

SAFETY DATA SHEET

===== SECTION 1 - IDENTIFICATION =====

MANUFACTURER:	Diamapro Systems, Inc.	EMERGENCY PHONE:	1-800-424-9300
ADDRESS :	325 West Front Street	INFORMATION PHONE:	1-800-622-2048
	Erie, PA 16507	NAME OF PREPARER:	Safety Director

PRODUCT NAME: Diamapro Slurry Sep
 PRODUCT CODE: DPSLSEP

===== SECTION 2 - HAZARDS IDENTIFICATION =====

Physical Hazards	Not classified.		
Health Hazards	Skin corrosion/irritation	Category 2	
	Serious eye damage/eye irritation	Category 2B	
	Carcinogenicity	Category 1A	
	Specific target organ toxicity, repeated exposure	Category 1	
Environmental Hazards	Not classified.		
OSHA Defined Hazards	Not classified.		
Label Elements			
	Signal word	Danger	
	Hazard statement	Causes skin irritation. Causes eye irritation. May cause cancer. Causes 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/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.	
	Response	If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Specific treatment (see on this label). If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before use.	
	Storage	Store locked up.	
	Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
Hazard(s) not otherwise classified (HNOC)	None known.		
Supplemental information	32.14% of the mixture consists of component(s) of unknown acute dermal toxicity.		

===== SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS =====

Mixtures

Chemical Name	Common Name and Synonyms	CAS number	%
TRADE SECRET*		Proprietary*	16
QUARTZ (SIO2)		14808-60-7	3 - < 5
TRADE SECRET		Proprietary*	3.7
TRADE SECRET*		Proprietary*	3.3
CRISTOBALITE		14464-46-1	1 - < 3
Other Components Below Reportable Levels			70 - < 80

*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. This product contains naturally occurring crystalline silica (not listed in Annex 1 of Directive 67/548/EEC) in quantities less than 4%.

===== SECTION 4 - FIRST AID MEASURES =====

Inhalation If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop. Move to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Call a physician if symptoms develop or persist.

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Skin contact	Immediately flush skin with running water for at least 20 minutes. Remove contaminated clothing. Get medical attention if irritation develops or persists. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Have victim rinse mouth thoroughly with water. If ingestion of a large amount does occur, seek medical attention. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. May cause redness and pain. 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.

===== SECTION 5 - FIRE AND EXPLOSION HAZARD DATA =====

Suitable Extinguishing Media	Dry chemical, CO2, water spray or regular foam.
Unsuitable Extinguishing Media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific Hazards Arising from the Chemical	During fire, gases hazardous to health may be formed.
Special Protective Equipment and Precautions for Firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire Fighting Equipment/Instructions	Move containers from fire area if you can do so without risk.
Specific Methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire Hazards	No unusual fire or explosion hazards noted.

===== SECTION 6 - ACCIDENTAL RELEASE MEASURES =====

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	<p>Stop leak if you can do so without risk. Avoid the generation of dusts during clean-up. Sweep up or gather material and place in appropriate container for disposal.</p> <p>Large Spills: Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS. Large spills may be neutralized with dilute alkaline solutions of soda ash, or lime.</p>
Environmental precautions	Do not let product enter drains. Avoid discharge into drains, water courses or onto the ground.

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===== SECTION 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. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for Safe Storage, Including any Incompatibilities Store locked up. No special restrictions on storage with other products. Store in original tightly closed container. No special storage conditions required. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

===== SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION =====

Occupational Exposure Limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

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

Components	Type	Value	Form
CRISTOBALITE (CAS 14464-46-1)	PEL	0.05 mg/m ³	Respirable dust.
QUARTZ (SiO ₂) (CAS 14808-60-7)	PEL	0.05 mg/m ³	Respirable dust.

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

Components	Type	Value	Form
CRISTOBALITE (CAS 14464-46-1)	TWA	0.05 mg/m ³	Respirable
QUARTZ (SiO ₂) (CAS 14808-60-7)	TWA	1.2 mppcf	Respirable.
		0.1 mg/m ³	Respirable
		2.4 mppcf	Respirable.

Impurities	Type	Value	Form
INERT OR NUISANCE DUSTS	TWA	5 mg/m ³	Respirable fraction
		15 mg/m ³	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
CRISTOBALITE (CAS 14464-46-1)	TWA	0.025 mg/m ³	Respirable fraction.
QUARTZ (SiO ₂) (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
CRISTOBALITE (CAS 14464-46-1)	TWA	0.05 mg/m ³	Respirable dust.
QUARTZ (SiO ₂) (CAS 14808-60-7)	TWA	0.05 mg/m ³	Respirable dust.

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

Appropriate Engineering Controls If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory protection must be worn. 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 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. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

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Individual Protection Measures, Such as Personal Protective Equipment

Eye/face Protection	Wear dust goggles. Eye wash fountain is recommended.
Skin Protection	
Hand Protection	Wear appropriate chemical resistant gloves. Impervious butyl rubber gloves.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Use of protective coveralls and long sleeves is recommended. Remove and wash contaminated clothing before re-use.
Respiratory Protection	Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.
Thermal Hazards	Wear appropriate thermal protective clothing, when necessary.

General Hygiene Considerations Observe any medical surveillance requirements. 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.

===== SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES =====

Appearance	
Physical State	Solid.
Form	Powder.
Color	Tan.
Odor	None.
Odor Threshold	Not available.
pH	3.5
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	Not available.
Flammability Limit – upper (%)	Not available.
Explosive Limit - lower (%)	Not available.
Flammability Limit – lower (%)	Not available.
Explosive Limit - upper (%)	Not available.
Vapor Pressure	0.00004 hPa estimated
Vapor Density	Not available.
Relative Density	Not available.
Solubility(ies)	
Solubility (water)	100 %
Partition Coefficient (n-octanol/water)	Not available.
Auto-ignition Temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.
Other Information	
Density	2.53 g/cm3 estimated
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	0 % estimated
Specific gravity	2.53 estimated
VOC	CARB

===== SECTION 10 - STABILITY AND REACTIVITY DATA =====

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical Stability	Stable at normal conditions.
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Contact with incompatible materials.
Incompatible Materials	None known.
Hazardous Decomposition Products	None known.

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===== SECTION 11 - TOXICOLOGICAL INFORMATION =====

Information on Likely Routes of Exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes eye irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. May cause redness and pain.

Information on Toxicological Effects

Acute toxicity Not known. May cause skin and eye irritation.

Components	Species	Test Results
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CRISTOBALITE (CAS 14464-46-1)
Acute
Oral

LD50

Rat

> 22500 mg/kg

TRADE SECRET
Acute
Inhalation

LC50

Rat

2.3 mg/l, 2 Hours

Oral

LD50

Rat

4090 mg/kg

Skin Corrosion/Irritation

Causes skin irritation.

Serious Eye Damage/Eye Irritation

Causes eye irritation.

Respiratory or Skin Sensitization
Respiratory Sensitization

Not a respiratory sensitizer.

Skin Sensitization
Germ Cell Mutagenicity

This product is not expected to cause skin sensitization.

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 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.

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IARC Monographs. Overall Evaluation of Carcinogenicity

CRISTOBALITE (CAS 14464-46-1) 1 Carcinogenic to humans.
 QUARTZ (SIO2) (CAS 14808-60-7) 1 Carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

CRISTOBALITE (CAS 14464-46-1) Cancer
 QUARTZ (SIO2) (CAS 14808-60-7) Cancer

US. National Toxicology Program (NTP) Report on Carcinogens

CRISTOBALITE (CAS 14464-46-1) Known To Be Human Carcinogen.
 Reasonably Anticipated to be a Human Carcinogen.
 QUARTZ (SIO2) (CAS 14808-60-7) Known To Be Human Carcinogen.

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

**Specific Target Organ Toxicity
Single Exposure** Not classified.

**Specific Target Organ Toxicity
Repeated Exposure** Causes damage to organs through prolonged or repeated exposure.

Aspiration Hazard Not an aspiration hazard.

Chronic Effects 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 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. Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

===== SECTION 12 - ECOLOGICAL INFORMATION =====

Ecotoxicity Components of this product have been identified as having potential environmental concerns.

Components	Species	Test Results
TRADE SECRET		
Aquatic		
Fish	LC50	Bluegill (Lepomis macrochirus) Fish
		300 mg/l, 96 hours <= 10 mg/l

Persistence and Degradability No data is available on the degradability of this product.

Bioaccumulative Potential No data available.

Mobility in Soil No data available.

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

===== SECTION 13 - DISPOSAL CONSIDERATIONS =====

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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 in accordance with all applicable regulations. Empty containers or liners may retain some product residues. The material and its container must be disposed of in a safe is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

===== SECTION 14 - TRANSPORT INFORMATION =====

DOT	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

===== SECTION 15 - REGULATORY INFORMATION =====

US Federal Regulations	OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.119. This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)	Not listed.
SARA 304 Emergency release notification	Not regulated.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)	
CRISTOBALITE (CAS 14464-46-1)	Cancer
QUARTZ (SIO2) (CAS 14808-60-7)	Cancer
CRISTOBALITE (CAS 14464-46-1)	lung effects
QUARTZ (SIO2) (CAS 14808-60-7)	lung effects
CRISTOBALITE (CAS 14464-46-1)	immune system effects
QUARTZ (SIO2) (CAS 14808-60-7)	immune system effects
CRISTOBALITE (CAS 14464-46-1)	kidney effects
QUARTZ (SIO2) (CAS 14808-60-7)	kidney effects
Superfund Amendments and Reauthorization Act of 1986 (SARA)	
SARA 302 Extremely hazardous substance	Not listed.
SARA 313 (TRI reporting)	Not regulated.
Other Federal Regulations	
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List	Not regulated.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)	Not regulated.
Safe Drinking Water Act (SDWA)	Not regulated.
US State Regulations	WARNING: This product contains a chemical known to the State of California to cause cancer. California Proposition 65 WARNING This product can expose you to QUARTZ (SIO2), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov .

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California Proposition 65 - CRT: Listed date/Carcinogenic substance
 QUARTZ (SIO₂) (CAS 14808-60-7) Listed: October 1, 1988
 US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22,
 69502.3, subd. (a))
 CRISTOBALITE (CAS 14464-46-1)
 QUARTZ (SIO₂) (CAS 14808-60-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
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)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No
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)

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).

===== SECTION 16 - OTHER INFORMATION =====

HMIS Rating Health: 3*
 Flammability: 0
 Reactivity: 0

NFPA Rating Health: 2
 Flammability: 0
 Instability: 0

Prepared By: S. Thome
 Revision Date: 07/20/2021

The information herein is based on data considered to be accurate. However, no warranty is expressed or implied regarding the accuracy of these data or results. Also this shall not establish a legally valid contractual relationship.

Vendor assumes no responsibility for injury to vendee or third person proximately caused if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in use of the material.

Our products are intended for sale to industrial and commercial customers. We encourage customers to inspect and test our products before use and to satisfy themselves as to suitability for their specific applications.

Warranty: The manufacturer warrants that products sold comply with specifications as represented and will perform satisfactorily if used according to the directions, or the manufacturer will refund or replace any unused portion thereof, for a period of one year from the date of manufacture. The manufacturer does not make any other warranty, or assume responsibility of any kind, expressed or implied regarding the effect or result of the products use; and assumes no responsibility of injury to vendee or third parties proximately caused by the material if reasonable safety procedures are not adhered to.