Integrity PowerPack™

Safety Data Sheet

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Integrity PowerPack
PRODUCT CODES: INTEGRITY-POWERPACK-30LB

MANUFACTURER: Creative Concrete Technologies, LLC
STREET ADDRESS: 3336 Barber Mill Rd
Clayton, NC 27520

INFORMATION PHONE: 919-275-2121
EMERGENCY PHONE: Chemtrec 800-424-9300

DATE PREPARED: October 27, 2023

SECTION 2: HAZARDS IDENTIFICATION

GHS INFORMATION:
GHS Classification:
Combustible Dust
Acute toxicity, dermal - Category 4
Acute toxicity, dust - Category 4

GHS Label Elements:
Signal Word: WARNING
GHS Pictogram: GHS07 Harmful

HAZARD STATEMENTS:
None

HAZARDS NOT OTHERWISE CLASSIFIED:
May form combustible dust concentration in air. The product is under certain conditions capable of dust explosion.

HMIS/NFPA HAZARD CLASSIFICATION:
HEALTH: 1 **FLAMMABILITY: 1** **REACTIVITY: 0** **PERSONAL PROTECTIVE EQUIPMENT: B**

CARCINOGENICITY: Assessment of carcinogenicity: The whole of the information assessable provides no indication of a carcinogenic effect.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS # or Formula	OSHA PEL	ACGIH TLV	WEIGHT %
Calcium-Silica-Alumina[1]	$CaO–SiO_2–Al_2O_3$	Not Listed[2]	Not Listed[2]	40-70
Fumed silica[3]	112945-52-5	Not Listed[2]	Not Listed[2]	2-30
Acrylic polymer(s)	trade secret	Not Listed[2]	Not Listed[2]	5-25
Calcium Carbonate	471-34-1	Not Listed[2]	Not Listed[2]	<0.1

(1) These substances are combined in a fused silicate. The free oxides are not present and are fully combined in the fused silicate. The fused mass is cooled to ambient temperature at a fast rate to prevent crystallization. Fine powder is made by fine grinding of the fused mass. The resulting powder is fully amorphous under X-ray diffraction measurements.
(2) Exposure to this product may be covered by OSHA inert or nuisance dust limits of 15 mg/m^3 for total dust and 5 mg/m^3 for respirable portion.
(3) This is also known as pyrogenic silica. It is an amorphous product obtained by high temperature oxidation of volatile silicon compounds in the vapor phase. The fully fused, microscopic droplets of amorphous silica form during rapid cooling to ambient temperature which prevents crystallization. The resulting fine powder is fully amorphous under X-ray diffraction measurements.

SECTION 4: FIRST AID MEASURES

EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Wash affected eyes for at least 15 minutes under running water with eyelids held open. If irritation develops, seek medical attention.

SKIN: Remove contaminated clothing. Wash thoroughly with soap and water. If irritation develops, seek medical attention.

INGESTION: Rinse mouth out with water. Induce vomiting if significant quantities ingested. Seek medical attention.

INHALATION: Immediately remove victim to fresh air. If breathing difficulties or irritation occur, seek medical attention.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: May aggravate existing pulmonary condition if high dust situation is created. Dusting conditions should not occur under normal use.

NOTES TO PHYSICIAN: May cause asthma-like (reactive airways) symptoms. Bronchodilators, expectorants, antitussives and corticosteroids may be of help. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Repeated excessive exposure may aggravate preexisting lung disease.

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA:
Suitable extinguishing media: Carbon dioxide (CO2). Dry powder. Water spray.
Unsuitable extinguishing media: No information available.

SPECIAL FIRE FIGHTING PROCEDURES: Isolate the area immediately for at least 50 meters in all directions. Avoid whirling up the material because of the danger of dust explosion. DO NOT use a solid stream of water. A solid stream of water directed at this material may create a potentially explosive airborne dust mixture.

SPECIFIC HAZARDS DURING FIRE: Material as sold is combustible; burns vigorously with intense heat. Dust at sufficient concentrations can form explosive mixtures with air.

ADVICE FOR FIRE-FIGHTERS: Wear self-contained breathing apparatus and protective suit.

SECTION 6: ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear appropriate safety equipment. Keep unprotected persons away. Do not discharge into drains or groundwater. For small amounts: Pick up with suitable appliance and dispose of. Use water spray to minimize dust. For large amounts: Contain with dust binding material and dispose of. **Avoid raising dust.** Dispose of in accordance with local, state and federal regulations.

FURTHER ACCIDENTAL RELEASE MEASURES: Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Avoid the formation and build-up of dust: danger of dust explosion.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Closed containers should only be opened in well-ventilated areas. Local exhaust ventilation may be required to control dust and reduce exposure to vapors. Observe good industrial hygiene and safe working practices. Avoid dust formation and wear proper PPE. To prevent dust explosions employ bonding and grounding for operations capable of generating static electricity. Protect all equipment from explosions by following the guidelines in NFPA-68 and NFPA-69. For electrical equipment follow local codes and electrical classification NFPA-70 (the National Electrical Code), class II, division 2, group G.

STORAGE: Store in original container. Avoid temperature extremes during storage; ambient temperature preferred. Keep away from heat, sparks, flame, and other sources of ignition.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENTS WITH LIMIT VALUES THAT REQUIRE MONITORING AT THE WORKPLACE:

Calcium carbonate:
ACGIH, US: TWA value 1 mg/m3

EXPOSURE CONTROLS: Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

RESPIRATORY PROTECTION: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or when indicated by your risk assessment process. In dusty or misty atmospheres, use half-mask or full-face air-purifying respirator equipped with NIOSH or MSHA-approved high efficiency filters for protection against pneumoconiosis-producing dust. An airline respirator may be required where dust levels are extremely high.

HAND PROTECTION: Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized.

EYE PROTECTION: Safety glasses with side-shields, goggles or face shield. Avoid contact lenses.

SKIN PROTECTION: Wear protective clothing as necessary to minimize contact, such as work gloves, long sleeves and long pants. Handle in accordance with good industrial hygiene and safety practice.

HYGIENIC WORK PRACTICES: Do not allow dust to get into eyes, be inhaled, be swallowed, or remain on skin if irritation occurs. Practice good personal hygiene. Wash or shower after use. Launder clothes as normal.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: White powder
ODOR: Acrylic-like
ODOR THRESHHOLD: No data available
pH: 7.0 – 10.0 (1% solution)
RELATIVE VAPOR DENSITY (AIR = 1): Not applicable
RELATIVE DENSITY (WATER = 1): 0.4000 – 0.7000
MELTING TEMPERATURE: No data available
EVAPORATION RATE: Not applicable
SOLUBILITY IN WATER: Partly soluble
VAPOR PRESSURE: Not applicable
AUTO IGNITION TEMPERATURE: No data available
FLASH POINT: Not applicable
FLAMMABILITY: May form combustible dust concentrations in air
PARTITION COEFFICIENT: No data available
MOLECULAR WEIGHT: No data available
PERCENT VOLATILITY: 0.50 - 3.00 %
NOTE: The physical data presented above are typical values and should not be construed as a specification.

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable
REACTIVITY: Components of this material act as pozzolans: When mixed with cement and concrete products in its intended use, the components react with the lime and alkalis present to form calcium silicate hydrates. This reaction does not occur in polymer and resin systems; the material is inert in such systems.
CONDITIONS TO AVOID: Avoid dust formation. Avoid deposition of dust. Avoid all sources of ignition: heat, sparks, open flame. See SDS section 7 - Handling and storage.
INCOMPATIBILITY (MATERIAL TO AVOID): Strong acids, strong bases, oxidizing agents, reducing agents
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Heating above the decomposition temperature will release acrylic monomers.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such information is available. Routes for exposure for solids and liquids are ingestion and inhalation but may include eye and skin contact.

ACUTE TOXICITY/EFFECTS

ACUTE TOXICITY: Represents short term exposures with immediate effects. No chronic/delayed effects known unless otherwise noted.

DERMAL: Prolonged skin contact is unlikely to result in absorption of harmful amounts. For similar material(s): LD50, Rabbit, > 5,000 mg/kg No deaths occurred at this concentration. Acrylic polymer(s): The dermal LD50 has not been determined. Calcium carbonate: Type of value: LD50. Species: Rat, > 2,000 mg/kg No deaths occurred at this concentration.

EYES: Based on testing for product(s) in this family of materials: May cause slight temporary eye irritation. Corneal injury is unlikely. Acrylic polymer(s): Essentially non-irritating to eyes. Calcium carbonate: May cause slight eye irritation. Dust may irritate eyes.

INHALATION: No adverse effects are anticipated from single exposure to dust. Dust may cause irritation of the upper respiratory tract (nose and throat) and lungs. For similar material(s): LC50, Rat, male and female, 4 Hour, dust/mist, > 3.36 mg/l No deaths occurred at this concentration. Acrylic polymer(s): The LC50 has not been determined. Calcium carbonate: LC50, Rat, male and female, 4 Hour, dust/mist, > 3 mg/l The LC50 value is greater than the Maximum Attainable Concentration. No deaths occurred at this concentration.

INGESTION: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. For similar material(s): LD50, Rat, > 5,000 mg/kg No deaths occurred at this concentration. Acrylic polymer(s): Single dose oral LD50 has not been determined. Calcium carbonate: LD50, Rat, female, > 2,000 mg/kg Fixed Dose Method No deaths occurred at this concentration.

SKIN IRRITATION/CORROSION: Based on testing for product(s) in this family of materials: Essentially nonirritating to skin. Acrylic polymer(s): Essentially nonirritating to skin. Calcium carbonate: Essentially nonirritating to skin. May cause drying and flaking of the skin.

SENSITIZATION: For skin sensitization: No relevant data found for material or components. For respiratory sensitization: No relevant data found for material or components.

CHRONIC TOXICITY/EFFECTS

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (REPEATED EXPOSURE): A 13-week inhalation study in rats of a compositionally similar acrylic powder showed inflammatory effects in the lung at concentrations of 6 mg/m3 for 6 hours per day, 5 days per week. These findings were consistent with high concentration exposure effects reported for other non-soluble dusts. Maintaining airborne dust concentrations within the recommended exposure limit is not expected to produce adverse effects within the lung.

MUTAGENICITY: Based on available data, the classification criteria are not met. Acrylic polymer(s): No relevant data found. Calcium carbonate: In vitro genetic toxicity studies were negative.

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

REPRODUCTIVE: Based on available data, the classification criteria are not met. Acrylic polymer(s): No relevant data found. Calcium carbonate: In animal studies, did not interfere with reproduction. In animal studies, did not interfere with fertility.

TERATOGENICITY: Based on available data, the classification criteria are not met. Acrylic polymer(s): No relevant data found. Calcium carbonate: Did not cause birth defects or any other fetal effects in laboratory animals.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY:

Toxicity to fish: LC50 (96 h) > 100 mg/l, Oncorhynchus mykiss (rainbow trout), OECD Test Guideline 203

Aquatic invertebrates: EC50 (48 h) > 100 mg/l, Daphnia magna (water flea), OECD Test Guideline 202

Aquatic plants: EC50 (72 h), Growth rate, > 100 mg/l, Algae (other), OECD Test Guideline 201

PERSISTENCE AND DEGRADABILITY: Inherent Biodegradability (OECD 302 B): This type of product is not biodegradable but readily bioeliminable. Emulsion polymer biodegradation is generally considered limited and dependant on polymer size and origin of treatment sludge. However, most of these polymers readily absorb onto water treatment sludge and therefore would be bioeliminable from effluents. Activated Sludge Respiratory Inhibition (OECD 209): >100 mg/l (non- inhibiting) No data are available for this material. The information shown is based on profiles of compositionally similar materials.

BIOACCUMULATIVE POTENTIAL: No data available.

MOBILITY IN SOIL: No relevant data found.

SECTION 13: WASTE DISPOSAL

DISPOSAL METHODS: Place powder in air-tight bags. For disposal, incinerate or landfill at a permitted facility in accordance with local, state, and federal regulations.

CONTAMINATED PACKAGING: Empty containers retain product residues. Follow label warnings even after container is emptied. Improper disposal or reuse of this container may be dangerous and illegal. Refer to applicable federal, state and local regulations.

SECTION 14: TRANSPORT INFORMATION

DOT: Not Regulated. Not dangerous goods.

IMO/IMDG: Not Applicable. Not dangerous goods. Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code.

SECTION 15: REGULATORY INFORMATION

IATA: Not Regulated for air transport. Not dangerous goods.

No data for the product. Regulatory information for reportable components:

US Toxic Substance Control Act (TSCA): The applicable CAS number is 65997-17-3, corresponding to "Glass Oxide." All the raw material components of the glass oxide are in the TSCA Inventory.
Canadian Domestic Substances List (DSL): All components are listed or exempt.
European Inventory of Existing Commercial Chemical Substances (EINECS): All components are listed or exempt.
US EPA CERCLA Hazardous Substances (40 CFR 302): None.
Superfund Amendments and Reauthorization Act of 1986 (SARA):

SARA 302: Not applicable
SARA 311/312: Combustible dust
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

U.S. Massachusetts RTK - Substance List:

No components are present in this product at a level which would require reporting under the statute.

U.S. New Jersey Worker and Community Right-to-Know Act:

No components are present in this product at a level which would require reporting under the statute.

U.S. Pennsylvania Worker and Community Right-to-Know Law:

No components are present in this product at a level which would require reporting under the statute.

U.S. Rhode Island Right to Know Law:

No components are present in this product at a level which would require reporting under the statute.

U.S. California Proposition 65:

This product contains a chemical that is at or below California Propositions 65's "safe harbor level" as determined via a risk assessment. Therefore, the chemical is not required to be listed as a Prop 65 chemical on the SDS or label.

SECTION 16: OTHER INFORMATION

DISCLAIMER: To the best of our knowledge the information contained here is accurate. 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. Neither the above-named manufacturer nor any of its distributors assumes any liability whatsoever for the accuracy or the completeness of the information contained herein. Final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.