SAFETY DATA SHEET

ZIRCON SAND; ZIRCON FLOUR; SPECTRALUX

Continental Mineral Processing Corp.
11817 Mosteller Road
Cincinnati, Ohio 45241
(513) 771-7190

SECTION 1: PRODUCT AND COMPANY INFORMATION

1.1 PRODUCT IDENTIFIER

Product Name: Zircon Sand; Zircon Flour; Spectralux
Product Grades: Zircon Sand (Unground); Premium Zircon Sand; Zircon Flour 200, 325, 400, 600; Z-Std.; Z-Coarse; Spectralux 1500, 3500, 4500, 5500, 6000, 7000.
Chemical Name: Zirconium silicate.

1.2 USES AND USES ADVISED AGAINST

Uses: Source of zirconium oxide, elemental zirconium and hafnium; abrasives, refractories, enamels refractory porcelain, catalysts, silicone rubbers; foundry mould; ceramic manufacture.

Uses advised against: This product is not intended to be used as:
Abrasive blasting media; or
Any product regulated by the U.S. Food and Drug Administration (FDA), including, but not limited to, human or animal food, drugs, medical devices, or cosmetics.

1.3 DETAILS OF THE SUPPLIER OF THE PRODUCT

Supplier name: Continental Mineral Processing Corp.
Address: P.O. Box 62005, Cincinnati, Ohio 45262-0005.
Corporate office telephone and fax: 1-513-771-7190 (Voice); 1-513-771-9153 (Fax)
Email: info@continentalmineral.com
Website: www.continentalmineral.com

1.4 EMERGENCY INFORMATION (USA): 1-513-771-7190 (Voice); 1-513-771-9153 (Fax).

SECTION 2: HAZARD IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Carcinogen: Category 1A
Specific Target Organ Toxicity – Repeated Exposure (STOT-RE): Category 2 - Respiratory
Eye Irritation: Category 2B
Skin Irritation: Category 2

2.2 GHS LABEL ELEMENTS

DANGER! Causes damage to organs (lungs) through prolonged or repeated inhalation exposure. May cause lung cancer. Causes eye and skin irritation.

Hazards not otherwise classified: This product contains trace amounts of the Naturally Occurring

Radioactive Materials (NORMs) uranium and thorium in concentrations too low to be regulated by the U.S. NRC or otherwise classified.

PRECAUTIONARY STATEMENTS
Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wear approved eye, skin and respiratory protection when handling. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Component Name and Chemical Name	CAS Registry Number	RTECS Number	Concentration
Zircon (Zirconium Silicate)	14940-68-2	ZH7070000	97 – 99 %
Kyanite (Aluminum Silicate)	1302-76-7	BD1450000	0.1 – 2 %
Aluminum Oxide, Non-Fibrous	1344-28-1	BD1200000	0.1 – 2 %
Titanium Dioxide	13463-67-7	XR2275000	Trace (<0.3%)
Quartz (Silicon Dioxide, Crystalline)	14808-60-7	VV7330000	Trace (<0.3%)

This product contains less than 0.05% NORMs as naturally occurring uranium and thorium.

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:
Inhalation: Move to fresh air and get medical attention if cough or other symptoms develop. If trouble breathing, seek immediate medical attention.
Eye Contact: Flush eyes with clean, flowing (low pressure) water for at least 15 minutes. Remove contact lenses if present and easy to do. Seek medical attention if pain or irritation persists.
Skin Contact: Brush off loose particles from skin and clothing. Wash skin with soap and water. Seek medical attention if irritation develops or persists.
Ingestion: No specific intervention is indicated. Seek medical attention if oral or gastrointestinal symptoms appear.
4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED
Refer to SECTION 11 of this SDS for detailed information on health effects.
4.3 IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED
Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

5.1 SUITABLE EXTINGUISHINGMEDIA
This product is compatible with all extinguishing media. Use extinguishing media appropriate local circumstances and the surrounding environment.
5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE
This product is non-flammable and cannot support combustion or participate in a dust explosion.
5.3 PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS
Use firefighting methods appropriate to local circumstances and the surrounding environment. Refer to SECTION 8.3 of this SDS for detailed information on protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES
Refer to PROTECTIVE EQUIPMENT recommended in SECTION 8.3 of this SDS during clean-up.
6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP
DO NOT USE COMPRESSED AIR TO MOVE MATERIAL. If spilled product is uncontaminated, collect using dustless method (HEPA vacuum or wet method) and place in appropriate container for use. If spilled product is contaminated: (a) use method appropriate for the nature of contamination; and (b) consider possible toxic or fire hazards associated with the contaminant. Collect spilled product in appropriate

containers for recycling or disposal. See SECTION 12 of this SDS for waste disposal information. Prevent spilled product from entering drains or waterways.

SECTION 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Read and understand the product label before using this product. Do not breathe dust. Avoid dust formation and accumulation in work area. Avoid contact with skin and eyes. Use normal precautions against bag breakage and spills. Observe precautionary statements on the label. Refer to PROTECTIVE EQUIPMENT recommended in SECTION 8.3 of this SDS during handling. Use gloves and wash hands before eating, drinking, applying cosmetics or smoking to minimize dust inhalation or ingestion of residue from hands. Wash hands before breaks and at the end of workday. Use engineering controls to maintain dust levels below exposure limits of SECTION 8.1 of this SDS.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITY

Store in a dry and well-ventilated area away from eating areas and break rooms. Practice good housekeeping in storage areas to prevent accumulation of dust. Ensure containers are properly labeled, protected from physical damage, and tightly closed when not in use.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 PERMISSIBLE EXPOSURE LIMITS

		Exposure Limits mg/m³		
		OSHA PEL 8-Hour TWA	ACGIH TLV 8-Hour TWA	NIOSH REL, Up to 10-Hour TWA
Chemical	**Percent**	5 mg/m³ (as Zr)	5 mg/m³ (as Zr)	5 mg/m³ (as Zr)
Zircon	97 - 99			
Aluminum silicate	0.1 - 2	15 mg/m³ (Total Dust); 5 mg/m³ (Respirable Fraction)	2 mg/m³ (Respirable Particulate Matter)	5 mg/m³ (Respirable Fraction) 10 mg/m³ (Total Dust)
Aluminum Oxide (non-fibrous)	0.1 - 2	15 mg/m³ (Total Dust); 5 mg/m³ (Respirable Fraction)	1 mg/m³ (Respirable Fraction)	Not established
Titanium Dioxide	<0.3%	15 mg/m³ (Total Dust)	0.2 mg/m³ Nanoscale Particles 2.5 mg/m³ Finescale Particles (Respirable Fraction)	2.4 mg/m³ Fine (Respirable Fraction) 0.3 mg/m³ UltraFine IDLH 5000 mg/m³
Crystalline Silica (Quartz)	<0.3	50 µg/m³ [25 µg/m³ Action Level] (Respirable fraction)	0.025 mg/m³ (Respirable Fraction)	0.05 mg/m³ IDLH 50 mg/m³ (Respirable fraction)

NOTES:

OSHA Permissible Exposure Limits (PEL) and ACGIH Threshold Limit Values (TLVs) are an 8-hour time-weighted average (TWA) concentration during a 40-hour work week. NIOSH Recommended Exposure Limit (REL) is a time-weighted average concentration for up to a 10-hour workday during a 40-hour work week.

IDLH are determined by NIOSH to be concentrations Immediately Dangerous to Life and Health above which only a highly reliable breathing apparatus, providing maximum worker protection, is permitted. NIOSH Current Intelligence Bulletin 63 defines “fine” titanium dioxide as all particle sizes collected by respirable particle sampling and “ultrafine” as the fraction of respirable particles with a primary particle diameter of <0.1 µm (<100 nm). ACGIH defines “Ultrafine” titanium dioxide as particles < 100 nm.

8.2 APPROPRIATE ENGINEERING CONTROLS

SAFETY DATA SHEET

ZIRCON SAND; ZIRCON FLOUR; SPECTRALUX

Use sufficient ventilation to keep exposure to airborne contaminants below the exposure limits listed in THIS SECTION. Identify points of dust generation such as conveyor and hopper discharges and equip with effective dust extraction system to control dust at its source. Maintain good housekeeping procedures to prevent dust accumulation on exposed surfaces. See: ACGIH "*Industrial Ventilation, A Manual of Recommended Practice (latest edition).*"

8.3 PERSONAL PROTECTIVE EQUIPMENT

Eye Protection: Wear protective safety goggles, face shield or safety glasses with side shields.

Skin Protection: Wear clothing sufficient to cover the skin, safety shoes, and impervious gloves for hand protection against dry material. Cleanse exposed skin with soap and water. Launder clothing after use.

Respiratory Protection: Use NIOSH/MSHA approved respiratory protection (air purifying or air supplying) with a type 100 (high efficiency) particulate cartridge or canister) where concentrations are above exposure limit values (see table below). A respiratory protection program that meets OSHA 29 CFR part 1910.134 and ANSI Z88.2 (latest version) requirements must be followed whenever workplace conditions warrant the use of a respirator.

Protection provided by air-purifying respirators is limited. Use a positive pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Sand- like crystalline solid (Unground form) to fine powder that can vary from gray/white to red / brown.
Odor : odorless
Odor threshold: Not applicable
pH: 6 -7.5 (Aqueous slurry)
Melting point/range: >2100℃ (>3812℉)
Boiling point: 6500 ℃ (11732 ℉)
Flash point: Not applicable; does not flash.
Evaporation rate: No data.
Flammability: Non-flammable.
Vapor pressure: No data.
Vapor density: No data.
Specific gravity: 4.6 – 4.7 g/cc (Bulk density = 100 – 175 lb/ft^3)
Water solubility: insoluble
Partition coefficient: n-octanol / water: No data.
Auto-ignition temperature: Not applicable.
Decomposition temperature: No data.
Viscosity: Not applicable.

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY: Reacts with hydrofluoric acid (HF) and hot concentrated alkali.
10.2 CHEMICAL STABILITY: Stable under recommended conditions of storage.
10.3 POSSIBILITY OF HAZARDOUS REACTIONS: Polymerization will not occur.
10.4 CONDITIONS TO AVOID: Avoid creating airborne dust.

10.5 INCOMPATIBILE MATERIALS: Hydrofluoric acid; hot concentrated alkali.
10.6 HAZARDOUS DECOMPOSITION PRODUCTS: None known.

SECTION 11: TOXICOLOGICAL PROPERTIES

11.1 INHALATION EXPOSURE

Zircon (Zirconium Silicate): Pulmonary granuloma in zirconium workers has been reported.

Crystalline Silica (Quartz): Inhalation of respirable crystalline silica (quartz) may result in silicosis, a serious lung disease (pneumoconiosis) that can occur after chronic exposure to airborne respirable crystalline silica (quartz). Silicosis may be progressive and cause lung lesions, changes in lung function, including wheezing, shortness of breath, cough and sputum production that may be disabling. Advanced silicosis may be fatal.

The International Agency for Research on Cancer (IARC) concluded that crystalline silica inhaled in the form of quartz from occupational sources is carcinogenic to humans (Group 1). See: IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Vo. 68, "Silica, Some Silicates…" (1997).

The National Toxicology Program (NTP) in its Ninth Annual Report on Carcinogens, classified respirable crystalline silica as a known human carcinogen.

There is evidence that exposure to respirable crystalline silica is associated with autoimmune diseases; increased risk of tuberculosis and kidney disease.

Aluminum Silicate and Aluminum Oxide (Non-Fibrous): Inhalation exposure to respirable dust particles that are not otherwise regulated can result in lung disease (pneumoconiosis).

Titanium Dioxide: Inhalation of titanium dioxide in the form of unbound particles of respirable size has been classified by IARC as a 2B "possible human carcinogen." NIOSH determined ultrafine particulate 0.1µm to be a potential occupational carcinogen but found insufficient data to classify respirable size titanium dioxide particulate. ACGIH classifies titanium dioxide as an A3 confirmed animal carcinogen with unknown relevance to humans.

NORMs: Inhalation of NORMs can result in exposure to ionizing radiation, which has been classified by the National Toxicology Program (NTP) as a known human carcinogen. All types of ionizing radiation have been classified by IARC as known to be human carcinogens.

11.2 INGESTION EXPOSURE

No adverse effects expected for incidental ingestion of this product.

11.3 SKIN AND EYE CONTACT

Skin and eye contact may cause irritation by mechanical (abrasive) action.

11.4 CHRONIC HEALTH EFFECTS

See "INHALATION" subsection above with respect to silicosis, cancer status and other information relevant to adverse effects on human health from chronic exposure.

11.5 MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Individuals with respiratory disease, including but not limited to asthma and chronic obstructive lung disease, should not be exposed to respirable mineral dusts.

11.6 SIGNS AND SYMPTOMS OF EXPOSURE

Inhalation exposure to mineral dusts may cause mucous membrane and respiratory irritation, cough, sore throat, nasal congestion, sneezing and shortness of breath. IMPORTANT: there may be no immediate symptoms of exposure to hazardous concentrations of respirable crystalline silica (quartz) and elevated levels of airborne crystalline silica (quartz) may not be visible to the unaided eye. Eye and skin irritation may result from mechanical abrasion.

11.7 NUMERICAL ESTIMATES OF TOXICITY

Crystalline Silica (Quartz): Oral approximate lethal dose (ALD): >11,000 mg/kg, rat.

Crystalline Silica (Quartz): Aquatic toxicity (LC_{50}) carp >10,000mg/L/72 hr.

Aluminum silicate: Oral toxicity (LD_{50}): 16000 mg/kg,rat.

Aluminum oxide: Oral toxicity (LD_{50}): > 2000 mg/kg (rat); no deaths reported following an acute 4-hour exposure to up to 1,000 mg Al/m^3 as aluminum oxide in groups of 12–18 male Fischer 344 rats (Thomson et al. 1986).

Zircon: Oral toxicity (LD_{50}): > 200 mg/kg, mice.

Titanium dioxide: Oral toxicity (LD_{50}): > 10000 mg/kg, rat

MUTAGENICITY / GENOTOXICITY

Crystalline Silica (Quartz) did not cause genetic damage in cultured bacterial cells; Did not cause genetic damage in animals;
Genetic damage was observed in some laboratory tests on cultured mammalian cells, but not others.
Zircon: Ceramic dusts containing zirconium (zirconium oxide/yttrium oxide) proved not to be cytotoxic in 3T3-Balb/c cell lines (Dion *et al.* 1994).
Aluminum silicate: No data.
Aluminum oxide: No data.
Titanium Dioxide:In-vitro and in-vivo genotoxicity assays have reported inconsistent results.
REPRODUCTIVE TOXICITY: No data.
STOT-SE: No known adverse effects from single exposure to this product.
STOT-RE (Inhalation): This product contains crystalline silica (quartz). Repeated exposure to crystalline silica particulate of respirable size is known to cause lung damage (silicosis) and lung cancer. This product contains titanium dioxide, a substance which the IARC determined that sufficient evidence of carcinogenicity exists in experimental animals and inadequate evidence of carcinogenicity in humans (Group 2B).
Aspiration: This product does not present an aspiration hazard.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity
This product is a naturally occurring mineral derived from beach sand and is unlikely to cause any environmental damage. This product is insoluble in water and unlikely to contaminate waterways or food chains.

12.2 Persistence and degradability
Not applicable

12.3 Bioaccumulative potential
This product is not bioavailable and will not bioaccumulate.

12.4 Mobility in soil
This product exhibits low mobility in soil.

12.5 Other adverse effects
None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 RCRA: This product, in its manufactured composition, is neither a “characteristic” nor “listed” hazardous waste when disposed of, as those terms are defined under the federal Resource Conservation and Recovery Act (42 U.S.C. 6901, et seq.).

13.2 DISPOSAL METHOD: This product is generally suitable for landfill disposal. Follow all applicable Federal, State, and local laws, rules, and regulations regarding the proper disposal of this material. If this product has been altered or contaminated with other hazardous substances, appropriate waste analysis by a qualified environmental professional is necessary to determine proper method for disposal.

13.3 NORM DISPOSAL: The presence of trace amounts of naturally occurring radioactive material (NORM) (See SECTION15) may require special disposal consideration in some jurisdictions. Because NORM disposal regulations vary from state to state, confirm the applicable NORM disposal rules in your jurisdiction.

SECTION 14: TRANSPORTATION INFORMATION

14.1 U.S. DOT
This product is not regulated by DOT as a hazardous material when transported by any modality (49 CFR Part 172.101).

14.2 International transport
This product is not classified as “dangerous goods” under IAEA SSR-6, IMDG/IMO, and IATA/ICAO, Transport Canada and EU regulations when transported by any modality.

SAFETY DATA SHEET

ZIRCON SAND; ZIRCON FLOUR; SPECTRALUX

SECTION 15: REGULATORY INFORMATION

15.1 COMPONENTS LISTED IN U.S. FEDERAL REGULATIONS AND STATE ''RIGHT-TO-KNOW'' LAWS:

COMPONENT	CAS #	FEDERAL					STATE (Right-to-Know)			
		RCRA	CERCLA RQ?	SARA 313	SARA EHS	TSCA Listed	PA	NJ	MA	CA
Zircon ($ZrO_2 \cdot SiO_2$) (14940-68-2)	14940-68-2	NO	NO	NO	NO	YES	NO	NO	NO	NO
Crystalline Silica (SiO_2)	14808-60-7	NO	NO	NO	NO	YES	YES	YES	YES	YES
Titanium Dioxide (TiO_2)	13463-67-7	NO	NO	NO	NO	YES	YES	YES	YES	YES
Aluminum Oxide (Al_2O_3)	1344-28-1	NO	NO	NO	NO	YES	YES	YES	YES	NO
Aluminum Silicate (Al_2SiO_5)	1302-76-7	NO	NO	NO	NO	YES	YES	NO	NO	NO
NORM – Natural Uranium (U)	7440-61-1	NO	YES*	NO	NO	YES	YES	YES	YES	YES
NORM – Natural Thorium(Th)	7440-29-1	NO	YES*	NO	NO	YES	YES	YES	YES	YES

Notes: (*) CERCLA Reportable Quantity (RQ) for radionuclides at 40 C.F.R. 302.4 Appendix B lists RQ for U (natural) at 1 E11 pCi (3.7E9 Bq) and Th (natural) at 1 E 10 pCi (3.7 E7 Bq). RQ reporting for these constituents would be triggered by the "release" of 18,000 pounds of zircon in a 24-hour period.

U.S. Federal Laws and Regulations

The Resource Conservation and Recovery Act (RCRA) defines substances that are hazardous wastes when disposed of. This product in its manufactured form is not classified as a RCRA hazardous waste when disposed of.

The Toxic Substances Control Act (TSCA) provides an Inventory of all chemical substances that are manufactured, imported or processed in the U.S. This product is a naturally occurring mineral that is automatically listed in the TSCA Inventory per 40 CFR 710.4(b); all of the constituents of this product are TSCA listed.

The Superfund Amendments and Reauthorization Act (SARA Title 313) prescribes a system of Toxics Release Reporting and lists extremely hazardous substances (EHS). The presence of EHSs in quantities in excess of the Threshold Planning Quantity (TPQ), requires certain emergency planning activities to be conducted.

Because this product contains less than 0.05% NORM as natural uranium and thorium, it is exempt from regulation by the U.S, Nuclear Regulatory Commission as unimportant quantity source material. 10 CFR 40.13(a). All radionuclides are "hazardous substances" under the Comprehensive Environmental Response, Compensation and Recovery Act (CERCLA) with a Reportable Quantity(RQ) established for each radionuclide.

15.2 State Regulations

The New Jersey Worker and Community Right-to-Know Act requires public and private employers to provide information about hazardous substances at their workplaces. The New Jersey Workplace Hazardous Substances List includes the following constituents of this product: Titanium dioxide and Silicon dioxide (quartz).

The Pennsylvania Worker and Community Right to Know Act prescribes a system for reporting listed hazardous substances present at a workplace. Titanium dioxide and Silicon dioxide (quartz) are listed The Pennsylvania Hazardous Substances List.

The Massachusetts Toxic or Hazardous Substance List consists of the substances identified on the toxic chemical list pursuant to section 313 of EPCRA as of January 1, 2002 and the substances listed pursuant to sections 101(14) and 102 of CERCLA as of January 1, 2002, and includes crystalline Silicon dioxide (quartz) less than ten microns in size and used in molding processes. 301 CMR 41.03(2), (6).

The California Safe Drinking Water and Toxic Enforcement Act of 1986 ("Proposition 65") List includes: Silica, crystalline (airborne particles of respirable size) and Titanium dioxide (airborne, unbound particles of respirable size), radionuclides as substances known to the State of California to cause cancer.

SAFETY DATA SHEET

ZIRCON SAND; ZIRCON FLOUR; SPECTRALUX

The OSHA Hazard Communication Standard 29 CFR §1910.1200 and state and local worker "Right-to-Know" laws and regulations should be strictly followed, which includes training employees on the content of this SDS. Warn your employees (and your customer users in case of resale) by posting or other means of the potential health risks associated with the use of this product and train them in the appropriate personal protective equipment, work and hygiene practices, and engineering controls which will reduce their risk of exposure. This SDS is limited to the product that is sold or distributed in the United States.

SECTION 16: OTHER INFORMATION

ACRONYMS AND ABBREVIATIONS USED IN THIS SDS

ACGIH American Conference of Governmental Industrial Hygienists
ANSI Z88.2 American National Standards Institute Practices for Respiratory Protection
Bq Becquerel, a measure of specific activity equal to 1 disintegration/second
CA California Right-to-Know Law; "Proposition 65,"CCR TITLE 8 – Division 1 – Chapter 3.2 –Subchapter 1– Article 5 - §339 The Hazardous Substances List
CAS# CAS Registration Number is an assigned number to identify a material
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act, 40 CFR part 302.4 – Designation, Reportable Quantities, and Notification (Table 302.4)
EPA United States Environmental Protection Agency
EU The European Union
GHS Globally Harmonized System of Hazard Communication implemented by OSHA at 29 CFR §1910.1200
IAEA International Atomic Energy Agency Regulations for the Safe Transport of Radioactive Material No. SSR-6 (Rev. 1).
IARC International Agency for Research on Cancer
IATA International Air Transport Association Dangerous Goods Regulations (62nd Edition).
ICAO International Civil Aviation Organization Technical Instructions for the Transport of Dangerous Goods by Air (2021-2022 Edition)
IMDG/IMO International Maritime Dangerous Goods Code published by the International Maritime Organization
Inhalable dust Dust fraction that enters the nose / mouth during breathing (D_{50} of sampler = 50 µm)
MA Massachusetts Right-to-Know Law; MGL PART I – TITLE XVI – CHAPTER 111F Hazardous Substances Disclosure By Employers
mg/m^3 Milligrams per cubic meter
N/A Not applicable
NIOSH National Institute of Occupational Safety and Health
NJ New Jersey Right-to-Know Law; NJAC 8:59 - Worker and Community Right to Know Act
NORM Naturally Occurring Radioactive Material
NRC U.S. Nuclear Regulatory Commission
NTP U.S. National Toxicology Program
OSHA Occupational Safety and Health Administration
PA Pennsylvania Right-to-Know Law; 34 PA Code § 323. Hazardous Substance List (Appendix A)
PEL Permissible Exposure Limit (OSHA)
pH Measurement of acidity and alkalinity ranging from 0 (most acid) to 14 (most alkaline) in standard units.
RCRA Resource Conservation and Recovery Act (EPA), 40 CFR part 261 - Identification and Listing of Hazardous Waste
REL Recommended Exposure Limit (NIOSH)
Respirable dust The sub-fraction of inhalable dust that penetrates to the alveolar region of lung (D_{50} of sampler = 4µm)
RQ Reportable Quantity (CERCLA)
RTECS Registry of Toxic Effects of Chemical Substances: This database contains toxic effects data on some 140,000 chemicals. It is built and maintained by NIOSH.
SARA Superfund Amendments and Reauthorization Act, 40 CFR part 372.65 - Toxic Chemical Release Reporting: Community Right-to-Know
SARA EHS (SARA Extremely Hazardous Substances) 40 CFR part 355 - Emergency Planning and Notification (Appendices A & B)
STEL Short-term exposure limit (ACGIH)
STOT Specific Target Organ Toxicity
STOT-SE Specific Target Organ Toxicity - Single Exposure
STOT-RE Specific Target Organ Toxicity - Repeated Exposure
STP Standard temperature and pressure (T = ~70^{O}F, P = 1 atm)
TLV Threshold Limit Value (ACGIH)

SAFETY DATA SHEET

ZIRCON SAND; ZIRCON FLOUR; SPECTRALUX

TSCA Toxic Substances Control Act, 40 CFR 716.120 - Health and Safety Data Reporting
TWA Time Weighted Average
USDOT United Stated Department of Transportation

NOTICE

This Safety Data Sheet (SDS) is to be used only for this product in its present form. If this product is altered or used as a component in another material, the information on this SDS may not be applicable. This document is generated for the purpose of distributing health, safety, and environmental information to users of the product. This SDS is not a specification sheet, nor should any displayed data be construed as a specification. Some of the information presented and conclusions drawn herein are derived from sources other than direct test data on the product.

The information and data herein are believed to be accurate and have been compiled from sources believed reliable. The Purchaser of this product assumes all risk of use, storage, and handling of the product in compliance with applicable Federal, State and local laws and CONTINENTAL MINERAL PROCESSING MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, CONCERNING THE ACCURACY OR COMPLETENESS OF THE INFORMATION AND DATA HEREIN. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE SPECIFICALLY EXCLUDED. CONTINENTAL MINERAL PROCESSING shall not be liable for claims relating to any party's use of or reliance on information and data contained herein, regardless of whether it is claimed that the information and data are inaccurate, incomplete, or otherwise misleading.

Date of Safety Data Sheet Preparation: 20 October 2022

[END OF SDS No. CMP 01 REV.01 US]