



SAFETY DATA SHEET

1. Identification

Product identifier LATICRETE PERMACOLOR® Select

Other means of identification None.

Recommended use of the chemical and restrictions on use

Recommended use Grout.

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 LATICRETE International
Address 1 Laticrete Park, N
Bethany, CT 06524
Telephone (203)-393-0010
Contact person Steve Fine
Website www.laticrete.com
Emergency phone number Call CHEMTREC day or night
USA/Canada - 1.800.424.9300
Mexico - 1.800.681.9531
Outside USA/Canada
1.703.527.3887

Supplier

Company name LATICRETE Australia
Address P.O. Box 508
Virginia Business Mail Centre
29 Telford Street
VIRGINIA QLD 4014
Australia
Telephone (61) (7) 3865-1599
Website www.laticrete.com
Emergency phone number 1.703.527.3887

2. Hazard(s) identification

Classification of the hazardous chemical

Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 1
	Sensitization, skin	Category 1
	Carcinogenicity	Category 1A
	Specific target organ toxicity following repeated exposure	Category 2 (Lung)
Environmental hazards	Not classified.	

Label elements, including precautionary statements

Hazard symbol(s)



Corrosion

Health hazard

Exclamation mark

Signal word

Danger

Hazard Statement(s) Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause cancer. May cause damage to organs (Lung) through prolonged or repeated exposure.

Precautionary Statement(s)

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe dust/fume. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response IF exposed or concerned: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. 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 or doctor/physician.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

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
Silica Sand	14808-60-7	50 - 55
Calcium aluminate cement	65997-16-2	20 - 30
Calcium sulphate	7778-18-9	5 - 7
Titanium dioxide	13463-67-7	0 - 8
Portland Cement	65997-15-1	2 - 4
Dolomite	16389-88-1	1 - 4
Calcium sulfate hemihydrate	26499-65-0	1 - 2
Sodium aluminium sulfosilicate	57455-37-5	0 - 2
Iron oxide	1309-37-1	0 - 1
Lithium Carbonate	554-13-2	0.15-0.25

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Description of necessary first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Eye contact Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.

Ingestion Rinse mouth. 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. IF exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.

Symptoms caused by exposure Rash. Coughing. Irritant effects. Permanent eye damage including blindness could result. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Prolonged exposure may cause chronic effects.

Medical attention and special treatment Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for fire fighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes.

Hazchem Code Not available.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Keep unnecessary personnel away. Keep upwind. Avoid formation of dust. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation.

For emergency responders Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

Methods and materials for containment and cleaning up Stop the flow of material, if this is without risk. Sweep or shovel up material and place in a clearly labeled container for waste. Collect dust using a vacuum cleaner. Following product recovery, flush area with water.

7. Handling and storage

Precautions for safe handling Do not handle until all safety precautions have been read and understood. Minimise dust generation and accumulation. Wear appropriate personal protective equipment. Do not breathe dust. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Keep container tightly closed. Store in a cool, dry place out of direct sunlight.

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)

Components	Type	Value	Form
Calcium sulphate (CAS 7778-18-9)	TWA	10 mg/m ³	Inhalable dust.
Iron oxide (CAS 1309-37-1)	TWA	5 mg/m ³	Fume.
Portland Cement (CAS 65997-15-1)	TWA	10 mg/m ³	Inhalable dust.
Silica Sand (CAS 14808-60-7)	TWA	0.1 mg/m ³	Respirable dust.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m ³	Inhalable dust.

Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Components	Type	Value	Form
------------	------	-------	------

Calcium sulphate (CAS 7778-18-9)	TWA	10 mg/m3	Inspirable dust.
Iron oxide (CAS 1309-37-1)	TWA	5 mg/m3	Fume.
Portland Cement (CAS 65997-15-1)	TWA	10 mg/m3	Inspirable dust.

Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Components	Type	Value	Form
Silica Sand (CAS 14808-60-7)	TWA	0.1 mg/m ³	
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m ³	Inspirable dust.

ACGIH

Components	Type	Value	Form
Sodium aluminium sulfosilicate (CAS 57455-37-5)	TWA	3 mg/m ³	Respirable particles
		10 mg/m ³	Inhalable particles

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulphate (CAS 7778-18-9)	TWA	10 mg/m ³	Inhalable fraction.
Iron oxide (CAS 1309-37-1)	TWA	5 mg/m ³	Respirable fraction.
Portland Cement (CAS 65997-15-1)	TWA	1 mg/m ³	Respirable fraction.
Silica Sand (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m ³	

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Iron oxide (CAS 1309-37-1)	STEL	10 mg/m ³	Fume.
	TWA	5 mg/m ³	Fume.
		4 mg/m ³	Respirable.
		10 mg/m ³	Inhalable
Portland Cement (CAS 65997-15-1)	TWA	4 mg/m ³	Respirable dust.
		10 mg/m ³	Inhalable dust.
Silica Sand (CAS 14808-60-7)	TWA	0.1 mg/m ³	Respirable.
Titanium dioxide (CAS 13463-67-7)	TWA	4 mg/m ³	Respirable.
		10 mg/m ³	Inhalable

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

Components	Type	Value	Form
Calcium sulphate (CAS 7778-18-9)	TWA	4 mg/m ³	Inhalable fraction.
		1.5 mg/m ³	Respirable fraction.

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.

Appropriate engineering controls

controls

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. Provide eyewash station.

Individual protection measures, for example personal protective equipment (PPE)

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection	
Hand protection	Wear chemical-resistant, impervious gloves.
Other	Wear appropriate chemical resistant clothing.
Respiratory protection	Wear a dust mask if dust is generated above exposure limits.
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. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state	Solid.
Form	Powder.
Colour	Colored.
Odour	Not available.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.

Flash point Not flammable or combustible.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit – upper (%) Not available.

Vapour pressure Not available.

Vapour density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Insoluble

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidising agents.

Hazardous decomposition products

No hazardous decomposition products are known.

11. Toxicological information

Information on possible routes of exposure

Inhalation	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing.
Skin contact	Causes skin irritation. Prolonged contact with wet cement/mixture may cause burns.
Eye contact	Causes serious eye damage. Prolonged contact with wet cement/mixture may cause burns.
Ingestion	Swallowing may cause gastrointestinal irritation.

Symptoms related to exposure Rash. Coughing. Irritant effects. Permanent eye damage including blindness could result. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Prolonged exposure may cause chronic effects.

Acute toxicity May cause respiratory irritation.

Components	Species	Test results
Lithium Carbonate (CAS 554-13-2)		
Acute		
<i>Inhalation</i>		
LC50	Rat	> 2.17 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	525 mg/kg
Sodium aluminium sulfosilicate (CAS 57455-37-5)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 3000 mg/kg
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation Causes serious eye damage.

Respiratory or skin sensitisation

Respiratory sensitisation	No data available.
Skin sensitisation	May cause an allergic skin reaction.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity May cause cancer. 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)

ACGIH Carcinogens

Iron oxide (CAS 1309-37-1)	A4 Not classifiable as a human carcinogen.
Portland Cement (CAS 65997-15-1)	A4 Not classifiable as a human carcinogen.
Silica Sand (CAS 14808-60-7)	A2 Suspected human carcinogen.
Titanium dioxide (CAS 13463-67-7)	A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Iron oxide (CAS 1309-37-1)	3 Not classifiable as to carcinogenicity to humans.
Silica Sand (CAS 14808-60-7)	1 Carcinogenic to humans.
Titanium dioxide (CAS 13463-67-7)	2B Possibly 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	May cause damage to organs (Lung) through prolonged or repeated exposure.
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.
Chronic effects	Prolonged or repeated exposure may cause lung injury, including silicosis.
Other information	Inhalation of high concentrations of quartz dust can lead to the lung disease known as silicosis, with cough and shortness of breath.

12. Ecological information

Ecotoxicity Not expected to be harmful to aquatic organisms.

Components	Species	Test results
Lithium Carbonate (CAS 554-13-2)		
Aquatic		
Fish	LC50 Mummichog (<i>Fundulus heteroclitus</i>)	8.1 mg/l, 96 hours

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available for this product.
Mobility in soil	The product is insoluble in water and will sediment in water systems.
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	Dispose of contents/container in accordance with local/regional/national/international regulations. Do not contaminate ponds, waterways or ditches with chemical or used container.
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	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

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 This substance/mixture is not intended to be transported in bulk.

15. Regulatory information

Safety, health and environmental regulations

National regulations This Safety Data Sheet was prepared in accordance with the Australia National Code of Practice for the Preparation of Material Safety Data Sheets (NOHSC: 2011.)

Australia Medicines & Poisons Appendix A

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix B

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix C

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix D

Poisons schedule number not allocated.
Australia Medicines & Poisons Appendix E
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix F

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix G

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix H

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix I

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix J

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix K

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 2

Iron oxide (CAS 1309-37-1)

applies to all preparations in any concentration Exception may apply, see the regulation for relevance.

Australia Medicines & Poisons Schedule 3

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 4

Iron oxide (CAS 1309-37-1)

for human use for injection

Australia Medicines & Poisons Schedule 5

Iron oxide (CAS 1309-37-1)

for the treatment of animals (excluding up to 1 per cent of iron oxides when present as an excipient): in other [unspecified] preparations Exception may apply, see the regulation for relevance.

for the treatment of animals (excluding up to 1 per cent of iron oxides when present as an excipient): in preparations for injection Exception may apply, see the regulation for relevance.

in garden preparations Exception may apply, see the regulation for relevance.

Australia Medicines & Poisons Schedule 6

Iron oxide (CAS 1309-37-1)

for the treatment of animals Exception may apply, see the regulation for relevance.

Australia Medicines & Poisons Schedule 7

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 8

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 9

Poisons schedule number not allocated.

High Volume Industrial Chemicals (HVIC)

Calcium aluminat cement (CAS 65997-16-2)

1000 - 9999 TONNES See the regulation for additional information.

Calcium sulphate (CAS 7778-18-9)

1000 - 9999 TONNES See the regulation for additional information.

Dolomite (CAS 16389-88-1)

1000 - 9999 TONNES See the regulation for additional information.

Iron oxide (CAS 1309-37-1)

100000 - 999999 TONNES See the regulation for additional information.

Portland Cement (CAS 65997-15-1)

> 1000000 TONNES See the regulation for additional information.

Silica Sand (CAS 14808-60-7)

1000 - 9999 TONNES See the regulation for additional information.

Titanium dioxide (CAS 13463-67-7)

100000 - 999999 TONNES See the regulation for additional information.

Importation of Ozone Deleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)

Not listed.

National Pollutant Inventory (NPI) substance reporting list

Not listed.

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

Not listed.

Restricted Carcinogenic Substances

Not regulated.

International regulations**Stockholm Convention**

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Calcium sulphate (CAS 7778-18-9)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies 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 18-March-2015

Revision date -

References HSDB® - Hazardous Substances Data Bank
Registry of Toxic Effects of Chemical Substances (RTECS)

Disclaimer The information in this (M)SDS was obtained from sources which we believe are reliable but cannot guarantee. Additionally, your use of this information is beyond our control and may be beyond our knowledge. Therefore, the information is provided without any representation or warranty express or implied.

