

PENTRA-SIL™ (HD+C)

MATERIAL SAFETY DATA SHEET



1. PRODUCT COMPANY IDENTIFICATION

Product Name	Pentra-Sil™ (HD+C)
Product Use	Concrete Chemical Hardener, Densifier and Curing Compound

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

Region	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

Emergency Contact	0800 764 766 - New Zealand National Poisons Centre
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2. HAZARD(S) IDENTIFICATION

GHS Pictogram(s)	
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GHS Signal Word	Warning 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.
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Potential Health Effects Code of Hazard Statements

Physical Hazards	None
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Health Hazards	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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Environmental Hazards	None
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Code of Precautionary Statements

General	P101 - Keep out of reach of children P103 - Read label before use
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Prevention Statements	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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Response Statements	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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Storage	P403 - Store in well-ventilated place P404 - Store in a closed container P412 - Do not expose to temperatures exceeding 60°C
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Routes of Entry	Eye contact, skin adsorption, ingestion and inhalation
Carcinogenicity	None known at this time

3. INGREDIENTS AND HAZARDS IDENTIFICATION

Components

COMPONENT	CAS#	EINECS No	% BY WEIGHT	REACH REG. #
Paraffin Wax Emulsion	Proprietary (Prop.)	Proprietary (Prop.)	2-4	No
Lithium Silicate	12627-14-4	235-730-0	10-15	Yes
Prop. B	Prop.	Prop.	1-5	Yes
Prop. C	Prop.	Prop.	1-5	No
Prop. D	Prop.	Prop.	1-5	No
Water	7732-18-5	231-791-58	Balance	No

Note. REACH Reg. # is the combination of the EINECS # and CAS #. The REACH Reg. # lithium silicate is 235730012627144. Prop. A & B contain no carcinogens, Prop. 65, SARA 313 listings and are non-hazardous and non-flammable.

4. FIRST-AID MEASURES

Eye Contact	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.
Skin Contact	Use soap and water to remove from the skin, remove contaminated clothing, clean thoroughly before reuse.
Inhalation	Move to fresh air. If not breathing, give rescue breathing. If breathing is difficult, give oxygen. Seek medical attention if breathing is still difficult.
Ingestion	If swallowed, get medical attention immediately. Do Not Induce Vomiting. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Flash Point	Not flammable
Flammability Limits	NE
Fire Fighting Media	Dry chemical, carbon dioxide, and water spray.
Special Fire Fighting Procedures	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

Clean-up Procedures	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.
Spills and Leaks	Dispose in accordance to local, state or federal regulations.

7. HANDLING AND STORAGE

Handling	Do not get into eyes. Do not taste or swallow. Wash thoroughly after handling.
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Storage	Store in original labeled container. Keep in cool and dry areas. Do not exceed 60°C
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8. EXPOSURE CONTROL/PERSONAL PROTECTION

Introductory Remarks	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

Eyes	Wear safety goggles or safety glasses to prevent eye contact
Body	Long sleeve shirts, long pants, socks, rubber boots and chemical resistant gloves.
Hands	Chemical resistant gloves
Respiratory	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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Odour / Colour	Nearly odourless & clear liquid	Vapour Pressure	<2.2 torr @ 20°C
pH	10.5-11.2	Density (water=1)	>.97 @ 20°C
% Volatile by Weight	<90	Solubility	>95% in water
Evaporation Rate (water=1)	< 1.0	Boiling Point	100°C

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

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

12. ECOLOGICAL INFORMATION

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

13. DISPOSAL CONSIDERATIONS

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

Ground Classification	Not regulated by US DOT
Shipping Name	Pentra-Sil™ (HD+C)
Technical Shipping Name	None
UNFIC	None
ID Number	None
Packaging Group	None
Labels	No US DOT Labels

Not regulated by IATA or IMO

15. REGULATORY INFORMATION

EPCRA 311/312 Categories

Immediate (Acute) Health Effects	Yes
Delayed (Chronic) Health Effects	Yes
Fire Hazard	No
Sudden Release of Pressure	No
Reactivity	No
European Community	Irritating (Xi) substances
Right to Know Classification	All ingredients are listed in PA and NJ
TSCA	All ingredients are listed or exempt from listing
Reportable Quantity (RQ)	None
Prop 65	None
WHMIS	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

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

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RCRA	Resource Conservation Recovery Act	TSCA	Toxic Substance Control Act
EC50	Effective Dose	LC50	Lethal Inhalation Concentration
LD50	Lethal Dose	CAS	Chemical Abstract Service Number
LEL	Lower Explosive Limit	UEP	Upper Explosive Limit
NDA	No Data Available	ND	Not Determined
NE	None Established < Less than or equal to	NA	Not Applicable < Greater than or equal to
CNS	Central Nervous System	CI	China
DSL	Canada	ECL	Korean Existing Chemicals List
EEC	European Economic Commission	ENCS	Japanese Existing and New Chemical List
EU	European Union	MAC	Netherlands
MAK	Germany	MITI	Japan
PICCS	Philippines	SWISS	Giftliste 1
UK	United Kingdom	USA	United States
VOC	Volatile Organic Content	ACGIH	American Conference of Government Industrial Hygienists
SARA	Superfund Amendments and Reauthorization Act		
AICS	Australian Inventory of Chemical Substances		
IARC	International Agency for Research on Cancer		
Taiwan	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	1	1	Fire
Reactivity	0	0	Instability
Personal Protection	C		NA

Health	4 Deadly, 3 Extreme Danger, 2 Dangerous, 1 Slight Hazard, 0 No Hazard
Fire	4 <73°C, 3 <100°C, 2 <200°C, 1 >200°, 0 Will not burn
Reactivity/Instability	4 May detonate, 3 Explosive, 2 Unstable, 1 Normally stable, 0 Stable
Risk Phases	R36, irritating to eyes; R37, Irritating to respiratory system; and R38, Irritating to skin
Safety Phrases	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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