InSync Press Ceramic Ingots

Safety Data Sheet

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SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: InSync Press Ceramic Ingots

Synonyms: PTZ Ceramic Ingots

Intended Use of the Product

Dental ceramics

Name, Address, and Telephone of the Responsible Party

Company

Jensen Industries Inc.
50 Stillman Road
North Haven, CT 06473
T 1-800-243-2000

Emergency Telephone Number

Emergency Number (USA & Canada Only): CHEMTREC 1-800-424-9300

Emergency Number (All other Countries): 203-239-2090

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Not classified

Label Elements

GHS-US Labeling No labeling applicable

Other Hazards

This product is not hazardous while it is present in its massive form as an ingot. It does not present the same hazards when the individual components are in their powdered forms, or when the material is processed. The materials present in this product in their powdered forms presents various health hazards. Exposure to dust generated from processing (based upon the individual materials) may cause organ damage, cause cancer, and be irritating. Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. The dried or powdered form of this substance may form combustible dust concentrations in air.

Silica (Crystalline: Quartz/Cristobalite): Repeated inhalation of silica crystalline dust/particulates can cause serious chronic lung damage, known as silicosis. Silicosis involves inflammation and scarring of the lung tissue; pulmonary fibrosis. Lung cancer is contributed to chronic exposure to silica (crystalline) dust/fumes.

Oxides: Inhalation of certain elements and their oxides contained in this product may be hazardous. Dust/fumes can cause irritation to the eyes, nasal passage, gastrointestinal tract, skin, and respiratory system.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Silica, cristobalite	(CAS No) 14464-46-1	25 - 40, 40 - 70, 70 - 75	Carc. 1A, H350 STOT RE 1, H372
Quartz	(CAS No) 14808-60-7	25 - 40, 40 - 70, 70 - 75	Carc. 1A, H350 STOT SE 3, H335 STOT RE 1, H372
Silicon	(CAS No) 7440-21-3	< 75	Comb. Dust
Aluminum oxide	(CAS No) 1344-28-1	4 - 15	Not classified
Boron oxide (B_2O_3)	(CAS No) 1303-86-2	< 0.1, 0.1 - 1, 1 - 5, 5 - 10	Repr. 1B, H360

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Calcium oxide	(CAS No) 1305-78-8	< 0.1, 0.1 - 1, 1 - 5	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 3, H402
Zinc oxide	(CAS No) 1314-13-2	< 5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Tin oxide (SnO_2)	(CAS No) 18282-10-5	< 5	Not classified

Full text of H-phrases: see section 16

More than one of the ranges of concentration prescribed by the Controlled Products Regulations has been used where necessary, due to varying composition.

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

Inhalation: When symptoms occur: go into open air and ventilate suspected area.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Seek medical attention immediately if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Obtain medical attention if irritation persists.

Ingestion: Rinse mouth. Do NOT induce vomiting.

Most Important Symptoms and Effects Both Acute and Delayed

General: Prolonged contact with large amounts of dust may cause mechanical irritation.

Inhalation: Inhalation of dusts and fumes can cause metal fume fever. Symptoms can include a metallic or sweet taste in the mouth, sweating, shivering, headache, throat irritation, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, fatigue, and shortness of breath.

Skin Contact: Dust may cause irritation in skin folds or by contact in combination with tight clothing.

Eye Contact: Eye contact with dust may cause mechanical irritation.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Airborne dust/fumes of silica crystalline can cause respiratory disease with symptoms which include cough, chest pain, shortness of breath, weight loss, weakness, and fatigue. Exposure to airborne dust and fumes containing silica may cause long-term health effects including loss of lung function, fibrosis, cough, dyspnea (breathing difficulty), wheezing; decreased pulmonary function, progressive respiratory symptoms (silicosis); irritation to the eyes. If dust is generated, repeated exposure through inhalation may cause cancer or lung disease.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO_2).

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Product is not flammable.

Explosion Hazard: Fine dust clouds may form explosive mixtures with air.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Nitrogen oxides. Ammonia. Burning material releases heavy metal oxide fumes.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not breathe dust. Avoid generation of dust during clean-up of spills.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Avoid actions that cause dust to become airborne during clean-up such as dry sweeping or using compressed air. Use HEPA vacuum or thoroughly wet with water to clean-up dust. Use PPE described in Section 8.

Reference to Other Sections

See Section 13, Disposal Considerations. See Section 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Precautions for Safe Handling: Do not breathe dust. Avoid creating or spreading dust. Use appropriate personal protection equipment (PPE).

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. Hydrogen fluoride.

Specific End Use(s)

Dental ceramics

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Aluminum oxide (1344-28-1)		
Mexico	OEL TWA (mg/m³)	10 mg/m³
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
Alberta	OEL TWA (mg/m³)	10 mg/m³
New Brunswick	OEL TWA (mg/m³)	10 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica)
Nunavut	OEL STEL (mg/m³)	20 mg/m³
Nunavut	OEL TWA (mg/m³)	10 mg/m³ 5 mg/m³ (respirable mass) 10 mg/m³ (total mass)
Northwest Territories	OEL STEL (mg/m³)	20 mg/m³
Northwest Territories	OEL TWA (mg/m³)	10 mg/m³ 5 mg/m³ (respirable mass) 10 mg/m³ (total mass)
Québec	VEMP (mg/m³)	10 mg/m³ (containing no Asbestos and <1% Crystalline silica-total dust)

Saskatchewan	OEL STEL (mg/m³)	20 mg/m³
Saskatchewan	OEL TWA (mg/m³)	10 mg/m³
Yukon	OEL STEL (mg/m³)	20 mg/m³ (Al2O3)
Yukon	OEL TWA (mg/m³)	30 mppcf (Al2O3) 10 mg/m³ (Al2O3)

Calcium oxide (1305-78-8)		
Mexico	OEL TWA (mg/m³)	2 mg/m³
USA ACGIH	ACGIH TWA (mg/m³)	2 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	2 mg/m³
USA IDLH	US IDLH (mg/m³)	25 mg/m³
Alberta	OEL TWA (mg/m³)	2 mg/m³
British Columbia	OEL TWA (mg/m³)	2 mg/m³
Manitoba	OEL TWA (mg/m³)	2 mg/m³
New Brunswick	OEL TWA (mg/m³)	2 mg/m³
Newfoundland & Labrador	OEL TWA (mg/m³)	2 mg/m³
Nova Scotia	OEL TWA (mg/m³)	2 mg/m³
Nunavut	OEL STEL (mg/m³)	4 mg/m³
Nunavut	OEL TWA (mg/m³)	2 mg/m³
Northwest Territories	OEL STEL (mg/m³)	4 mg/m³
Northwest Territories	OEL TWA (mg/m³)	2 mg/m³
Ontario	OEL TWA (mg/m³)	2 mg/m³
Prince Edward Island	OEL TWA (mg/m³)	2 mg/m³
Québec	VEMP (mg/m³)	2 mg/m³
Saskatchewan	OEL STEL (mg/m³)	4 mg/m³
Saskatchewan	OEL TWA (mg/m³)	2 mg/m³
Yukon	OEL STEL (mg/m³)	4 mg/m³
Yukon	OEL TWA (mg/m³)	2 mg/m³

Silica, cristobalite (14464-46-1)		
Mexico	OEL TWA (mg/m³)	0.05 mg/m³ (respirable fraction)
USA ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
USA ACGIH	ACGIH chemical category	Suspected Human Carcinogen
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m³ (respirable dust)
USA IDLH	US IDLH (mg/m³)	25 mg/m³ (respirable dust)
Alberta	OEL TWA (mg/m³)	0.025 mg/m³ (respirable particulate)
British Columbia	OEL TWA (mg/m³)	0.025 mg/m³ (respirable)
Manitoba	OEL TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
New Brunswick	OEL TWA (mg/m³)	0.05 mg/m³ (respirable fraction)
Newfoundland & Labrador	OEL TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
Nova Scotia	OEL TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
Nunavut	OEL TWA (mg/m³)	0.05 mg/m³ (respirable mass) 0.15 mg/m³ (total mass)
Northwest Territories	OEL TWA (mg/m³)	0.05 mg/m³ (respirable mass) 0.15 mg/m³ (total mass)
Ontario	OEL TWA (mg/m³)	0.05 mg/m³ (designated substances regulation-respirable)
Prince Edward Island	OEL TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
Québec	VEMP (mg/m³)	0.05 mg/m³ (respirable dust)
Saskatchewan	OEL TWA (mg/m³)	0.05 mg/m³ (respirable fraction)
Yukon	OEL TWA (mg/m³)	150 particle/mL

Silicon (7440-21-3)		
Mexico	OEL TWA (mg/m³)	10 mg/m³ (inhalable fraction)

Mexico	OEL STEL (mg/m³)	20 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m³ (total dust) 5 mg/m³ (respirable dust)
British Columbia	OEL TWA (mg/m³)	10 mg/m³ (total dust) 3 mg/m³ (respirable fraction)
New Brunswick	OEL TWA (mg/m³)	10 mg/m³
Nunavut	OEL TWA (mg/m³)	5 mg/m³ (respirable mass) 10 mg/m³ (total mass)
Northwest Territories	OEL TWA (mg/m³)	5 mg/m³ (respirable mass) 10 mg/m³ (total mass)
Ontario	OEL TWA (mg/m³)	10 mg/m³ (total dust)
Québec	VEMP (mg/m³)	10 mg/m³ (containing no Asbestos and <1% Crystalline silica-total dust)
Saskatchewan	OEL STEL (mg/m³)	20 mg/m³
Saskatchewan	OEL TWA (mg/m³)	10 mg/m³
Yukon	OEL STEL (mg/m³)	20 mg/m³
Yukon	OEL TWA (mg/m³)	30 mppcf 10 mg/m³

Quartz (14808-60-7)		
Mexico	OEL TWA (mg/m³)	0.1 mg/m³ (respirable fraction)
USA ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
USA ACGIH	ACGIH chemical category	A2 - Suspected Human Carcinogen
USA OSHA	OSHA PEL (STEL) (mg/m³)	250 mppcf/%SiO_2+5, 10mg/m^3/%SiO_2+2
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m³ (respirable dust)
USA IDLH	US IDLH (mg/m³)	50 mg/m³ (respirable dust)
Alberta	OEL TWA (mg/m³)	0.025 mg/m³ (respirable particulate)
British Columbia	OEL TWA (mg/m³)	0.025 mg/m³ (respirable)
Manitoba	OEL TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
New Brunswick	OEL TWA (mg/m³)	0.1 mg/m³ (respirable fraction)
Newfoundland & Labrador	OEL TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
Nova Scotia	OEL TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
Nunavut	OEL TWA (mg/m³)	0.1 mg/m³ (respirable mass) 0.3 mg/m³ (total mass)
Northwest Territories	OEL TWA (mg/m³)	0.1 mg/m³ (respirable mass) 0.3 mg/m³ (total mass)
Ontario	OEL TWA (mg/m³)	0.10 mg/m³ (designated substances regulation-respirable)
Prince Edward Island	OEL TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
Québec	VEMP (mg/m³)	0.1 mg/m³ (respirable dust)
Saskatchewan	OEL TWA (mg/m³)	0.05 mg/m³ (respirable fraction)
Yukon	OEL TWA (mg/m³)	300 particle/mL

Boron oxide (B_2O_3) (1303-86-2)		
Mexico	OEL TWA (mg/m³)	10 mg/m³
Mexico	OEL STEL (mg/m³)	20 mg/m³
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m³
USA IDLH	US IDLH (mg/m³)	2000 mg/m³
Alberta	OEL TWA (mg/m³)	10 mg/m³
British Columbia	OEL TWA (mg/m³)	10 mg/m³
Manitoba	OEL TWA (mg/m³)	10 mg/m³
New Brunswick	OEL TWA (mg/m³)	10 mg/m³

Newfoundland & Labrador	OEL TWA (mg/m³)	10 mg/m³
Nova Scotia	OEL TWA (mg/m³)	10 mg/m³
Nunavut	OEL STEL (mg/m³)	20 mg/m³
Nunavut	OEL TWA (mg/m³)	10 mg/m³
Northwest Territories	OEL STEL (mg/m³)	20 mg/m³
Northwest Territories	OEL TWA (mg/m³)	10 mg/m³
Ontario	OEL TWA (mg/m³)	10 mg/m³
Prince Edward Island	OEL TWA (mg/m³)	10 mg/m³
Québec	VEMP (mg/m³)	10 mg/m³
Saskatchewan	OEL STEL (mg/m³)	20 mg/m³
Saskatchewan	OEL TWA (mg/m³)	10 mg/m³
Yukon	OEL TWA (mg/m³)	10 mg/m³

Zinc oxide (1314-13-2)		
Mexico	OEL TWA (mg/m³)	5 mg/m³ (fume) 10 mg/m³ (dust)
Mexico	OEL STEL (mg/m³)	10 mg/m³ (fume)
USA ACGIH	ACGIH TWA (mg/m³)	2 mg/m³ (respirable fraction)
USA ACGIH	ACGIH STEL (mg/m³)	10 mg/m³ (respirable fraction)
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³ (fume) 15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	5 mg/m³ (dust and fume)
USA NIOSH	NIOSH REL (STEL) (mg/m³)	10 mg/m³ (fume)
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	15 mg/m³ (dust)
USA IDLH	US IDLH (mg/m³)	500 mg/m³
Alberta	OEL STEL (mg/m³)	10 mg/m³ (respirable)
Alberta	OEL TWA (mg/m³)	2 mg/m³ (respirable)
British Columbia	OEL STEL (mg/m³)	10 mg/m³ (respirable)
British Columbia	OEL TWA (mg/m³)	2 mg/m³ (respirable)
Manitoba	OEL STEL (mg/m³)	10 mg/m³ (respirable fraction)
Manitoba	OEL TWA (mg/m³)	2 mg/m³ (respirable fraction)
New Brunswick	OEL STEL (mg/m³)	10 mg/m³ (fume)
New Brunswick	OEL TWA (mg/m³)	10 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica, dust) 5 mg/m³ (fume)
Newfoundland & Labrador	OEL STEL (mg/m³)	10 mg/m³ (respirable fraction)
Newfoundland & Labrador	OEL TWA (mg/m³)	2 mg/m³ (respirable fraction)
Nova Scotia	OEL STEL (mg/m³)	10 mg/m³ (respirable fraction)
Nova Scotia	OEL TWA (mg/m³)	2 mg/m³ (respirable fraction)
Nunavut	OEL STEL (mg/m³)	10 mg/m³ (fume)
Nunavut	OEL TWA (mg/m³)	5 mg/m³ (fume) 5 mg/m³ (dust, respirable mass) 10 mg/m³ (total mass-dust)
Northwest Territories	OEL STEL (mg/m³)	10 mg/m³ (fume)
Northwest Territories	OEL TWA (mg/m³)	5 mg/m³ (fume) 5 mg/m³ (dust, respirable mass) 10 mg/m³ (total mass-dust)
Ontario	OEL STEL (mg/m³)	10 mg/m³ (respirable)
Ontario	OEL TWA (mg/m³)	2 mg/m³ (respirable)
Prince Edward Island	OEL STEL (mg/m³)	10 mg/m³ (respirable fraction)
Prince Edward Island	OEL TWA (mg/m³)	2 mg/m³ (respirable fraction)
Québec	VECD (mg/m³)	10 mg/m³ (fume)

Québec	VEMP (mg/m^3)	10 mg/m^3 (containing no Asbestos and <1% Crystalline silica-total dust) 5 mg/m^3 (fume)
Saskatchewan	OEL STEL (mg/m^3)	10 mg/m^3 (dust and fume, respirable fraction)
Saskatchewan	OEL TWA (mg/m^3)	2 mg/m^3 (dust and fume, respirable fraction)
Yukon	OEL STEL (mg/m^3)	10 mg/m^3 (fume)
Yukon	OEL TWA (mg/m^3)	5 mg/m^3 (fume) 30 mppcf (dust) 10 mg/m^3 (dust)

Tin oxide (SnO_2) (18282-10-5)		
USA NIOSH	NIOSH REL (TWA) (mg/m^3)	2 mg/m^3
Alberta	OEL TWA (mg/m^3)	2 mg/m^3

Exposure Controls

Appropriate Engineering Controls: Local exhaust and general ventilation must be adequate to meet exposure standards. Site-specific risk assessments should be conducted to determine the appropriate exposure control measures. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

Personal Protective Equipment: Protective goggles. Gloves. Dust formation: dust mask.

Materials for Protective Clothing: Wear suitable protective clothing.

Hand Protection: Protective Gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: In case of dust production: dustproof clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	:	Solid
Appearance	:	Various
Odor	:	None
Odor Threshold	:	Not available
pH	:	Not available
Evaporation Rate	:	Not available
Melting Point	:	≈ 900 °C (≈ 1652 °F)
Freezing Point	:	Not available
Boiling Point	:	Not available
Flash Point	:	Not available
Auto-ignition Temperature	:	Not available
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not available
Lower Flammable Limit	:	Not available
Upper Flammable Limit	:	Not available
Vapor Pressure	:	Not available
Relative Vapor Density at 20 °C	:	Not available
Relative Density	:	Not available
Specific gravity / density	:	2.5 g/cm^3
Specific Gravity	:	Not available
Solubility	:	Insoluble in water
Partition Coefficient: N-Octanol/Water	:	Not available

Viscosity	:	Not available
Explosion Data – Sensitivity to Mechanical Impact	:	Not expected to present an explosion hazard due to mechanical impact
Explosion Data – Sensitivity to Static Discharge	:	Not expected to present an explosion hazard due to static discharge
VOC content	:	None

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials. Avoid creating or spreading dust.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. Hydrogen fluoride.

Hazardous Decomposition Products: None known.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

Carcinogenicity: Not classified.

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified.

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Inhalation of dusts and fumes can cause metal fume fever. Symptoms can include a metallic or sweet taste in the mouth, sweating, shivering, headache, throat irritation, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, fatigue, and shortness of breath

Symptoms/Injuries After Skin Contact: Dust may cause irritation in skin folds or by contact in combination with tight clothing

Symptoms/Injuries After Eye Contact: Eye contact with dust may cause mechanical irritation

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects

Chronic Symptoms: Airborne dust/fumes of silica crystalline can cause respiratory disease with symptoms which include cough, chest pain, shortness of breath, weight loss, weakness, and fatigue. Exposure to airborne dust and fumes containing silica may cause long-term health effects including loss of lung function, fibrosis, cough, dyspnea (breathing difficulty), wheezing; decreased pulmonary function, progressive respiratory symptoms (silicosis); irritation to the eyes. If dust is generated, repeated exposure through inhalation may cause cancer or lung disease

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Aluminum oxide (1344-28-1)	
LD50 Oral Rat	> 15900 mg/kg
LC50 Inhalation Rat	> 2.3 mg/l/4h
Calcium oxide (1305-78-8)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rabbit	> 2500 mg/kg
Silicon (7440-21-3)	
LD50 Oral Rat	3160 mg/kg
Quartz (14808-60-7)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 5000 mg/kg

Zinc oxide (1314-13-2)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg

Tin oxide (SnO_2) (18282-10-5)	
LD50 Oral Rat	> 20 g/kg

Silica, cristobalite (14464-46-1)	
IARC Group	1
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

Quartz (14808-60-7)	
IARC Group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Aluminum oxide (1344-28-1)	
LC50 Fish 1	> 100 mg/l
EC50 Daphnia 1	> 100 mg/l
ErC50 (algae)	> 100 mg/l
NOEC (acute)	> 50 mg/l

Calcium oxide (1305-78-8)	
LC50 Fish 1	1070 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [static])

Boron oxide (B_2O_3) (1303-86-2)	
EC50 Daphnia 1	370 - 490 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Zinc oxide (1314-13-2)	
LC50 Fish 1	780 µg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 Daphnia 1	0.122 mg/l
NOEC chronic fish	0.026 mg/l (Species: Jordanella floridae)

Persistence and Degradability

InSync Press Ceramic Ingots	
Persistence and Degradability	Not established.

Bioaccumulative Potential

InSync Press Ceramic Ingots	
Bioaccumulative Potential	Not established.

Calcium oxide (1305-78-8)	
BCF Fish 1	(no bioaccumulation)

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Ecology – Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

In Accordance with DOT Not regulated for transport

In Accordance with IMDG Not regulated for transport

In Accordance with IATA Not regulated for transport

In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Aluminum oxide (1344-28-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313	
SARA Section 313 - Emission Reporting	1.0 % (fibrous forms)

Calcium oxide (1305-78-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

Silica, cristobalite (14464-46-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard

Silicon (7440-21-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Quartz (14808-60-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard

Boron oxide (B_2O_3) (1303-86-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Zinc oxide (1314-13-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Tin oxide (SnO_2) (18282-10-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State Regulations

Quartz (14808-60-7)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.

Aluminum oxide (1344-28-1)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List

Calcium oxide (1305-78-8)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

Silica, cristobalite (14464-46-1)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

Silicon (7440-21-3)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

Quartz (14808-60-7)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

Boron oxide (B_2O_3) (1303-86-2)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Zinc oxide (1314-13-2)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Tin oxide (SnO_2) (18282-10-5)
U.S. - New Jersey - Right to Know Hazardous Substance List

Canadian Regulations

InSync Press Ceramic Ingots	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

Aluminum oxide (1344-28-1)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

Calcium oxide (1305-78-8)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Silica, cristobalite (14464-46-1)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

Silicon (7440-21-3)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

Quartz (14808-60-7)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Boron oxide (B_2O_3) (1303-86-2)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Zinc oxide (1314-13-2)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

Tin oxide (SnO_2) (18282-10-5)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 10/05/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Repr. 1B	Reproductive toxicity Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
	May form combustible dust concentrations in air
H315	Causes skin irritation
H318	Causes serious eye damage
H335	May cause respiratory irritation
H350	May cause cancer
H360	May damage fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Party Responsible for the Preparation of This Document

Jensen Industries

1-800-243-2000

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.

NA GHS SDS