

# PENTRA-SIL® (244+)

## MATERIAL SAFETY DATA SHEET



### 1. PRODUCT COMPANY IDENTIFICATION

<b>Product Name</b>	Pentra-Sil® (244+)
<b>Product Use</b>	Salt Protection, Dust-Proofing, Hardener, Densifier and Sealer

#### Details of the Supplier of the Safety Data Sheet / Manufacturer / Supplier

Convergent Concrete Technologies, 115 North 1380 West, Orem, UT 84057  
Telephone Number: 801-375-2280

#### Distributor Detail

<b>Region</b>	New Zealand / Australia
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Lesas Systems 2017 LTD: 700 Great South Road, Penrose, P O Box 9826, Auckland, New Zealand, Phone: +64 9 526 7136, Fax: +64 9 525 2139, Freephone: 0800 74 5372, Email: sales@lesasystems.co.nz

<b>Emergency Contact</b>	0800 764 766 - New Zealand National Poisons Centre
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### 2. HAZARD(S) IDENTIFICATION

<b>GHS Pictogram(s)</b>	
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<b>GHS Signal Word</b>	<b>Warning</b> This product is alkaline. Avoid contact with eyes and skin. Keep out of reach of children. The product may be harmful if it is inhaled or swallowed.
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#### Potential Health Effects Code of Hazard Statements

<b>Physical Hazards</b>	None
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<b>Health Hazards</b>	H303 - May be harmful if swallowed H312 - Harmful in contact with skin H319 - Causes serious eye irritation H333 - May be harmful if inhaled
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<b>Environmental Hazards</b>	None
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#### Code of Precautionary Statements

<b>General</b>	P101 - Keep out of reach of children P103 - Read label before use
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<b>Prevention Statements</b>	P202 - Do not handle until all safety precautions have been read and understood. P262 - Do not get in eyes, on skin or on clothing. P264 - Wash thoroughly after handling using this product. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P284 - Wear respiratory protection.
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<b>Response Statements</b>	P312 - Call a Poison Centre or doctor/physician if you feel unwell P331 - Do not induce vomiting P340 - Remove victim to fresh air and keep at rest in a position comfortable for breathing P352 - Wash with plenty of soap and water P362 - Take off contaminated clothing and wash before reuse
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<b>Storage</b>	P403 - Store in well-ventilated place P404 - Store in a closed container
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<b>Routes of Entry</b>	Eye contact, skin adsorption, ingestion and inhalation
<b>Carcinogenicity</b>	None known at this time

### 3. INGREDIENTS AND HAZARDS IDENTIFICATION

#### Components

COMPONENT	CAS#	EINECS No	% BY WEIGHT	REACH REG. #
Prop.	Prop.	Prop.	1-8	No
Prop.	Prop.	Prop.	1-8	Yes
Lithium Silicate	12627-14-4	235-730-0	25-35	Yes
Water	7732-18-5	231-791-2	Balance	No

REACH Registration number is the EINECS # and CAS#: lithium silicate is 23573001267144.

### 4. FIRST-AID MEASURES

<b>Eye Contact</b>	Flush eyes with water immediately while holding eyelids open. Remove contacts, if worn, after initial flushing and continue flushing for at least 15 minutes. Seek medical attention if irritation persists.
<b>Skin Contact</b>	Use soap and water to remove from the skin, remove contaminated clothing, clean thoroughly before reuse.
<b>Inhalation</b>	Move to fresh air. If not breathing, give rescue breathing. If breathing is difficult, give oxygen. Seek medical attention if breathing is still difficult.
<b>Ingestion</b>	If swallowed, get medical attention immediately. Do Not Induce Vomiting. Never give anything by mouth to an unconscious person.

### 5. FIRE-FIGHTING MEASURES

<b>Flash Point</b>	Not flammable
<b>Flammability Limits</b>	NE
<b>Fire Fighting Media</b>	Dry chemical, carbon dioxide, and water spray.
<b>Special Fire Fighting Procedures</b>	First responders need to wear full-bunker gear with SCBA, never enter a confined space unless fully protected with proper personal protective equipment (PPE). Material is alkaline and may cause the floor to be slippery.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Clean-up Procedures</b>	Material is alkaline wear proper PPE. Stop the source of the release if you are not put at risk. Use absorbent material (such as sand or kitty litter) to absorb the spill, use plastic shovel to pick up absorbent for disposal.
<b>Spills and Leaks</b>	Dispose in accordance to local, state or federal regulations.

### 7. HANDLING AND STORAGE

<b>Handling</b>	Do not get into eyes. Do not taste or swallow. Wash thoroughly after handling.
<b>Storage</b>	Store in original labeled container. Keep in cool and dry areas.

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### 8. EXPOSURE CONTROL/PERSONAL PROTECTION

<b>Introductory Remarks</b>	Consider the potential hazards of this product outlined in section 3. Use process exposures such as local exhaust ventilation, to control over exposure to airborne levels above recommended exposure limits.
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#### Personal Protection

<b>Eyes</b>	Wear safety goggles or safety glasses to prevent eye contact
<b>Body</b>	Long sleeve shirts, long pants, socks, rubber boots and chemical resistant gloves.
<b>Hands</b>	Chemical resistant gloves
<b>Respiratory</b>	Wear an approved respirator (NIOSH TC-84A rated or EN 14387) that provides protection from this product if the airborne concentrations exceed the recommended exposure limits.
<b>Other</b>	None

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Odour / Colour</b>	Slight to none / red tint, dries clear	<b>Vapour Pressure</b>	<2.2 torr @ 20°C
<b>pH</b>	11-12	<b>Density (water=1)</b>	1.10 @ 20°C
<b>VOC</b>	<50g/L	<b>Solubility</b>	>95% in water
<b>Evaporation Rate</b>	< 1.0	<b>Boiling Point</b>	100°C
<b>Freezing Point</b>	0°C	<b>Vapour Density (air=1)</b>	>1

### 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Considered stable under normal ambient temperatures
<b>Hazardous Decomposition</b>	If complete combustion, oxides of carbon and silicates are formed.
<b>Hazardous Polymerisation</b>	Will not occur
<b>Incompatibility / Materials to Avoid</b>	May react with strong oxidising agents and strong acids

### 11. TOXICOLOGICAL INFORMATION

<b>Acute Eye Irritation</b>	Irritating
<b>Acute Skin Irritation</b>	Chronic exposure may be irritating
<b>Acute Dermal Toxicity</b>	Not expected to be toxic through the skin
<b>Acute Inhalation Toxicity</b>	Not determined, expected to be an irritant to the respiratory system
<b>Carcinogenic Effects</b>	None
<b>Existing Medical Conditions Aggravated by Exposure</b>	Exposure to eyes and skin may cause irritation to pre-existing conditions

### 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	The toxicity of this product has not been determined
<b>Environmental Fate</b>	This product should be expected to be readily biodegradable

### 13. DISPOSAL CONSIDERATIONS

<b>Waste Disposal Method</b>	Whatever cannot be saved for recovery or recycling must be disposed of per local, state or Federal Regulations.
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<b>Container Handling and Disposal</b>	All containers should be triple rinsed and disposed of according to local, state and Federal regulations.
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### 14. TRANSPORT INFORMATION

<b>Ground Classification</b>	Not regulated by US DOT
<b>Shipping Name</b>	Pentra-Sil® (244+)
<b>Technical Shipping Name</b>	None
<b>UNFIC</b>	None
<b>ID Number</b>	None
<b>Packaging Group</b>	None
<b>Labels</b>	No US DOT Labels

Not regulated by IATA or IMO

### 15. REGULATORY INFORMATION

#### EPCRA 311/312 Categories

<b>Immediate (Acute) Health Effects</b>	Yes
<b>Delayed (Chronic) Health Effects</b>	Yes
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure</b>	No
<b>Reactivity</b>	No
<b>European Community</b>	 Irritating (Xi) substances
<b>Right to Know Classification</b>	All ingredients are listed in CA, FL, MA, MI, MN, PA and NJ
<b>TSCA</b>	All ingredients are listed or exempt from listing
<b>Reportable Quantity (RQ)</b>	None
<b>Prop 65</b>	None
<b>WHMIS</b>	Xi (Irritant to the eyes and skin)

All ingredients are listed as chemical inventories of ACIS, ECL, EEC, ENCS, EU, Israel, MAC, MAK, MITI, PICCS, SWISS, Taiwan, USA and UK Abbreviations

<b>CAS#</b>	Chemical Abstract Service Number	<b>EINECS</b>	European Inventory of existing Commercial Chemical Sales
<b>°C</b>	Celsius Temperature Scale	<b>°F</b>	Fahrenheit Temperature Scale
<b>Prop</b>	Propriety	<b>PE</b>	Personal Protective Equipment
<b>TLV</b>	Threshold Limit Value	<b>TWA</b>	Time Weighted Average
<b>STEL</b>	Short-Term Exposure Limit	<b>PEL</b>	Permissible Exposure Limit
<b>OSHA</b>	Occupational Safety & Health	<b>NIOSH</b>	National Institute of Safety & Health
<b>NFPA</b>	National Fire Protection Agency	<b>WHMIS</b>	Workplace Hazardous Materials Information System
<b>NTP</b>	National Toxicology Program	<b>IARC</b>	Int. Agency for Research on Cancer

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<b>RCRA</b>	Resource Conservation Recovery Act	<b>TSCA</b>	Toxic Substance Control Act
<b>EC50</b>	Effective Dose	<b>LC50</b>	Lethal Inhalation Concentration
<b>LD50</b>	Lethal Dose	<b>CAS</b>	Chemical Abstract Service Number
<b>LEL</b>	Lower Explosive Limit	<b>UEP</b>	Upper Explosive Limit
<b>NDA</b>	No Data Available	<b>ND</b>	Not Determined
<b>NE</b>	None Established < Less than or equal to	<b>NA</b>	Not Applicable < Greater than or equal to
<b>CNS</b>	Central Nervous System	<b>CI</b>	China
<b>DSL</b>	Canada	<b>ECL</b>	Korean Existing Chemicals List
<b>EEC</b>	European Economic Commission	<b>ENCS</b>	Japanese Existing and New Chemical List
<b>EU</b>	European Union	<b>MAC</b>	Netherlands
<b>MAK</b>	Germany	<b>MITI</b>	Japan
<b>PICCS</b>	Philippines	<b>SWISS</b>	Giftliste 1
<b>UK</b>	United Kingdom	<b>USA</b>	United States
<b>VOC</b>	Volatile Organic Content	<b>ACGIH</b>	American Conference of Government Industrial Hygienists
<b>SARA</b>	Superfund Amendments and Reauthorization Act		
<b>AICS</b>	Australian Inventory of Chemical Substances		
<b>IARC</b>	International Agency for Research on Cancer		
<b>Taiwan</b>	List of Toxic Chemical Substances regulated under Taiwan Toxic Chemical Substances Control Act of 1086		

## 16. OTHER INFORMATION

Hazardous Material Information (HMIS)		National Fire Protection Association (NFPA)	
Health	1	1	Health
Fire	0	0	Fire
Reactivity	0	0	Instability
Personal Protection	C		NA

<b>Health</b>	4 Deadly, 3 Extreme Danger, 2 Dangerous, 1 Slight Hazard, 0 No Hazard
<b>Fire</b>	4 <73°C, 3 <100°C, 2 <200°C, 1 >200°, 0 Will not burn
<b>Reactivity/Instability</b>	4 May detonate, 3 Explosive, 2 Unstable, 1 Normally stable, 0 Stable
<b>Risk Phases</b>	R36, irritating to eyes; R37, Irritating to respiratory system; and R38, Irritating to skin
<b>Safety Phrases</b>	S2, Keep out of reach of children, S24, Avoid contact with skin, S25, Avoid contact with eyes; S37, Wear suitable gloves; and S39, Wear eye/face protection.

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