

Date Issued: 01/20/2006 MSDS No: 5-001.6 Date-Revised: 10/02/2007

Revision No: 6

#### Silane

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**PRODUCT NAME:** Silane

PRODUCT DESCRIPTION: Bonding agent

**MANUFACTURER** 

24 HR. EMERGENCY TELEPHONE NUMBERS

**CHEMTREC (NORTH AMERICA) :**(800) 424 - 9300

(INTERNATIONAL):(703) 527 - 3887

Ultradent Products, Inc. 505 W. 10200 S.

South Jordan UT 84095

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS	EINECS	Classification	Content
Methacryloxy propyl trimethoxy silane	07803-62-5	232-263-4	F+; R-12/17	5 - 15
Isopropyl Alcohol	000067-63-0	200-661-7	F+; R-11	92

#### 3. HAZARDS IDENTIFICATION

#### HAZARD DESIGNATION

"F+" - Extremely flammable R11: Highly flammable.

## POTENTIAL HEALTH EFFECTS

**EYES:** Causes eye irritation.

**SKIN:** May cause slight irritation.

**INGESTION:** Irritating to mouth, throat and stomach.

**INHALATION:** High concentrations in immediate area can displace oxygen and can cause dizziness, unconsciousness, and even death with longer exposure. Keep people away from such vapors without self-contained breathing apparatus.

## SIGNS AND SYMPTOMS OF OVEREXPOSURE

**EYES:** Causes eye irritation.

**SKIN:** Repeated or prolonged use, may cause irritation.

PHYSICAL HAZARDS: Flammable Liquid

## 4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

**SKIN:** Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

**INGESTION:** Give large volumes of water. Do not induce vomiting. Consult a physician if ingested in large amounts.



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## 5. FIRE FIGHTING MEASURES

**FIRE FIGHTING PROCEDURES:** General: Evacuate all personnel; use protective equipment for fire-fighting. Use self-contained breathing apparatus when the product is involved in fire.

**FIRE FIGHTING EQUIPMENT:** Foam, dry chemical, carbon dioxide (CO<sub>2</sub>)

## 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Wipe up small amounts with chemical resistant or damp rag which is washed with large amounts of water after each use. After cleaning, flush away traces with water.

LARGE SPILL: Collect in tightly closed containers.

## **ENVIRONMENTAL PRECAUTIONS**

**WATER SPILL:** Do not allow to enter sewers or drains that may lead to waterways.

SPECIAL PROTECTIVE EQUIPMENT: S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

**COMMENTS:** Refer particularly to local circumstances and regulations.

## 7. HANDLING AND STORAGE

**HANDLING:** Keep away from heat, sparks and flame.

**STORAGE:** S3/9: Keep in a cool, well ventilated place

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

#### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear safety glasses with side shields (or goggles) and a face shield.

**SKIN:** S36/37: Wear suitable protective clothing and gloves. **RESPIRATORY:** S51: Use only in well-ventilated areas.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Volatile Liquid

**ODOR:** Rubbing alcohol

COLOR: Colorless

PHYSICAL STATE COMMENTS: Soluble in water

**BOILING POINT:** 82°C

**MELTING POINT: -89°C** 



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**SOLUBILITY IN WATER:** Fully miscible

## 10. STABILITY AND REACTIVITY

**CONDITIONS TO AVOID:** Heat, flames, ignition sources, and incompatibles.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Complete combustion generates carbon dioxide. Incomplete combustionm generates toxic and highly flammable carbon monoxide.

**INCOMPATIBLE MATERIALS:** Strong oxidizers, acids, and Isocyanates

#### 11. TOXICOLOGICAL INFORMATION

**EYE EFFECTS:** Severe eye irritation

**SKIN EFFECTS:** Repeated or prolonged use, may cause irritation.

**REPRODUCTIVE EFFECTS:** None

**MUTAGENICITY:** None

## 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** None Expected.

**DISTRIBUTION:** Does not bioaccumulate.

## 13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in compliance with governmental regulation (EC 1975L0442-20/11/2003)

## 14. TRANSPORT INFORMATION

ROAD AND RAIL (ADR/RID)

**PROPER SHIPPING NAME:** Alcohols, n.o.s. (Isopropyl alcohol mixture)

HAZARD CLASS: 3
PACKING GROUP: II
LABEL: Flammable Liquid

AIR (ICAO/IATA)

**SHIPPING NAME:** Alcohols, n.o.s. (Isopropyl alcohol mixture)

UN/NA NUMBER: 1987

**PRIMARY HAZARD CLASS/DIVISION: 3** 

PACKING GROUP: II LABEL: Flammable Liquid



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VESSEL (IMO/IMDG)

**SHIPPING NAME:** Alcohols, n.o.s. (Isopropyl alcohol mixture)

UN/NA NUMBER: 1987

PRIMARY HAZARD CLASS/DIVISION: 3

PACKING GROUP: II LIMITED QUANTITY: 1L LABEL: Flammable Liquid

# 15. REGULATORY INFORMATION

#### **EUROPEAN COMMUNITY**

## EEC LABEL SYMBOL AND CLASSIFICATION



"F+" - Extremely flammable R11: Highly flammable.

## 16. OTHER INFORMATION

PREPARED BY: Iris McCallister

**REVISION SUMMARY:** Revision #: 6 This MSDS replaces the February 08, 2007 MSDS. Any changes in information are as follows: In Section 1 MSDS Number CHEMTREC MSDS In Section 14 DOT Proper Shipping Name DOT UN/NA Number IMO Proper Shipping Name AIR Proper Shipping Name IMO UN/NA Number AIR UN/NA Number TDG UN/NA Number TDG Proper Shipping Name ADRSHPNAME Not Found

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