



**Delta
Drilling
Products
& Services, LLC**

P.O. Box 1603
EUNICE, LA 70535
866-457-0064 or 337-457-0064

SAFETY DATA SHEET

SUPER SEAL

1. Identification

Product Identifier

D-Test-1

Recommended use

Not available

Recommended restrictions

Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

Manufacturer/Importer/Supplier/Distributor Information

Distributor

Company name

Delta Drilling Products & Services, LLC

Address

191 Eastpark Drive, Eunice, LA 70535

Phone

(866) 457-0064

Website

www.deltadrillingproducts.com

Email

deltap_roducts@bellsouth.net

Emergency phone number

(866) 457-0064

2. Hazard(s) Identification

Physical hazards

Not classified

Health hazards

Carcinogenicity Category 1A

Specific target organ toxicity, repeated Category 2

Environmental hazards

Not classified

OSHA defined hazards

Not classified

Label elements

Hazard symbol

Signal Word

Danger

Hazard statement

May cause cancer. May cause damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wear protective gloves/protective clothing/eye protection/face protection.

Response

If exposed or concerned: Get medical advice/attention.

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with

Material name: Super Seal
Date prepared: April 7, 2016
Date revised: April 7, 2016
Version number: 01

Hazard(s) not otherwise classified (HNOC)
Supplemental information

local/regional/national/international regulations.
None known
None

3. Composition/Information of Ingredients

Mixtures

Chemical Name	Common name and <u>synonyms</u>	CAS Number	%
Quartz (SiO ₂)		14808-60-7	5 - < 10
Gypsum (Calcium Sulphate)		13397-24-5	3 - < 5
Tridymite		15468-32-3	3 - < 5
Cellulosic Fiber	<u>Drilling Paper</u>		60- 70
Other components below reportable levels			1 - < 2

Impurities

Chemical Name	Common name and <u>synonyms</u>	CAS Number	%
Aluminum Oxide		11092-32-3	13.6
Silica, Crystalline (Quartz)		14808-60-7	3.2

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.
Composition comments Occupational Exposure Limits for impurities are listed in Section 8

4. First Aid Measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact

Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

Ingestion-

Most important symptoms, effects, acute and delayed

Rinse mouth. Get medical attention if symptoms occur. Dusts may irritate the respiratory tract, skin and eyes. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical Special protective equipment and precautions

During fire, gases hazardous to health may be formed. Material can be slippery when wet.

Material name: Super Seal

Date prepared: April 7, 2016

Date revised: April 7, 2016

Version number: 01

For firefighters
Firefighting equipment/instructions
Specific methods

Use water spray to cool unopened containers.
Use standard firefighting procedures and consider the hazards of other involved materials.
No unusual fire or explosion hazards noted.

General fire hazards

6. Accidental Release Measures
Personal precautions, protective equipment, and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Material can be slippery when wet. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SOS.

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SOS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and Storage
Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SOS).

8. Exposure Controls/Personal Protection

Material name: Super Seal
Date prepared: April 7, 2016
Date revised: April 7, 2016
Version number: 01

Occupational exposure limits

US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Gypsum (Calcium Sulphate) (CAS 13397-24-5)	PEL	5 mg/m ³	Respirable fraction
		15 mg/m ³	Total dust

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Quartz (SiO ₂) (CAS 14808-60-7)	TWA	0.3 mg/m ³	Total dust
		0.1 mg/m ³	Respirable
		2.4 mppcf	Respirable
Tridymite (CAS 15468-32-3)	TWA	0.15 mg/m ³	Total dust
		0.05 mg/m ³	Respirable
		1.2 mppcf	Respirable

Impurities	Type	Value	Form
Silica, Crystalline (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m ³	Total dust
		0.1 mg/m ³	Respirable
		2.4 mppcf	Respirable

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Gypsum (Calcium Sulphate) (CAS 13397-24-5)	TWA	10 mg/m ³	Inhalable fraction
Quartz (SiO ₂) (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction

Impurities	Type	Value	Form
Silica, Crystalline (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction

US NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Mineral Oil (CAS 8042-47-5)	TWA	5 mg/m ³	Respirable
		10 mg/m ³	Total
Quartz (SiO ₂) (CAS 14808-60-7)	TWA	0.05 mg/m ³	Respirable dust

Impurities	Type	Value	Form
Silica, Crystalline (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m ³	Respirable dust

Biological limit values Exposure Guidelines

No biological exposure limits noted for the ingredient(s). Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

Material name: Super Seal
Date prepared: April 7, 2016
Date revised: April 7, 2016
Version number: 01

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection

Chemical respirator with organic vapor cartridge, full facepiece, dust and mist filter.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other

Respiratory protection

Use of an impervious apron is recommended. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Chemical respirator with organic vapor cartridge, full facepiece, dust and mist filter.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and Chemical Properties

Appearance

Physical state

Powder

Form

Solid

Color

Powder

Tan to Grey

Odor

None

Odor threshold

Not available

pH

7.1% solution

Melting point/freezing point

Not available

Initial boiling point and boiling range

Not available

Flash point

Not available

Evaporation rate

Not available

Flammability (solid, gas)

Not available

Upper/lower flammability or explosive limits

Flammability limit-lower(%)

Not available

Flammability limit-upper(%)

Not available

Material name: Super Seal

Date prepared: April 7, 2016

Date revised: April 7, 2016

Version number: 01

Explosive limit-lower(%)	Not available
Explosive limit-upper(%)	Not available
Vapor pressure	0.00003 hPa estimated
Vapor density	Not available
Relative density	Not available
Solubility(ies)	
Solubility (water)	Not available
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	500 °F (260 °C) estimated
Decomposition temperature	Not available
Viscosity	Not available
Other Information	
Density	2.96 g/cm3 estimated
Specific gravity	2.96 estimated
10. Stability and	
Reactivity	
Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Powerful oxidizers. Chlorine.
Hazardous decomposition products	No hazardous decomposition products are known.
11. Toxicological Information	
Information on likely routes of exposure	
Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. Dust may irritate respiratory system. Prolonged inhalation may be harmful.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Dust may irritate the eyes.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Dusts may irritate the respiratory tract, skin and eyes.
Information on toxicological effects	
Acute toxicity	Not available
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial

Material name: Super Seal
Date prepared: April 7, 2016
Date revised: April 7, 2016
Version number: 01

circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. May cause cancer. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

IARC Monographs. Overall Evaluation of Carcinogenicity

QUARTZ (SiO₂) (CAS 14808-60-7) 1 Carcinogenic to humans.

SILICA, CRYSTALLINE (QUARTZ) (CAS 14808-60-7) 1 Carcinogenic to humans.

TRIDYMITE (CAS 15468-32-3) 1 Carcinogenic to humans. Not listed

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
US. National Toxicology Program (NTP)
Report on Carcinogens**

QUARTZ (SiO₂) (CAS 14808-60-7) Known to be human carcinogen

SILICA, CRYSTALLINE (QUARTZ) (CAS 14808-60-7) Known to be human carcinogen

TRIDYMITE (CAS 15468-32-3) Known to be human carcinogen

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure
Specific target organ toxicity - repeated exposure**

Not classified

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Not an aspiration hazard.

Chronic Effects

May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

**12. Ecological Information
Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or

**Material name: Super Seal
Date prepared: April 7, 2016
Date revised: April 7, 2016
Version number: 01**

Persistence and degradability
Bioaccumulative potential
Mobility in soil
Other adverse effects

frequent spills can have a harmful or damaging effect on the environment.

No data is available on the degradability of this product.

No data available.

No data available.

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposable Considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues/unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

DOT

Not regulated as dangerous goods.

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. One or more components are not listed on TSCA.

15. Regulatory Information US

Federal regulations

Not regulate.d

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
CERCLA Hazardous Substance List (40 CFR 302.4)
SARA 304 Emergency release notification

Not listed.

Not regulated.

Material name: Super Seal

Date prepared: April 7, 2016

Date revised: April 7, 2016

Version number: 01

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard Categories**

Not listed.

**SARA 302 Extremely hazardous substance
SARA 311/312 Hazardous chemical
SARA 313 (TRI reporting) Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Safe Drinking Water Act (SOWA) US state regulations
US California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
US. California. Candidate Chemicals List.
Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))
US Massachusetts RTK- Substance List**

**Immediate Hazard:No
Delayed Hazard:Yes
Fire Hazard:No
Pressure Hazard:No
Reactivity Hazard:No**
Not listed
No
Not regulated

Not regulated

Not regulated

Not regulated

Not listed

QUARTZ (SIO2) (CAS 14808-60-7)
SILICA, CRYSTALLINE (QUARTZ) (CAS 14808-60-7)

Gypsum (calcium Sulphate) (CAS 13397-24-5)
QUARTZ (SIO2) (CAS 14808-60-7)
SILICA, CRYSTALLINE (QUARTZ) (CAS 14808-60-7)
TRIDYMITE (CAS 15468-32-3)
Gypsum (calcium Sulphate) (CAS 13397-24-5)
QUARTZ (SIO2) (CAS 14808-60-7)
SILICA, CRYSTALLINE (QUARTZ) (CAS 14808-60-7)
TRIDYMITE (CAS 15468-32-3)
Gypsum (calcium Sulphate) (CAS 13397-24-5)
QUARTZ (SIO2) (CAS 14808-60-7)
SILICA, CRYSTALLINE (QUARTZ) (CAS 14808-60-7)
TRIDYMITE (CAS 15468-32-3)

US New Jersey Worker and Community Right-to- Know Act

US Pennsylvania Worker and Community Right-to- Know Law

Not regulated.

WARNING: This product contains a chemical known to the State of California to cause cancer.

QUARTZ(SIO2) (CAS 14808-60-7) Listed: October 1, 1988

SILICA, CRYSTALLINE (QUARTZ) (CAS 14808-60-7)
Listed: October 1, 1988
TRIDYMITE (CAS 15468-32-3)

**US Rhode Island RTK
US California Proposition 65**

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

**Material name: Super Seal
Date prepared: April 7, 2016
Date revised: April 7, 2016
Version number: 01**

Listed: October 1, 1988

International Inventories

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

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

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information, Including Date of Preparation or Last Revision

Date Prepared: April 7, 2016

Revision Date: April 7, 2016

Version Number: 01

Disclaimer: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. All information and recommendations concerning this product is based on tests and data believed to be reliable, however, it is the user's responsibility to determine the safety, toxicity and suitability for the user's own use of the product described herein. Since the actual use by others is beyond our control, no guarantee expressed or implied is made. Nor is the information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular conditions exist or because of applicable laws or government regulations.

Material name: Super Seal

Date prepared: April 7, 2016

Date revised: April 7, 2016

Version number: 01