Portland Lime Cement Types M, N, N Billiard, and S

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Date of issue: 03/10/2015 Revision date: 03/10/2015 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Portland Lime Cement Types M, N, N Billiard, and S

Product code : Not available

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Construction and repair materials

1.3. Details of the supplier of the safety data sheet

Precision Packaging Inc. or Materials Packaging Corporation
10809 Executive Center Drive, Ste. 321
Little Rock, AR 72211
T 501-224-3882

1.4. Emergency telephone number

Emergency number : CHEMTREC (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin corrosion 1A
Serious Eye Damage 1
Skin Sensitization 1
Carcinogenicity 1A
Specific Target Organ Toxicity After Single Exposure 3

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :

GHS05 GHS07 GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause cancer. May cause respiratory irritation.

Prevention statements (GHS-US) : Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Do not breathe dusts. Wash hands thoroughly after handling. Wear protective gloves and clothing as well as eye and face protection. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product.

Response statements (GHS-US) : If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Take off contaminated clothing and wash before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a doctor if ingested or skin / eye irritation persists or worsens. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.

Storage statements (GHS-US) : Store to keep product dry until use. Store locked up.

Disposal statements (GHS-US) : Dispose of contents and container in accordance with all local, state, and federal regulations.

Supplemental Information : Read and Follow all precautions listed in the Safety Data Sheet available on request or at Ashgrovepkg.com. Additional information on the selection and use of respirators can be found in the *NIOSH Respirator Selection Logic* (DHHS [NIOSH] Publication No. 2005-100) and the *NIOSH Guide to Industrial Respiratory Protection* (DHHS [NIOSH] Publication No. 87-116) available at http://www.cdc.gov/niosh/docs/87-116/.

This product contains greater than 0.1% crystalline silica. Crystalline silica has been linked to cancer, silicosis, and other lung problems in conditions of prolonged airborne over-exposure.

Keep product dry until use. Avoid contact with bleed water from wet product. Clothing saturated with wet product can result in delayed, serious alkali skin burns.

2.3. Other hazards

No additional information available.

2.4. Unknown acute toxicity (GHS-US)

Portland Lime Cement Types M: 76 % of the mixture consists of ingredient(s) of unknown acute toxicity.
Portland Lime Cement Types N: 63 % of the mixture consists of ingredient(s) of unknown acute toxicity.
Portland Lime Cement Types N Billiard: 47 % of the mixture consists of ingredient(s) of unknown acute toxicity.

Portland Lime Cement Types S: 42 % of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable.

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Cement, portland, chemicals	(CAS No) 65997-15-1	39 - 77	Skin Irrit. 2 Eye Dam. 1 Skin Sens. 1 STOT SE 3
Calcium hydroxide	(CAS No) 1305-62-0	5.5 - 20	Skin Irrit. 2 Eye Dam. 1 STOT SE 3
Magnesium oxide (MgO)	(CAS No) 1309-48-4	0.4 - 18	Not classified.
Gypsum (Ca(SO4).2H2O)	(CAS No) 13397-24-5	1.8 - 6.9	Not classified.
Iron oxide (Fe2O3)	(CAS No) 1309-37-1	0 - 5[1]	Not classified.
Limestone	(CAS No) 1317-65-3	2.5 - 4	Not classified.
Calcium oxide	(CAS No) 1305-78-8	1.7 - 2.8	Skin Irrit. 2 Eye Dam. 1 STOT SE 3
Flue dust, portland cement	(CAS No) 68475-76-3	1.3 - 2.2	Skin Irrit. 2 Eye Dam. 1 Skin Sens. 1 STOT SE 3
Quartz	(CAS No) 14808-60-7	0.13 - 0.19	Carc. 1A STOT RE 1
Titanium dioxide	(CAS No) 13463-67-7	0.15[2]	Carc. 2* * airborne, unbound particles of respirable size

[1] Portland Lime Cement Types M, N, and S
[2] Portland Lime Cement Types N, and S

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice/attention.

First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing. Wash contaminated clothing before reuse. Get immediate medical advice/attention.

First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.

First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause respiratory tract irritation.

Symptoms/injuries after skin contact : Causes severe skin burns. Symptoms may include redness, pain, blisters. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. May cause sensitization by skin contact.

Symptoms/injuries after eye contact : Causes serious eye damage. May cause burns. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Treat for surrounding material.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Product does not burn; however its packaging may. Products of combustion may include, and are not limited to: oxides of carbon.

5.3. Advice for firefighters

Firefighting instructions : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Avoid contact with skin and eyes.

6.2. Methods and material for containment and cleaning up

For containment : Contain spill, then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up : Vacuum or sweep material and place in a disposal container. Provide ventilation.

6.3. Reference to other sections

No additional information available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid generating and breathing dust. Do not swallow. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Handle and open container with care. When using do not eat, drink or smoke.

Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Do not store in an area equipped with emergency water sprinklers.Clean up spilled material promptly.

7.3. Specific end use(s)

No additional information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Cement, portland, chemicals (65997-15-1)		
USA ACGIH	ACGIH TWA (mg/m³)	1 mg/m³ (respirable fraction)
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)

Calcium hydroxide (1305-62-0)		
ACGIH	ACGIH TWA (mg/m³)	5 mg/m³
OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)

Magnesium oxide (1309-48-4)		
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m^3

Gypsum (Ca(SO4).2H2O) (13397-24-5)		
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³ (inhalable fraction)
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m^3 (total dust) 5 mg/m^3 (respirable fraction)

Iron oxide (Fe2O3) (1309-37-1)		
ACGIH	ACGIH TWA (mg/m³)	5 mg/m³ (respirable fraction)
OSHA	OSHA PEL (TWA) (mg/m³)	10 mg/m³ (fume) 15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)

Limestone (1317-65-3)		
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³ (total dust)
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m^3 (total dust) 5 mg/m^3 (respirable fraction)

Calcium oxide (1305-78-8)		
USA ACGIH	ACGIH TWA (mg/m³)	2 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³

Flue dust, portland cement (68475-76-3)		
ACGIH	ACGIH TLV (mg/m³)	10 mg/m³ (as inhalable fraction, PNOS) 3 mg/m³ (as respirable fraction, PNOS)
OSHA	OSHA PEL (mg/m³)	15 mg/m³ (as total dust, PNOR) 5 mg/m³ (as respirable fraction, PNOR)

Quartz (14808-60-7)		
USA ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m3)	(10 mg/m^3)/(%SiO_2+2) (respirable fraction) (30 mg/m^3)/(%SiO_2+2) (dust) (250)/(%SiO_2+5) mppcf (respirable fraction)

Titanium dioxide (13463-67-7)		
ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust)

8.2. Exposure controls

Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Hand protection : Wear suitable gloves.

Eye protection : Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).

Skin and body protection : Wear suitable clothing common to do-it-yourself projects.

Respiratory protection : A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

Environmental exposure controls : Maintain levels below Community environmental protection thresholds.

Other information : Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Dry powder mix

Appearance : Sanded powder

Colour : Varies

Odour : Odourless.

Odour threshold : No data available.

pH : 10 - 12 (when wet)

Relative evaporation rate (butylacetate=1) : No data available.

Melting point : No data available.

Freezing point : No data available.

Boiling point : No data available.

Flash point : No data available.

Self ignition temperature : No data available.

Decomposition temperature : No data available.

Flammability (solid, gas) : Not flammable.

Vapour pressure : No data available.

Relative vapour density at 20 °C : No data available.

Relative density : 3.1 - 3.4

Solubility : No data available.

Log Pow : No data available.

Log Kow : No data available.

Viscosity, kinematic : No data available.

Viscosity, dynamic : No data available.

Explosive properties : No data available.

Oxidising properties : No data available.

Explosive limits : No data available.

9.2. Other information

VOC content : No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use. An alkali reaction from components of portland cement will corrode aluminum.

10.2. Chemical stability

Stable under normal storage conditions. Keep dry in storage.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use. Do not mix with other chemcals.

10.4. Conditions to avoid

Moisture – product must be kept dry until ready to use. Incompatible materials.

10.5. Incompatible materials

Strong acids.

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified.

Portland Lime Cement Types M, N, N Billiard, and S	
LD50 oral rat	> 2000 mg/kg, rat
LD50 dermal rabbit	> 2000 mg/kg, rabbit
LC50 inhalation rat	> 5 mg/l/4h

Calcium hydroxide (1305-62-0)	
LD50 oral rat	7340 mg/kg

Magnesium oxide (1309-48-4)	
LD50 oral rat	>5000 mg/kg

Iron oxide (Fe2O3) (1309-37-1)	
LD50 oral rat	> 10000 mg/kg

Limestone (1317-65-3)	
LD50 oral rat	6450 mg/kg

Calcium oxide (1305-78-8)	
LD50 oral rat	> 2000 mg/kg

Flue dust, portland cement (68475-76-3)	
LD50 dermal rabbit	≥ 2000 mg/kg
LC50 inhalation rat	>6.04 mg/l/4h

Titanium dioxide (13463-67-7)	
LD50 oral rat	> 10000 mg/kg

Skin corrosion/irritation : Causes severe skin burns.

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Based on available data, the classification criteria are not met.

Carcinogenicity : May cause cancer.

Iron oxide (Fe2O3) (1309-37-1)	
IARC group	3 - Not classifiable

Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	2 - Known Human Carcinogens

Titanium dioxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans (airborne, unbound particles of respirable size)

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

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated exposure) : Based on available data, the classification criteria are not met.

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

Symptoms/injuries after inhalation	:	May cause respiratory tract irritation.
Symptoms/injuries after skin contact	:	Causes severe skin burns. Symptoms may include redness, pain, blisters. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. May cause sensitisation by skin contact.
Symptoms/injuries after eye contact	:	Causes serious eye damage. May cause burns. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/injuries after ingestion	:	May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No ecological consideration when used according to directions. Do not flush to sewer or allow to enter waterways.

12.2. Persistence and degradability

Portland Lime Cement Types M, N, N Billiard, and S	
Persistence and degradability	No data available.

12.3. Bioaccumulative potential

Portland Lime Cement Types M, N, N Billiard, and S	
Bioaccumulative potential	No data available.

12.4. Mobility in soil

Portland Lime Cement Types M, N, N Billiard, and S	
Ecology - soil	No data available.

12.5. Other adverse effects

Other adverse effects : No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

SECTION 14: Transport information

In accordance with DOT

Not regulated for transport.

Additional information

Other information : No supplementary information available.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

Gypsum (Ca(SO4).2H2O)	CAS No 13397-24-5

15.2. US State regulations

Portland Lime Cement Types M, N, N Billiard, and S	
State or local regulations	This product contains Crystalline Silica, Quartz and may also contain trace amounts of other chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16: Other information

Date of issue : 03/10/2015

Other information : None.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product