



SAFETY DATA SHEET

1. Identification

Product identifier SlurrySep™ LPH3

Other means of identification None.

Recommended use of the chemical and restrictions on use

Recommended use water supply; sewerage, waste management and remediation activities: remediation activities and other waste management services

Restrictions on use 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.

Details of manufacturer or importer

Manufacturer

Company name AMCOL Australia, an MTI Company
Address 94 Balham Road
Archerfield
Brisbane, Queensland 4108
Australia
Telephone General Information +61 (0) 7 3719 3500
Website <http://www.cetco.com.au/>
E-mail safetydata@mineralstech.com

Emergency phone number

Asia Pacific 1 760 476 3960
Australia 61 1 800 686 951

2. Hazard(s) identification

Classification of the hazardous chemical

Physical hazards Not classified.
Health hazards Serious eye damage/eye irritation Category 1

Label elements, including precautionary statements

Hazard symbol(s)



Corrosion

Signal word Danger

Hazard statement(s) Causes serious eye damage. Causes eye irritation.

Precautionary statement(s)

Prevention Keep out of reach of children. Read carefully and follow all instructions. Wash thoroughly after handling. Wear eye protection/face protection.

Response If medical advice is needed, have product container or label at hand. 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 CENTRE/doctor. Specific treatment (see on this label).

Storage Store in accordance with local/regional/national regulations.

Disposal Not available.

Supplemental information None.

Other hazards which do not result in classification None known.

3. Composition/information on ingredients

Mixture

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
TRADE SECRET	Proprietary	10 - < 20
TRADE SECRET DISODIUM CARBONATE soda ash SODIUM CARBONATE ANHYDROUS	Proprietary	3 - < 5
TRADE SECRET	Proprietary	3 - < 5
Other components below reportable levels		70 - < 80

Constituents

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
Quartz Crystalline silica, quartz SILICA (QUARTZ)	14808-60-7	<= 4
Cristobalite	14464-46-1	<= 1

Composition comments Bentonite contains naturally occurring crystalline silica (not listed in Annex I of Directive 67/548/EEC) in quantities less than 6%. Occupational Exposure Limits for impurities are listed in Section 8.

4. First-aid measures

Description of necessary 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.
Skin contact	Immediately flush skin with running water for at least 20 minutes. Get medical attention if irritation develops or persists. Get medical attention if irritation develops and persists.
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 immediately.
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.
Personal protection for first-aid responders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Symptoms caused by exposure	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Medical attention and special treatment	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing equipment	Dry chemical, CO ₂ , water spray or regular foam.
Unsuitable extinguishing equipment	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 Material can be slippery when wet.

Fire fighting equipment/instructions Move containers from fire area if you can do so without risk.

Hazchem code None.

General fire hazards No unusual fire or explosion hazards noted.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Material can be slippery when wet. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

For emergency responders Keep unnecessary personnel away. Ensure adequate ventilation. Material can be slippery when wet. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

Environmental precautions

Do not let product enter drains. Avoid discharge into drains, water courses or onto the ground.

Methods and materials for containment and cleaning up

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. The product is completely soluble in water.

Large Spills: Following product recovery, flush area with water.

Small Spills: Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Large spills may be Neutralised with dilute alkaline solutions of soda ash, or lime.

7. Handling and storage

Precautions for safe handling

Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Do not get this material in contact with eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls and personal protection

Control parameters Follow standard monitoring procedures.

Occupational exposure limits

Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

Constituents	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0.05 mg/m ³	Respirable dust.
Quartz (CAS 14808-60-7)	TWA	0.05 mg/m ³	Respirable dust.
Impurities	Type	Value	Form
INERT OR NUISANCE DUSTS (CAS SEQ250)	TWA	10 mg/m ³	Inhalable dust.

US. ACGIH Threshold Limit Values (TLV)

Constituents	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0.025 mg/m ³	Respirable fraction.
Quartz (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.

UK. OELs. Workplace Exposure Limits (WELs) (EH40/2005 (Fourth Edition 2020)), Table 1

Constituents	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0.1 mg/m ³	Respirable.
Quartz (CAS 14808-60-7)	TWA	0.1 mg/m ³	Respirable.
Impurities	Type	Value	Form
INERT OR NUISANCE DUSTS (CAS SEQ250)	TWA	4 mg/m ³	Respirable dust.
		10 mg/m ³	Inhalable dust.

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG), as updated

Impurities	Type	Value	Form
INERT OR NUISANCE DUSTS (CAS SEQ250)	TWA	4 mg/m ³	Inhalable dust.

Biological limit values	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.
Control banding	Not available.
Engineering controls	If these are not sufficient to maintain concentrations of particulates and solvent vapour below the 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. Provide eyewash station.
Individual protection measures, such as personal protective equipment (PPE)	
Eye/face protection	Applicable for industrial settings only. Wear safety glasses with side shields (or goggles) and a face shield. Eye wash fountain is recommended.
Skin protection	
Hand protection	Applicable for industrial settings only. Wear appropriate chemical resistant gloves. Impervious butyl rubber gloves.
Other	Applicable for industrial settings only. Wear suitable protective clothing. Use of protective coveralls and long sleeves is recommended. Remove and wash contaminated clothing before re-use.
Individual protection measures, for example personal protective equipment (PPE)	
Individual protection measures, such as personal protective equipment (PPE)	
Respiratory protection	Applicable for industrial settings only. Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	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

Physical state	Solid.
Form	Powder.
Colour	Tan.
Odour	None.
Odour threshold	Not available.
pH	5
Melting point/freezing point	450 °C (842 °F) estimated
Boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower explosive limits	
Explosion limit - lower (%)	Not available.
Explosion limit - upper (%)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility	
Solubility (water)	100 %
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Particle characteristics	Not available.
Data relevant with regard to physical hazard classes	No relevant additional information available.

Other physical and chemical parameters

Density	2.53 g/cm ³ estimated
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
Specific gravity	2.54 estimated

10. Stability and reactivity

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	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	None known.
Hazardous decomposition products	None known.

11. Toxicological information

Information on possible routes of exposure

Inhalation	No adverse effects due to inhalation are expected.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Causes serious eye damage.
Ingestion	Expected to be a low ingestion hazard.

Early onset symptoms related to exposure Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Delayed health effects from exposure Not available.

Acute toxicity May cause skin and eye irritation.

Components	Species	Test Results
TRADE SECRET		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	2300 mg/m ³ , 2 Hours
Oral		
LD50	Rat	2.8 g/kg
Constituents	Species	Test Results
Quartz (CAS 14808-60-7)		
Acute		
Oral		
LD50	Rat	500 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/irritation	Causes serious eye damage.	
Respiratory or skin sensitisation		
Respiratory sensitisation	Not a respiratory sensitiser.	
Skin sensitisation	This product is not expected to cause skin sensitisation.	
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 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. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

ACGIH Carcinogens

Cristobalite (CAS 14464-46-1)

A2 Suspected human carcinogen.

Quartz (CAS 14808-60-7)

A2 Suspected human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Cristobalite (CAS 14464-46-1)

1 Carcinogenic to humans.

Quartz (CAS 14808-60-7)

1 Carcinogenic to humans.

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

Not classified.

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.)

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According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Prolonged exposure may cause chronic effects. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

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

Fish

<= 10 mg/l

Acute

Crustacea

EC50

Water flea (*Ceriodaphnia dubia*)

156.6 - 298.9 mg/l, 48 hours

Fish

LC50

Bluegill (*Lepomis macrochirus*)

300 mg/l, 96 hours

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

No data available.

Mobility in soil

No data available for this product.

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.

13. Disposal considerations

Disposal methods	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.
Residual waste	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

ADG

Not regulated as dangerous goods.

RID

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.

15. Regulatory information

Safety, health and environmental regulations

National regulations This Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for the preparation of Safety Data Sheets for Hazardous Chemicals.

High Volume Industrial Chemicals (HVIC)

Cristobalite (CAS 14464-46-1)	10000 - 99999 TONNES See the regulation for additional information.
Quartz (CAS 14808-60-7)	100000 - 999999 TONNES See the regulation for additional information.
TRADE SECRET (CAS Proprietary)	10000 - 99999 TONNES See the regulation for additional information.

Importation of Ozone Depleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10, as amended)

Not listed.

National Pollutant Inventory (NPI) substance reporting list

Cristobalite (CAS 14464-46-1)	2000 tonnes/yr Threshold Category: 2B 400 tonnes/yr Threshold Category: 2A
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Prohibited Carcinogenic Substances

Not regulated.

Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)

Not listed.

Restricted Carcinogenic Substances

Not regulated.

Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)

Not listed.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto Protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	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).

16. Other information

Issue date	22-November-2023
Revision date	22-November-2023
Further information	This safety datasheet only contains information relating to safety and does not replace any product information or product specification.
Key abbreviations or acronyms used	AICIS: Australian Inventory of Industrial Chemicals.
Disclaimer	<p>AMCOL Australia, an MTI Company cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. 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 a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use.</p> <p>Third party materials: Insofar as materials not manufactured or supplied by this manufacturer are used in conjunction with, or instead of this product, it is the responsibility of the customer to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of this product in conjunction with materials from another supplier. 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.</p>
Revision information	Product and Company Identification: Product and Company Identification Section 1: Hazardous ingredients Physical & Chemical Properties: Multiple Properties GHS: Classification