MATERIAL SAFETY DATA SHEET





1. PRODUCT COMPANY IDENTIFICATION

Product Name	Pentra-Sil® (NL)		
Irritant	X		
Product Use	Concrete chemical hardener, sealer and densifier		

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
	LB

Lesa 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

2. INGREDIENTS AND HAZARDS IDENTIFICATION

Hazardous Components

COMPONENT	CAS#	EINECS No	OSHA PEL	ACGIH TLV	PERCENT
Water	7732-18-5	231-791-2	NA	NA	85-94
Proprietary A	NA	NA	NA	NA	5-10
Proprietary B	NA	NA	NA	NA	1-5

Proprietary compounds A & B contain no carcinogens, Prop. 65, SARA 313 listings and are non-hazardous and nonflammable.

Potential Acute Health Effects

Eyes	Causes eye irritation		
Skin	Expected to cause irritation to the skin		
Inhalation	Vapours may cause respiratory irritation		
Ingestion	Harmful or fatal if swallowed		

3. HAZARD IDENTIFICATION

The primary routes of entry are eyes, skin and respiratory. Immediate Health Effects

Eye Contact	Causes irritation		
Skin	Contact with the skin is expected to cause irritation		
Ingestion	May cause headache, dizziness, nausea and vomiting.		
Inhalation	The vapour or fumes from this product may cause respiratory irritation		
Delayed or other Health Effects:	None determined		
Target Organs:	None determined		

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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).		

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.		
Storage	Store in original labeled container. Keep in cool and dry areas.		

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.		
Other	None		

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9. PHYSICAL AND CHEMICAL PROPERTIES

Odour / Colour	Odourless and clear liquid	Vapour Pressure	<2.2 torr @ 20°C
рН	11.0	Vapour Density (air=1)	>.1.0
voc	<50 g/L	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	
Hazardous Polymerization Will not occur	
Incompatibility / Materials to Avoid	May react with strong oxidising 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.
Container Handling and Disposal	All containers should be triple rinsed and disposed of according to local, state and Federal regulations.

14. TRANSPORT INFORMATION

Ground Classification	Not regulated by US DOT	
Shipping Name	Pentra-Sil® (NL)	
Technical Shipping Name	None	
UNFIC	None	
ID Number	None	
Packaging Group	None	
Labels	No US DOT Labels	

Not regulated by IATA or IMO

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15. REGULATORY INFORMATION

EPCRA 311/312 Categories

EPCHA 311/312 Categories		
Immediate (Acute) Health Effects	Yes	
Delayed (Chronic) Health Effects	Yes	
Fire Hazard	No	
Sudden Release of Pressure	No	
Reactivity	No	
Right to Know Classification	None listed in CA, PA, MN, MA, MI, FL and NJ	
TSCA	All of the components either listed or exempt from listing on TSCA inventory	
Reportable Quantity (RQ)	None	
Prop 65	None	
WHMIS	Xi (Irritant to the eyes and skin)	
None is listed on ch Abbreviations	nemical inventories of ACIS, ECL, EEC, ENCS, EU, Israel, MAC, MAK, MITI, PICCS, SWISS, Taiwan, USA and UK	
AICS	Australian Inventory of Chemical Substances	
CAS#	Chemical Abstract Service Number	
°C	Celsius Temperature Scale	
°F	Fahrenheit Temperature Scale	
ECL	Korean Existing Chemicals Ltd	
EEC	European Economic Commission	
ENCS	Japanese Existing and New Chemical List	
EINECS#	European Inventory of Existing Chemical Substances Number	
EU	European Union	
(Israel)	2001 proposed list of chemical substances to be regulated under Israel Hazardous Substances Law and Regulations Ltd	
MAC	Netherlands	
MAK	Germany	
МІТІ	Ministry of International Trade and Industry	
NA	Not Applicable	
PEL	Permissible Exposure Limit	
PICCS	Phillipines Inventory of Chemicals and Chemical Substances	
PPE	Personal Protective Equipment	
Prop.	Proprietory	

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NA	Not Applicable
ND	Not Determined
STEL	Short Term Exposure Limit
SWISS	Giftliste 1
SWISS	Inventory of Notified New Substances
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
(Taiwan)	List of Toxic Chemical Substances regulated under Taiwan Toxic Chemical Substances Control Act of 1086
USA	United States of America
UK	United Kingdom

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	С		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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