

PRECISION COATINGS SAFETY DATA SHEET

Section 1. Identification

GHS product identifier: PC5 Siloxane Fast Cure
Product number: 50080
Product use: Additive
Restrictions on use: None known
Manufacture/Supplier: Precision Coatings
Address: 1940 E. Trafficway
Springfield, MO 65802
Telephone: 417-862-5738
FAX: 417-862-8874
Website: www.precisioncoatingsinc.com
Emergency telephone number: 800-424-9300 Chemtrec Contract CCN675735

Section 2. Hazards identification

OSHA/HCS status: This material is considered hazardous by the OSHA Hazardous Communication Standard (29 CFR 1910.1200).

Hazard classification:

Physical hazards: Flammable Liquids: Category 4

Health hazards: Acute Toxicity-oral: Category 4
Skin Corrosion/Irritation: Category 1B
Serious Eye Damage/Eye Irritation: Category 1
Skin Sensitization: Category 1
Reproductive Toxicity: Category 1B
Specific Target Organ Toxicity (Single Exposure): Category 2

GHS label elements

Hazard pictograms:



Signal word: Danger

Hazard statements: H227: Combustible liquid.
H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H360: May damage fertility or the unborn child.
H360F: May damage fertility.
H370: Causes damage to organs.

Precautionary statements:

Prevention: P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233: Keep container tightly closed.
P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P264: Wash thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P272: Contaminated work clothing should not be allowed out of the workplace.

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P280: Wear protective gloves/protective clothing/eye protection/face protection.
P281: Use personal protective equipment as required.

Response: P301+P330+P331+P310: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353+P310: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
P302+P352+P333+P313: IF ON SKIN: Wash with plenty of water/soap. If skin irritation or rash occurs: Get medical advice/attention.
P304+P340+P310: IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338+P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P314: Get medical advice/attention if you feel unwell.
P363: Wash contaminated clothing before reuse.

Storage: P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P235: Keep cool.
P405: Store locked up.

Disposal: P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): None known.

Section 3. Composition / Information on Ingredients

Components	CAS #	Percent
1-propanamine,3-(triethoxysilyl)-3-(trimethoxysilyl)propylamine	919-30-2	35-50
Propanoic acid, 3-(trimethoxysilyl)-,methyl ester	13822-56-5	35-50
Ethanol	76301-00-3	0.5-2.5
Methanol	64-17-5	<1
	67-56-1	<1

Section 4. First aid measures

Eye Contact: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Skin Contact: Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in

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recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that gas or vapor is still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Section 5. Fire-fighting measures

Suitable extinguishing media: Use dry chemical, carbon dioxide, water spray (fog) or foam.

Unsuitable extinguishing media: Do not use water jet.

Special hazards arising from the substance or mixture: Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products: Decomposition products may include the following materials: carbon dioxide, carbon monoxide, oxides of nitrogen, silicon oxides

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use spray to keep fire-exposed containers cool. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment, full protective clothing and self-contained breathing apparatus with full face piece operated in the positive pressure mode.

Section 6. Accidental release measures

Personal precautions,

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protective equipment and emergency procedures

- For non-emergency personnel:** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders:** If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods and material for containment and cleaning up:** Eliminate sources of ignition. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Use only non-combustible material for clean-up. Recover by pumping (use explosion proof or hand pump). Use clean, non-sparking tools to collect absorbed materials. Eliminate all ignition sources. Prevent additional discharge of material is able to do so safely. Do not touch or walk through spilled material. Collect spilled materials for disposal. Wear appropriate personal protective equipment (see Section 8 Exposure controls/personal protection). Evacuate unnecessary personnel. Do not apply water to the leak.

Section 7. Handling and storage

- Precautions for safe handling:** Do not handle until all safety precautions have been read and understood. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not swallow. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion proof electrical equipment. Empty containers retain product residue and can be hazardous. Do not reuse container. Ground and bond containers when transferring material. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities:** Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed

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until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls / personal protection

Control parameters

Occupational exposure limits

U.S. ACGIH Threshold Limit Values

Components	Type	Value	Form
Ethanol	STEL	1000ppm	
Methanol	TWA	262 mg/m3, 200ppm	SKIN –DES
	STEL	328 mg/m3, 250ppm	Can be absorbed through the skin

U.S. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Ethanol	PEL	1000ppm	
		1900 mg/m3	
Methanol	PEL	200ppm	SKIN –DES
		260 mg/m3	Can be absorbed through the skin

USA. NIOSH REL

Components	Type	Value	Form
Ethanol	TWA	1000ppm	
		1900 mg/m3	
Methanol	TWA	200ppm, 260 mg/m3	SKIN –DES
	STEL	250ppm, 325 mg/m3	Can be absorbed through the skin

Appropriate engineering controls:

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In case of mixtures, consisting if several substances, the protection time of the gloves cannot be accurately estimated.

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Body protection:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection:	Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicated this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical & Chemical Properties

Appearance

Physical state:	Liquid
Form:	Liquid
Color:	Colorless
Odor:	Amine-like
Odor threshold:	Not available
pH:	Not available
Melting point/freezing point:	Not available
Initial boiling point and boiling range:	210°C (428°F)
Flash point:	82°C (179°F) (Tag closed cup)
Evaporation rate:	Not available
Upper/lower flammability or explosive limits:	Not available
Vapor pressure:	Not available
Vapor density:	➤ 1 Air = 1
Relative density:	0.982
Solubility(ies):	Not available
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available
Other information:	No additional information

Section 10. Chemical stability & reactivity information

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Reactivity:	None known.
Chemical stability:	Stable.
Possibility of hazardous reactions:	None known.
Conditions to avoid:	All possible sources of ignition (heat, sparks, flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials:	Reactive or incompatible with the following materials: oxidizing material water, Reaction with water or other aqueous media is rapid and exothermic. The addition of small amounts of water (in the range of 2-15%) can produce an exothermic reaction which generates alcohol to the extent that the resulting solution can reach a temperature which exceeds the flash point of the new solution. If a water solution is desired, add the product to water, and not vice versa.
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Conclusion/summary:	Not available
Oral:	1-propanamine,3-(triethoxysilyl)-: Oral LD50 (Rat): 3,000 mg/kg OECD-Guideline 401 (Acute Oral Toxicity) 3-(trimethoxysilyl)propylamine: Oral LD50 (Rat): 3,000 mg/kg
Dermal:	1-propanamine,3-(triethoxysilyl)-: Dermal LD50: (Rabbit-Male): >2,000 mg/kg OECD Test Guideline 402 3-(trimethoxysilyl)propylamine: Dermal LD50: (Rat-Male): 11,000 mg/kg
Inhalation:	1-propanamine,3-(triethoxysilyl)-: LC50 (Aerosols) (Rat-Male): >7.35 mg/l, 4 h

Irritation/Corrosion

Skin:	1-propanamine,3-(triethoxysilyl)-: (Rabbit): Corrosive to the skin 3-(trimethoxysilyl)propylamine: (Rabbit): Slightly irritating to the skin
Eyes:	1-propanamine,3-(triethoxysilyl)-: (Rabbit): Severely irritating to eyes 3-(trimethoxysilyl)propylamine: (Rabbit): Causes severe eye irritation
Respiratory:	Not available

Sensitization

Skin:	1-propanamine,3-(triethoxysilyl)-: Guinea pig: Sensitizing 3-(trimethoxysilyl)propylamine: Guinea pig: did not elicit a delayed contact
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hypersensitivity response
3-(trimethoxysilyl)propylamine: Guinea pig: Non-sensitizing. OECD-Guideline 406 (Skin Sensitization)

Respiratory: Not available

Mutagenicity

Conclusion/Summary: Not available

Carcinogenicity

Conclusion/Summary: Not available

Reproductive toxicity

Conclusion/Summary: Not available

Specific target organ toxicity (single exposure): Not available

Specific target organ toxicity (repeated exposure): Not available

Aspiration hazard: Not available

Information on likely routes of exposure:

Potential acute health effects:

Eye contact: Causes serious eye damage.

Inhalation: May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact: Causes severe burns. May cause an allergic skin reaction.

Ingestion: Harmful if swallowed. May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include pain or irritation, watering, redness.

Inhalation: Not available

Skin contact: Adverse symptoms may include pain or irritation, redness, blistering may occur.

Ingestion: Adverse symptoms may include stomach pains.

Potential chronic health effects: Not available

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Section 12. Ecological information

Toxicity

Acute toxicity

1-propanamine,3-(triethoxysilyl)-:

Fish-Brachydaniorerio:	Acute LC50 934 mg/l static test OECD 203 96 h
Aquatic plants-Desmodesmus subspicatus (green algae):	Acute EC50 1,000 mg/l static test 72 h
Aquatic plants-Desmodesmus subspicatus (green algae):	Acute NOEC 1.3 mg/l static test 72 h

Chronic toxicity: Not available

Persistence and degradability

Biodegradation: Not available

Biological Oxygen Demand: Not available

Chemical Oxygen Demand Product: Not available

BOD/COD ratio: Not available

Bioaccumulative potential: Not available

Mobility in soil: Not available

Results of PBT and vPvB assessment: Not available

Other adverse effects: Not available

Section 13. Disposal considerations

Disposal methods: Dispose of waste in accordance with all local, state and federal regulations.

Section 14. Transport information

DOT

Basic shipping requirements:

UN number	UN3066
Proper shipping name	Paint Related Material
Hazard class	Corrosive Liquid
Labels required	8
Additional information:	
Packaging exceptions	154
Packaging non bulk	173

IATA

Basic shipping requirements:

UN Number	3066
Proper shipping name	Paint Related Material, corrosive
Hazard class	8
Packing group	II

Section 15. Regulatory information

US federal regulations

OSHA: This product is hazardous according to OSHA 29 CFR 1910.1200

SARA Title III Section 313 – Toxic Chemical: Listed

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Substance: None

SARA Title III Section 302 Extremely hazardous substances: None

SARA Title III Section 311/312 Hazard categories: Immediate (acute) health hazard
Delayed (chronic) health hazard
Fire hazard

Inventory Status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

* A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State Regulations

California Proposition 65: **Warning:** This product does not contain a chemical known to the State of California to cause cancer.
Warning: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Massachusetts RTK: Ethanol, 64-17-5; Methanol 67-56-1

New Jersey RTK: Ethanol, 64-17-5; Methanol 67-56-1

Pennsylvania RTK: Ethanol, 64-17-5; Methanol 67-56-1

Section 16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA

HMIS® ratings
Health: 3
Flammability: 2
Physical hazard: 2

NFPA ratings
Health: 3
Flammability: 2
Instability: 2

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