

Section 1. Identification

Product Descriptions (GHS):	Portland Cement Type IT
Other means of identification: Cement	Type IT (ternary – pozzolan/ash and limestone blended)
Chemical name:	Composed of calcium compounds, calcium and aluminum amorphous silicate compounds, crystalline silica and other compounds containing calcium, silica, aluminum and minor amounts of iron and other metals make up the majority of this product. <i>Usó de la Sustancia/Mezcla:</i> Materiales de construcción, un ingrediente básico en concreto.
Manufacturers Name:	CEMEX
Address:	CEMEX PUERTO RICO, INC. Street PR-123, Km. 8 Ponce, PR 00733 Phone: (787) 503-0000
Emergency telephone number:	1-800-424-9300/1+703-527-3887 CHEMTREC

Section 2. Hazards Identification

Estado OSHA/HCS:	This material, as individual components and resulting mixture, is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Category Classification(s):	EYE, SKIN, RESPIRATORY SYSTEM AND GASTROINTESTINAL CORROSION/IRRITATION – Category 1 EYE DAMAGE – Category 1 SKIN SENSITIZATION – Category 1 CARCINOGENICITY/INHALATION – Category 1A SINGLE TARGET ORGAN TOXICITY (REPEATED EXPOSURE) Lungs – Category 1 & 21

GHS label elements:

Hazard pictograms:



Signal word:	Danger
Hazard statements:	Causes severe skin burns and eye damage May cause an allergic skin reaction. Causes serious eye irritation/damage May cause cancer (Inhalation, Dermal). Causes damage to lungs; kidneys and autoimmune system through prolonged or repeated inhalation exposure May cause damage to organs (eye, lung/respiratory system, Skin, kidney) through prolonged or repeated exposure (Dermal, Inhalation)
Precautionary Statements:	P201: Obtain special instructions before use P202: Do not handle until all safety precautions have been read and understood P260: Do not breathe dusts or mists P264: Wash skin thoroughly after manually handling. Wash clothing, hands, forearms, and face thoroughly after handling Contaminated work clothing must not be allowed out of the workplace P270: Do not eat, drink, or smoke when using this product. P281: use personal protective equipment (PPE) appropriately as needed. Wear eye protection, protective clothing, protective gloves when manually handling this product P301+P330+P331: If product enters mouth or is swallowed: rinse mouth. Do NOT induce vomiting P302 + P352: If on skin: Wash with plenty of soap and water P303+P361+P353: If on skin (or hair) remove immediately all contaminated clothing and rinse skin with water or in shower P304+P112: If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P3S1+p338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation continues, get medical advice/attention P308+_313: If exposed or concerned, unwell or irritation of the eyes, skin, mouth, or throat/nasal passages persist: Get medical advice/attention. Immediately call a doctor or POISON CENTER Get medical advice/attention if you feel unwell Specific treatment (see Section 4 on this label) If skin irritation or rash occurs: Get medical advice/attention Take off contaminated clothing. Wash contaminated clothing before

reuse Dispose of contents/container to comply with Local/regional/national regulations Avoid creating dust when handling, using, cleaning up or storing this product. Use with adequate ventilation to keep exposures below recommended exposure limits.

Other Hazards: Trace amounts of naturally occurring chemicals might be detected during chemical analysis. Trace constituents may include insoluble residue, some of which may be free Quartz (crystalline silica), calcium oxide (Also known as lime or quick lime), magnesium oxide, potassium sulfate, sodium sulfate, chromium compounds (including hexavalent chromium), and nickel compounds

Section 3. Composition / Information on Ingredients

Substance/mixture: Blended Cement – mixture, IT Types

Chemical name: Calcium oxides and compounds; calcium and aluminum morphous silicates and crystalline silica make up the majority of this product – amorphous silicate and calcium compounds can contain small amounts of iron and other metals as well as significant amounts of calcium and aluminum.

Número de CAS / Otro Identificador:

CAS Number: Does not apply

Product Code: Does not apply

Nombre de Componentes:	%	Número de CAS
Portland Cement Clinker	40 - 80	65997-15-1
Gypsum	4 - 9	7778-18-9
Pozzolan	0 - 15	1302-93-8 1332-93-8
Slag	0 -12	65996-69-2
Quartz and cristobalite (crystalline silica)	0 - 4.5	14808-60-7 14464-46-1

Any concentration shown as a range is to protect confidentiality or is due to process or product variation(s). The following elements may be present as oxides: aluminum, calcium, iron, magnesium, nickel, phosphorous, potassium, silicon, sulfur, titanium, and vanadium.” Ashes including fly ash and fluidized bed combustion ash are identified by CAS number 68131-74-8. The exact composition of the ash is dependent on the fuel source

and flue additives composed of a large number of constituents. The Classification of the final substance is dependent on the presence of specific identified oxides as well as other trace elements.

**Hexavalent chromium is included due to dermal sensitivity associated with the component. Hexavalent chromium is present in Portland cement in very small quantities. OSHA's Hexavalent Chromium (chromium VI) standard exempts the hexavalent chromium in Portland cement: "1910.1026(a)(1) – standard applies to occupational exposures to chromium (VI) in all forms and compounds in general industry, except: 1910.1026(a)(3) Exposures to Portland cement."

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Todas las concentraciones se muestran con un rango para proteger confidencialidad o debido a variación del proceso.

Section 4. First-Aid Measures

Description of necessary first aid measures:

- General:** Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
- Eye contact:** Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation:** Seek medical help if coughing or other symptoms persist. Inhalation of large amounts of Blended Cement requires immediate medical attention. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If the individual is not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.
- Skin contact:** Get medical attention immediately. Heavy exposure to Blended Cement dust, wet concrete or associated water requires prompt attention. Quickly remove contaminated clothing, shoes, and leather goods such as watchbands and belts. Quickly and gently blot or brush away excess Blended Cement. Immediately wash thoroughly with lukewarm, gently flowing water and nonabrasive pH neutral soap. Seek medical attention for rashes, burns, irritation, dermatitis and

prolonged unprotected exposures to wet cement, cement mixtures or liquids from wet cement. Burns should be treated as caustic burns.

Ingestion: Get medical attention immediately. Call a poison center or physician. Have victim rinse mouth thoroughly with water. **DO NOT INDUCE VOMITING** unless directed to do so by medical personnel. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Have victim drink 60 to 240 mL (2 to 8 oz.) of water. Stop giving water if the exposed person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Potential symptoms and effects from acute exposures (delayed or immediate):

Direct skin and eye contact with dust may cause irritation by mechanical abrasion. Some components of the product are also known to cause corrosive effects to skin, eye and mucous membranes. Ingestion of large amounts may cause gastrointestinal irritation and blockage. Inhalation of dust may irritate nose, throat, mucous members, and respiratory tract by mechanical abrasion. Coughing, sneezing, chest pain, shortness of breath, inflammation of mucous membrane, and flu-like fever may occur following exposures more than appropriate exposed limits. Repeated excessive exposure may cause pneumoconiosis, such as silicosis and other respiratory effects.

Eye contact: Causes serious eye damage

Inhalation: May cause respiratory irritation in minor amounts and burns if in high concentrations.

Skin contact: Causes severe burns. Discomfort or pain cannot be relied upon to alert a person to a serious injury. You may not feel pain or the severity of the burn until hours after the exposure. Chemical burns must be treated promptly by a physician. May cause an allergic skin reaction.

Ingestion: Not expected to be a significant route of entry. May cause burns to mouth, throat and stomach.

Recommendations for immediate medical attention / treatment:

If large quantities have been
Ingested or inhaled: Seek medical treatment and contact poison treatment specialist immediately.

Notes to physician: Treat symptomatically.

Specific treatments: There are no specific treatments.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Refiérase a la Información Toxicológica en la Sección 11.

Section 5. Fire-fighting Measures

Extinguishing media:

Suitable extinguishing media: Non-flammable. Use an extinguishing agent suitable for the surrounding fire.

Medios de extinción no adecuados: No utilice agua o compuestos halogenuros, excepto cuando grandes cantidades de agua puedan ser utilizadas para inundar pequeñas cantidades de cal.

Specific hazards arising from the chemical: No specific fire or explosion hazard.

Hazardous thermal decomposition products: Decomposition products may include the following materials: carbon dioxide, carbon monoxide sulfur oxides and metal oxide/oxides products.

Special protective actions for firefighters: Evacuate area. Fight fire with normal precautions from a reasonable distance. Moves containers from fire area if this can be done without risk.

Special protective equipment

for fire-fighters: Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection.

Section 6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

No action shall be taken involving any personal risk or without suitable training. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. For personal protective clothing requirements, please see Section 8.

For non-emergency personnel: Evacuate area, if necessary. Contact emergency personnel, if needed. Do not breathe dust. Stay upwind.

For emergency responders: Evacuate surrounding areas if necessary. Keep unnecessary and unprotected personnel from entering. Do not breathe dust. Provide adequate ventilation.

Environmental precautions: Avoid release to the environment. Contain the spill to avoid the discharge of spilled material into drains, surface waters and/or groundwater. If the spilled material enters any drainage systems, surface waters and/or groundwater, follow all applicable local, state and federal laws and regulations for additional clean-up and/or reporting requirements.

Methods and materials for containment and cleaning up

Small and large spills: Wear appropriate personal protective equipment as described in Section 8 for cleaning, containing, and removing the spill. Minimize generation of dust. For small spills, clean with a vacuum with a filtration system sufficient to remove and prevent recirculation of cement dust (a vacuum equipped with a high-efficiency particulate air (HEPA) filter is recommended). For large spills, use control dust measures and carefully scoop or shovel into clean dry container (avoiding creation of airborne dusts) for later reuse or disposal. DO NOT USE COMPRESSED AIR TO CLEAN SPILLS. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and Storage

Precautions for safe handling:

Protective measures: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure by obtaining and following special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Advice on general occupational hygiene: Eating, drinking, and smoking should be prohibited in areas where this material is handled stored and processed. Workers should wash hands and face before eating, drinking and smoking.

Conditions for safe storage: Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances.

Section 8. Exposure Controls / Personal Protection

Control Parameters
Occupational Exposure Limits

Nombre de Componente	Límite de Exposición
Clinker de Cemento Portland	ACGIH TLV (Estados Unidos, 3/2012). TWA: 1 mg/m ³ 8 horas. Forma: Respirable NIOSH REL (Estados Unidos, 6/2009). TWA: 5 mg/m ³ 10 horas. Forma: Respirable TWA: 10 mg/m ³ 10 horas. Forma: Total OSHA PEL (Estados Unidos, 6/2010). TWA: 5 mg/m ³ 8 horas. Forma: Respirable TWA: 15 mg/m ³ 8 horas. Forma: Total
Cuarzo (Sílice Cristalina)	ACGIH TLV (Estados Unidos, 3/2012). TWA: 0.025 mg/m ³ 8 horas. Forma: Respirable NIOSH REL (Estados Unidos, 6/2009). TWA: 0.05 mg/m ³ 8 horas. Forma: Respirable OSHA PEL Z-3 (Estados Unidos, 9/2005). TWA: 10mg/m ³ Dividido por %SiO ₂ + 2: Respirable TWA: 30mg/m ³ Dividido por %SiO ₂ + 2: Total
Puzolana	ACGIH TLV (Estados Unidos, 3/2012). TWA: 10 mg/m ³ 8 horas. Forma: Total NIOSH REL (Estados Unidos, 6/2009). TWA: 5 mg/m ³ 10 horas. Forma: Respirable

	<p>TWA: 10 mg/m³ 10 horas. Forma: Polvo Total OSHA PEL (Estados Unidos, 6/2010). TWA: 5 mg/m³ 8 horas. Forma: Respirable TWA: 15 mg/m³ 8 horas. Forma: Polvo Total</p>
Slag	
Yeso	<p>ACGIH TLV (Estados Unidos, 3/2012) TWA: 10 mg/m³ 8 horas. Forma: Respirable NIOSH REL (Estados Unidos, 6/2009) TWA 5 mg/m³ 8 horas. Forma: Respirable TWA 10 mg/m³ 8 horas. Forma: Total OSHA PEL Z-1 (Estados Unidos, 2/2006) TWA 5 mg/m³ 8 horas. Forma: Respirable TWA 15 mg/m³ 8 horas. Forma: Total</p>
Partículas no regulas (polvo total)	<p>ACGIH TLV (Estados Unidos, 3/2012) TWA: 3 mg/m³ 8 horas. Forma: Respirable TWA: 10 mg/m³ 8 horas. Forma: Polvo Total OSHA PEL (Estados Unidos, 6/2010). TWA: 5mg/m³ 8 horas. Forma: Respirable TWA: 15 mg/m³ 8 horas. Forma: Polvo Total</p>

Appropriate engineering controls: Use only with adequate ventilation. If user operations generate dust, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual Protection Measures:

Hygiene measures: Clean water should always be readily available for skin and (emergency) eye washing. Periodically wash areas contacted by Blended Cement with a pH neutral soap and clean, uncontaminated water. If clothing becomes saturated with Blended Cement, garments should be removed and replaced with clean, dry clothing. Remove protective equipment and saturated clothing before entering eating areas.

Eye/face protection: To prevent eye contact, wear safety glasses with side shields, safety goggles or face shields when handling dust or wet Cement. Wearing contact lenses when working with cement is not recommended.

PPE:

Hand protection: Use impervious, waterproof, and alkali-resistant gloves. Do not rely on barrier creams in place of impervious gloves. Do not get

Body protection:	Blended Cement inside gloves. Recommended material: Nitrile® Use impervious, waterproof, abrasion and alkali-resistant boots and protective long-sleeved and long- legged clothing to protect the skin from contact with wet Blended Cement. To reduce foot and ankle exposure, wear impervious boots that are high enough to prevent Blended Cement from getting inside them. Do not get Blended Cement inside boots, shoes, or gloves. Remove clothing and protective equipment that becomes saturated with cement and immediately wash exposed areas of the body.
Other skin protection:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved. Footwear and other gear to protect the skin should be approved by a specialist before handling this product.
Respiratory protection:	Use a properly fitted, NIOSH approved particulate filter respirator if a risk assessment indicates this is necessary (exposures above an applicable occupational exposure value). Respirator selection must be based on known or anticipated exposure levels, the hazards of the product, and assigned protection factor of the selected respirator as per OSHA 29 CFR 1910.134

Section 9. Physical and Chemical Properties

Apariencia:

Physical State:	Solid
Color:	Gray or White
Odor:	Odorless.
Odor threshold:	Not available.
pH:	12 a 13
Melting point:	Not available.
Boiling point:	>1000°C (>1832°F)
Flash point:	Not flammable. Not combustible..
Burning time:	Not available
Burning rate: (sólido, gas):	Not applicable.
Límites Explosivos (Inflamables) Bajos y Altos:	Not applicable.
Evaporation rate:	No Disponible
Vapor density:	No Disponible
Relative density:	2.7 to 3.15

Solubility:	Slightly soluble in water
Solubility in water:	0.1 to 1%
Partition coefficient n-octanol/water:	Not available.
Auto-ignition temperature:	Not applicable.
Decomposition temperatura:	Not applicable.
Viscosity:	Not available.
Volatilidad:	Not available.
VOC (w/w):	0% (w/w)

Section 10. Stability and Reactivity

Reactivity:	Reacts slowly with water forming hydrated compounds, releasing heat and producing a strong alkaline solution until reaction is substantially complete.
Chemical stability:	The product is stable.
Conditions to avoid:	No hay datos específicos.
Incompatible materials:	Reactive or incompatible with the following materials: oxidizing materials, acids, aluminum and ammonium salt. Blended Cement is highly alkaline and will react with acids to produce a violent, heat-generating reaction. Toxic gases or vapors may be given off depending on the acid involved. Reacts with acids, aluminum metals and ammonium salts. Aluminum powder and other alkali and alkaline earth elements will react in wet mortar or concrete, liberating hydrogen gas. Limestone ignites on contact with fluorine and is incompatible with acids, alum, ammonium salts, and magnesium. Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride yielding possible fire and/or explosions. Silicates dissolve readily in hydrofluoric acid producing a corrosive gas — silicon tetrafluoride.
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced

Section 11. Toxicological Information

Toxicological Effects Information

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Acute toxicity: Blended Cement LD50/LC50 = Not available

Irritation/Corrosion: Skin: May cause serious burns in the presence of moisture.
Eyes: Causes serious eye damage. May cause burns in the presence of moisture.
Respiratory: May cause respiratory tract irritation.

Sensitization: May cause dermal sensitization due to the potential presence of trace amounts of hexavalent chromium

Carcinogenicity Classification:

Nombre Producto / Ingrediente	OSHA	IARC	NPT	ACGIH	EPA	NIOSH
Portland Cement Clinker	—	—	—	A4		
Quartz (crystalline silica)	-	1	Known to be a human carcinogen.	A2	-	+

Specific target organ toxicity (single exposure):

Nombre	Categoría	Ruta de Exposición	Órganos Objetivos
Quartz (crystalline silica)	Categoría 3	Inhalación	Respiratory tract irritation

Routes of exposure - Dermal contact, Eye contact, Inhalation, and Ingestion.

Potential acute health effects:

Eye contact: Causes serious eye damage
Inhalation: May cause respiratory irritation.
Skin contact: Causes severe burns. May cause an allergic skin reaction
Ingestion: May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics:

Eye contact: Adverse symptoms may include the following: pain, watering, redness:

Inhalation: Adverse symptoms may include the following: respiratory tract irritation, coughing.

Skin contact:	Adverse symptoms may include the following: pain or irritation, redness, blistering may occur, skin burns, ulcerations and necrosis may occur
Ingestion:	Adverse symptoms may include the following: stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure:

Short term exposure:

Potential immediate effects: No known significant effects or critical hazards.
Potential delayed effects: No known significant effects or critical hazards.

Long term exposure:

Potential immediate effects: No known significant effects or critical hazards.
Potential delayed effects: See chronic health effects below.

Potential chronic health effects:

General: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation and lung damage and potentially lung cancer. If sensitized to hexavalent chromium, a severe allergic dermal reaction may occur when subsequently exposed to very low levels.

Carcinogenicity: Quartz (crystalline silica) is considered a hazard by inhalation. IARC has classified Quartz (crystalline silica) as a Group 1 substance, carcinogenic to humans. This classification is based on the findings of laboratory animal studies (inhalation and implantation) and epidemiology studies that were considered sufficient for carcinogenicity. Excessive exposure to Quartz (crystalline silica) can cause silicosis, a non-cancerous lung disease. NTP, NIOSH and ACGIH also list crystalline silica as a carcinogen.

Mutagenicity: No known significant effects or critical hazards

Teratogenicity: No known significant effects or critical hazards

Developmental effects: No known significant effects or critical hazards

Fertility effects: No known significant effects or critical hazards.

Medidas numéricas de Toxicidad:

Estimados de Toxicidad aguda: No hay data disponible.

Section 12. Ecological

Toxicity:

Persistence and degradability: There are no data available.

Bioaccumulation potential: There are no data available.

Mobility in soil:

Soil/water partition coefficient (K_{oc}): Not available

Other adverse effects: No known significant effects or critical hazards

Section 13. Disposal Considerations

Disposal methods: Salvage spilled cement material where possible. Uncontaminated cement material may be reused. Dispose of waste material in accordance with local, state, and federal laws and regulations.

Section 14. Transport Information

Special precautions for user: Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according A Anexo II de MARPOL 73/ 78 y el IBC Código: Not Regulated..

Transport Parameters	DOT	IMDG	IATA
UN Number	Not Regulated	Not Regulated	Not Regulated

UN Proper Shipping Name	-	-	-
Transport Hazard Class	-	-	-
Packing Group	-	-	-
Environmental Hazard	None	None	None
Additional Information	-	-	-

Section 15. Regulatory Information

Status under USDOL-OSHA Hazard Communication Rule, 29 CFR 1910.1200 This product is considered a "hazardous chemical" under this regulation and should be part of any hazard communication program.

Status under CERCLA/SUPERFUND 40 CFR 117 and 302 Not listed. Categoría de Riesgo bajo SARA (Título III), secciones 311 y 312

The product qualifies as a "hazardous substance" with delayed health effects.

Status under SARA (Title III), Section 313

This cement product does not contain Emergency Planning and Community Right to Know (EPCRA") Section 313 chemicals more than the applicable de minimis concentration specified in EPCRA Section 313 Section 372.38(a). Trace amounts of naturally occurring chemicals might be detected during chemical analysis.

Status under TSCA (as of May 1997) The ingredients of this product are listed on the TSCA inventory or are exempt.

Status under the Federal Hazardous Substances Act This product is a "hazardous substance" subject to statutes promulgated under the subject act.

Section 16. Other Information

History:

Date of issue (mm/yyyy): 01/30/2024

Versión: 1

Nota a los Lectores:

La información contenida aquí es precisa, según nuestro mejor conocimiento. Sin embargo, ninguno de los suplidores mencionados, ni ninguna de sus subsidiarias, asume cualquier responsabilidad alguna por la precisión o lo completo de la información aquí contenida. La determinación final de la idoneidad de cualquier material es responsabilidad única del usuario. Todos los materiales pueden presentar peligros desconocidos y deben ser utilizados con precaución. Aunque algunos de los riesgos se describen aquí, nosotros no podemos garantizar que son los únicos riesgos que existen.