



## Material Safety Data Sheet QSi 12C

### 1. Chemical Product and Company Identification

Quantum Silicones  
8021 Reycan Road  
Richmond, VA 23237

Phone (804)271-9010

Prepared by: Philip McDermott  
Date Prepared: 6/26/03  
Chemical Family: Industrial Silicone Elastomer Catalyst  
Physical Form: Liquid

NFPA Profile            Health **2**            Flammability **2**            Reactivity **1**

### 2. OSHA Hazardous Ingredients

CAS Number	Wt%	Component Name
77-58-7	0.3-4	Dibutyl tin Dilaurate
78-10-4	20-40	Ethyl Silicate
64742-47-8	>60	Light aliphatic hydrocarbon solvent

The above components are hazardous as defined in 29 CFR 1910.1200

### 3. Hazards Identification

#### Acute effects

Eye: Direct contact may cause severe irritation. Vapors may cause eye irritation.  
Skin: May cause moderate irritation. May be harmful if absorbed through the skin.  
Inhalation: Vapor may be irritating to the respiratory tract. Over exposure by inhalation may cause damage to the Central nervous system which may be characterized by drowsiness, dizziness, loss of coordination, unconsciousness, and at very high concentration even death.  
Oral: May cause irritation to the mouth, throat and stomach. Aspiration of liquid while vomiting  
May cause damage to the lungs.

#### Prolonged/Repeated Exposure Effects

Skin: Repeated or prolonged exposure may irritate seriously or injure internally if absorbed through the Skin.  
Inhalation: Overexposure by inhalation may cause injury to the following organs:  
Blood, lungs, liver, nervous system, reproductive system, brain, bone-marrow.  
Oral: Overexposure by ingestion may cause injury to the following organs:  
Blood, lungs, liver, nervous system, reproductive system, brain.

#### Signs and Symptoms of Overexposure

No Known application information

#### Medical Conditions Aggravated by Exposure

None Known

#### Carcinogenicity

This product or one of its ingredients present 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC or OSHA.

#### 4. First Aid Measures

Eyes: Immediately flush with water for 15 minutes. Seek medical attention.  
Skin: Remove from skin and flush with water for 15 minutes. Seek medical attention if irritation persists or ill effects develop or persist.  
Inhalation: Remove to fresh air. Immediately seek medical attention.  
Oral: Get medical attention. DO NOT induce vomiting.

#### 5. Fire Fighting Measures

Flash point 49C (121F) PMCC  
Auto Ignition Temp: 245C (473F)

Flammability Limits in Air:

Upper limit 6.0  
Lower Limit 1.0

Extinguishing Media – On large fires, use dry chemical, foam or water spray. On small use carbon dioxide(CO<sub>2</sub>), dry chemical or water spray. Water can be used to cool fire exposed containers.

Firefighting Procedure - NIOSH/MSHA approved self-contained breathing apparatus and protective clothing should be worn when fighting fires involving chemicals. Determine the need to evacuate or isolate the area depending on your local emergency plan. Use water spray to keep fire exposed containers cool.

#### Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Nitrogen Oxides. Metal Oxides. Formaldehyde. Silicone Dioxide. Carbon oxides and traces of incompletely burned carbon compounds.

#### 6. Accidental Release Measures

Containment/Clean-up

Determine the need to evacuate based on you local emergency plan. Ensure all personal protective equipment is utilized (see section 5 and 8). For large spills, provide diking or other measure to contain material. Store recovered material in an appropriate container. Clean up non-recoverable material with a suitable absorbent. Clean area thoroughly as silicone materials are a known slip hazard. Disposal of all cleaning materials, including absorbent and any non-usable materials should be done in accordance with Federal, State and Local laws.

#### 7. Handling and Storage

Keep container closed when not in use. Avoid eye contact. Store away from heat, sources of ignition, oxidizers and incompatibles.

#### 8. Exposure Controls/Personal Protection

## Component exposure limits

CAS Number	Component Name	Exposure Limits
64742-47-8	Light Aliphatic hydrocarbon solvent	Observe petroleum distillates limits. OSHA PEL: TWA 400ppm
78-10-4	Ethyl Silicate	OSHA PEL(final rule): TWA 100 ppm, 850mg/m3
77-58-7	Dibutyl Tin Dilaurate	Observe organic tin compounds limits. OSHA PEL and ACGIH TLV Skin: TWA 0.1mg/m3; ACGIH STEL 0.2 mg/m3

Engineering Controls-  
Eye wash station  
Safety shower  
General ventilation recommended

### *Personal Protective equipment for routine use:*

Eyes Safety glasses/goggles  
Skin Washing after use is recommended. Change any contaminated clothing as soon as Possible. Chemical protective gloves are recommended. Additional Skin protection such As lab coats are recommended.  
Gloves Rubber gloves  
Inhalation Use respiratory protection unless adequate local ventilation is provided or air sampling data show exposures are within recommended exposure guidelines. Industrial hygiene personnel can assist in judging the adequacy of existing engineering controls.  
Respirators Local ventilation is recommended to maintain vapor exposures below recommended Limits. Where concentrations are above the recommended limits, respirators that meet OSHA regulations (29 CFR 1910.134).

### *Personal Protective equipment for spills:*

Eyes Full face respirator  
Skin Washing after exposure. Gloves are recommended. Additional Protective clothing May be needed and is recommended.  
Inhalation/Respirator Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

Precautionary Measures Avoid eye contact. Avoid skin contact. DO NOT breath vapor. Do not take internally.

Comments: Ethyl alcohol, a flammable material, evolves upon exposure of this material to moisture or humid air. Provide adequate ventilation or respiratory equipment when processing this material.

***Note; These precautions are for room temperature handling. Use at elevated temperatures or aerosol/spray applications may require additional precautions.***

## 9. Physical and Chemical Properties

Physical Form: Liquid  
Color Clear  
Specific Gravity 0.78  
Vapor Pressure Not Determined  
Vapor Density Not Determined  
Freezing point Not Determined  
Melting point Not Determined

Boiling point	Not Determined
pH	Not Determined
Odor	Characteristic Odor
Solubility in water	Not determined

## 10. Stability and Reactivity

Chemical Stability	Stable
Hazardous Polymerization	Will not occur
Conditions to Avoid	None
Materials to avoid	Strong Acids, Bases and Oxidizers can cause hydrogen evolution. Water, moisture or humid air can cause hazardous vapors to form as described in Section 8.

### Hazardous Thermal Decomposition/Combustion Products

Carbon Monoxide  
Carbon Dioxide  
Silicone Dioxide  
Formaldehyde

## 11. Toxicological Information

None available

## 12. Ecological Information

Ecotoxicological Information –	Information is not yet available
Chemical Fate Information -	Information is not yet available

## 13. Disposal Considerations

RCRA Hazard Class (40CFR 261)  
Material as received is non-hazardous with regard to disposal

Disposal should be made in accordance with Federal, State and Local regulations.

Incineration is recommended in approved incinerator according to federal, state and local regulations

## 14. Transportation Information

DOT Road Shipment (49CFR 172.101):

***This material is not DOT regulated in containers less than 119 gallons***

### ***For containers > 119 gallons***

Proper shipping name:	Petroleum Distillate, NOS
DOT Hazard Class:	2
DOT Label:	Combustible Liquid
UN/NA Number:	1268
Packing Group:	II

### Ocean Shipment (IMDG)

Proper shipping name: Petroleum Distillate, NOS

Hazard Class: 3  
 Hazard Label: Flammable Liquid  
 UN/NA Number: 1268  
 Packing Group: III  
 Marine Pollutant: Not Applicable

**Air Shipment (IATA)**

Proper shipping name: Petroleum Distillate, NOS  
 DOT Hazard Class: 3  
 DOT Label: Flammable Liquid  
 UN/NA Number: 1268  
 Packing Group: III

IMO IMDG code: 3  
 EMS No.: EmS. No.3-07  
 European Class  
 RID (OCTI): 3  
 ADR (ECE): 3,2301,3  
 RAR(IATA): 3

**15. Regulatory Information**

Contents of this MSDS comply with OSHA 29 CFR 1910.1200

TSCA – All chemical components of this material are included on or exempt from listing on the TSCA inventory of Chemical Substances

SARA Regulations

SARA 302	None
SARA 304	None
SARA 311, 312	
Acute	Yes
Chronic	Yes
Fire	Yes
Pressure	No
Reactive	No
SARA 313	None

California Prop 65                      None

HMIS	Flammability	3	Reactivity	1	Health	2
NFPA	Flammability	3	Reactivity	1	Health	2

**16. Other Information**

These data are offered in good faith as typical values and not as product specifications. No warranty, either 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 intended use and determine whether they are appropriate.

