-6)**

Information on toxicological effects

Acute toxicity:

LD50 Oral - rat - 13,000 mg/kg

Inhalation: no data available

LD50 Dermal - rabbit - &gt; 5,000 mg/kg

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

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

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

NTP: 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.

OSHA: 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.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Symptoms/injuries after inhalation: Irritation of the respiratory tract. Dry/sore throat. Coughing. Dizziness. Narcosis.

Respiratory difficulties. FOLLOWING SYMPTOMS MAY APPEAR LATER: Risk of lung oedema.

Symptoms/injuries after skin contact: Red skin. Tingling/irritation of the skin.

Symptoms/injuries after eye contact: Irritation of the eye tissue.

Symptoms/injuries after ingestion: Risk of aspiration pneumonia. Dry/sore throat. Nausea. Abdominal pain. Diarrhea.

Additional Information:

RTECS: FG0450000

**1-Propanamine, 3-(trimethoxysilyl)-N-[3-(trimethoxysilyl)propyl]- (82985-35-1)**

Information on likely routes of exposure

Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Information on toxicological effects Acute toxicity (list all possible routes of exposure)

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Oral

LD 50 (Rat, males): &gt; 4,000 mg/kg

LD 50 (Rat, female): &gt; 3,600 mg/kg

Dermal

LD 50 (Rabbit, males): 16,000 mg/kg

LD 50 (Rabbit, female): 11,300 mg/kg

Inhalation

No deaths

Repeated dose toxicity: No data available.

Skin Corrosion/Irritation: (Rabbit): Non irritating

Serious Eye Damage/Eye Irritation: (Rabbit): Strongly irritating.

Respiratory or Skin Sensitization: No data available.

Carcinogenicity: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens: No carcinogenic components identified US. OSHA

Specifically Regulated Substances (29 CFR 1910.1001-1050): No carcinogenic components identified Germ Cell Mutagenicity

In vitro

Ames-Test (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay)): negative (not mutagenic)

In vivo: Micronucleus test (mouse) (OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)): negative

Reproductive toxicity: No data available.

Specific Target Organ Toxicity - Single Exposure: No data available.

Specific Target Organ Toxicity - Repeated Exposure: No data available.

Aspiration Hazard: No data available.

Other effects:

Product may hydrolyze upon contact with body fluids in the gastrointestinal tract to produce additional methanol. The potential for toxic effects due to methanol formation (eye damage and blindness, metabolic acidosis, dizziness and drowsiness, fetal toxicity, and liver, kidney, and heart muscle damage) should be recognized. No data available.

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**ECOLOGICAL INFORMATION****Carbonic acid, dimethyl ester (616-38-6)**

Information on ecological effects

Ecology - general: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Ecology - air: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).

Ecology - water: Water pollutant (surface water). Ground water pollutant. Slightly harmful to fishes (LC50(96h) 100-1000 mg/l). Slightly harmful to aquatic organisms (EC50: 100 - 1000 mg/l). Insufficient data available on ecotoxicity.

LC50 fish: 100 - 1000 mg/l (96 h; Pisces)

LC50 other aquatic organisms: 100 - 1000 mg/l (96 h)

Threshold limit other aquatic organisms: 100 - 1000,96 h

Persistence and degradability: Biodegradability in water: no data available.

Bioaccumulative potential: Not bioaccumulative.

**1-Propanamine, 3-(trimethoxysilyl)-N-[3-(trimethoxysilyl)propyl]- (82985-35-1)**

Ecotoxicity:

Acute hazards to the aquatic environment:

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Fish: NOEC (Rainbow Trout, 96 h): 100 mg/l LC50 (Rainbow Trout, 96 h): 130 mg/l  
 Aquatic Invertebrates: (Daphnia magna, 48 h): > 100 mg/l The information given is based on data available for the material, the components of the material, and similar materials.

Chronic hazards to the aquatic environment:

Fish: No data available.

Aquatic Invertebrates: EC50 (Daphnia magna): 3.5 mg/l

Toxicity to Aquatic Plants: EC50 (Desmodesmus subspicatus (green algae), 72 h): > 100 mg/l The information given is based on data available for the material, the components of the material, and similar materials. NOEC (Desmodesmus subspicatus (green algae), 72 h): 22 mg/l The information given is based on data available for the material, the components of the material, and similar materials.

Persistence and Degradability Biodegradation

The product is not readily biodegradable.

BOD/COD Ratio: No data available.

Bioaccumulative potential Bioconcentration Factor (BCF): No data available.

Partition Coefficient n-octanol / water (log Kow): No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Bis(trimethoxysilylpropyl)amine: No data available.

Other adverse effects: No data available.

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### DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, and federal regulations. Incineration is the preferred method.

Empty Container Precautions

Empty containers retain product residue; observe all precautions for product. Do not heat or cut empty container with electric or gas torch because highly toxic vapors and gases are formed. Do not reuse without thorough commercial cleaning and reconditioning. If container is to be disposed, ensure all product residues are removed prior to disposal.

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### TRANSPORT INFORMATION

UN1263, Paint, 3, PGII

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### REGULATORY INFORMATION

Component (CAS#) [%] - CODES

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 1-Propanamine, 3-(trimethoxysilyl)-N-[3-(trimethoxysilyl)propyl]- (82985-35-1) [10-15%] TSCA

Carbonic acid, dimethyl ester (616-38-6) [80-90%] MASS, PA, TSCA

Regulatory CODE Descriptions

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 TSCA = Toxic Substances Control Act  
 MASS = MA Massachusetts Hazardous Substances List  
 PA = PA Right-To-Know List of Hazardous Substances



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**OTHER INFORMATION**

**NOTICE:** This information is presented in good faith and believed to be accurate as of the effective date below. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Coatings For Industry, Inc. assumes no responsibility for personal injury or property damage to vendees, users, or third parties caused by the material. Such vendees or users assume all risks associated with the use of the material. Regulatory requirements are subject to change and may differ from one location to another: it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The preceding specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.