1. Identification

Product identifier
LATICRETE® PERMACOLOR® Select Color Kit

Other means of identification
None.

Recommended use
Grout.

Recommended restrictions
None known.

Manufacturer/Importer/Supplier/Distributor information

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

2. Hazard(s) identification

Physical hazards
Not classified.

Health hazards
Carcinogenicity
Category 2

Environmental hazards
Not classified.

Label elements

Signal word
Warning

Hazard statement
Suspected of causing cancer.

Precautionary statement

Prevention
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

Response
IF exposed or concerned: Get medical advice/attention.

Storage
Store locked up.

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

Other hazards
Not classified.

Supplemental information
None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium-silica-aluminium</td>
<td>65997-17-3</td>
<td>0 - 90</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>1309-37-1</td>
<td>0 - 60</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>0 - 50</td>
</tr>
<tr>
<td>Chromium oxide</td>
<td>1308-38-9</td>
<td>0 - 40</td>
</tr>
</tbody>
</table>
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

Inhalation
Move injured person into fresh air and keep person calm under observation. Get medical attention if any discomfort occurs.

Skin contact
Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact
Rinse with water. Get medical attention if irritation develops and persists.

Ingestion
Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed
Coughing. Dust may irritate the eyes and the respiratory system.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

General information
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.

5. Fire-fighting measures

Suitable extinguishing media
Use fire-extinguishing media appropriate for surrounding materials.

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 firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards
No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. Wear appropriate personal protective equipment. For personal protection, see Section 8 of the SDS.

Methods and materials for containment and cleaning up
Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not vacuum clean unless vacuum cleaners are equipped with HEPA filter. For waste disposal, see Section 13 of the SDS.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Provide appropriate exhaust ventilation at places where dust is formed. Keep formation of airborne dusts to a minimum. Do not breathe dust. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Store locked up. Store in a cool, dry place out of direct sunlight.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>3.5 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>Chromium oxide (CAS 1308-38-9)</td>
<td>TWA</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Iron oxide (CAS 1309-37-1)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>
### US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

### Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium-silica-aluminium (CAS 65997-17-3)</td>
<td>TWA</td>
<td>0.2 fibers/cm³</td>
<td>Fiber.</td>
</tr>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Fiber, total</td>
</tr>
<tr>
<td>Chromium oxide (CAS 1308-38-9)</td>
<td>TWA</td>
<td>3.5 mg/m³</td>
<td>Total particulate.</td>
</tr>
<tr>
<td>Iron oxide (CAS 1309-37-1)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

### Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium-silica-aluminium (CAS 65997-17-3)</td>
<td>TWA</td>
<td>0.2 fibers/cm³</td>
<td>Fiber.</td>
</tr>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Inhalable fibers.</td>
</tr>
<tr>
<td>Chromium oxide (CAS 1308-38-9)</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Inhalable</td>
</tr>
<tr>
<td>Iron oxide (CAS 1309-37-1)</td>
<td>STEL</td>
<td>10 mg/m³</td>
<td>Fume.</td>
</tr>
<tr>
<td>Iron oxide (CAS 1309-37-1)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Dust.</td>
</tr>
<tr>
<td>Iron oxide (CAS 1309-37-1)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Fume.</td>
</tr>
<tr>
<td>Iron oxide (CAS 1309-37-1)</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Iron oxide (CAS 1309-37-1)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

### Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>Chromium oxide (CAS 1308-38-9)</td>
<td>TWA</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Iron oxide (CAS 1309-37-1)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

### Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium-silica-aluminium (CAS 65997-17-3)</td>
<td>TWA</td>
<td>0.5 fibers/ml</td>
<td>Respirable fibers.</td>
</tr>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>Iron oxide (CAS 1309-37-1)</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>
Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium-silica-aluminium (CAS 65997-17-3)</td>
<td>TWA</td>
<td>1 fibers/cm³</td>
<td>Fiber.</td>
</tr>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td>Iron oxide (CAS 1309-37-1)</td>
<td>TWA</td>
<td>3.5 mg/m³</td>
<td>Dust and fume.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Dust and fume.</td>
</tr>
</tbody>
</table>

No biological exposure limits noted for the ingredient(s).

Appropriate engineering 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.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection
Use personal protective equipment as required.

Other
Use personal protective equipment as required.

Respiratory protection
In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
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. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance

Physical state
Solid.

Form
Powder.

Color
Various colors.

Odor
None.

Odor threshold
Not applicable.

pH
Not applicable.

Melting point/freezing point
Not available.

Initial boiling point and boiling range
Not applicable.

Flash point
Not applicable.

Evaporation rate
Not available.

Flammability (solid, gas)
Non flammable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)
Not applicable.

Flammability limit - upper (%)
Not applicable.

Explosive limit - lower (%)
Not applicable.

Explosive limit - upper (%)
Not applicable.

Vapor pressure
Not applicable.

Vapor density
Not applicable.

Relative density
Not available.

Solubility(ies)

Solubility (water)
Moderate soluble in water.
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 None under normal conditions.

Incompatible materials None known.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Dust may irritate respiratory system.

Skin contact May cause irritation through mechanical abrasion.

Eye contact Dust may irritate the eyes.

Ingestion May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics Coughing. Dust may irritate the eyes and the respiratory system.

Information on toxicological effects

Acute toxicity May cause discomfort if swallowed.

Components Species Test Results

Carbon black (CAS 1333-86-4)

Acute

Dermal
LD50 Rabbit > 3000 mg/kg

Oral
LD50 Rat > 8000 mg/kg

Titanium dioxide (CAS 13463-67-7)

Acute

Inhalation
LC50 Rat 3.43 mg/l, 4 Hours

Oral
LD50 Rat > 5000 mg/kg

Skin corrosion/irritation May cause irritation through mechanical abrasion.

Serious eye damage/eye irritation Dust may irritate the eyes.

Respiratory or skin sensitization

Canada - Alberta OELs: Irritant

Chromium oxide (CAS 1308-38-9) Irritant
Titanium dioxide (CAS 13463-67-7) Irritant

Respiratory sensitization Not classified.

Skin sensitization Not a skin sensitizer.

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

Carcinogenicity Suspected of causing cancer.
ACGIH Carcinogens

- Carbon black (CAS 1333-86-4): A3 Confirmed animal carcinogen with unknown relevance to humans.
- Titanium dioxide (CAS 13463-67-7): A4 Not classifiable as a human carcinogen.

Canada - Manitoba OELs: carcinogenicity

- Carbon black (CAS 1333-86-4): Confirmed animal carcinogen with unknown relevance to humans.
- Titanium dioxide (CAS 13463-67-7): Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

- Carbon black (CAS 1333-86-4): 2B Possibly carcinogenic to humans.
- Chromium oxide (CAS 1308-38-9): 3 Not classifiable as to carcinogenicity to humans.
- Iron oxide (CAS 1309-37-1): 3 Not classifiable as to carcinogenicity to humans.
- Titanium dioxide (CAS 13463-67-7): 2B Possibly carcinogenic to humans.

Based on available data, the classification criteria are not met.

Reproductive toxicity

No data available.

Specific target organ toxicity - single exposure

No data available.

Specific target organ toxicity - repeated exposure

Aspiration hazard

Due to the physical form of the product it is not an aspiration hazard.

Chronic effects

Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

12. Ecological information

Ecotoxicity

Not expected to be harmful to aquatic organisms.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Fish</td>
<td>LC50</td>
<td>Leuciscus idus</td>
</tr>
<tr>
<td></td>
<td>&gt;= 1000 mg/l</td>
<td>96 Hours</td>
</tr>
</tbody>
</table>

Persistence and degradability

The product contains inorganic compounds which are not biodegradable.

Bioaccumulative potential

The product is not expected to bioaccumulate.

Mobility in soil

The product is immiscible with 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 instructions

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

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products

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

TDG

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

15. Regulatory information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act
Not regulated.

Export Control List (CEPA 1999, Schedule 3)
Not listed.

Greenhouse Gases
Not listed.

Chromium oxide (CAS 1308-38-9)

Precursor Control Regulations
Not regulated.

International regulations

Stockholm Convention
Not applicable.

Rotterdam Convention
Not applicable.

Kyoto protocol
Not applicable.

Montreal Protocol
Not applicable.

Basel Convention
Not applicable.

International Inventories

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

*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                        | 02-May-2017
Revision date                     | -
Version #                         | 01
References
HSDB® - Hazardous Substances Data Bank
Registry of Toxic Effects of Chemical Substances (RTECS)
This safety data sheet was prepared in accordance with JIS Z 7253:2012. Additional information is given in the Material Safety Data Sheet. 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.