Fiber Ceramics, Inc.

Ceramic Foam Filters & Advanced Refractories

SAFETY DATA SHEET

FiberOx[R] T1
FiberOx[R] T2

SECTION I – GENERAL INFORMATION

Manufacturer: Fiber-Ceramics, Inc.
2121 E. Norse Ave.
Cudahy, WI 53110

Emergency Contact: 414 769-8155

Product Name: FiberOx T1 or FiberOx T2
Product Type: Sintered Ceramic Foam Body

SECTION II – HAZARD IDENTIFICATION

WARNING: Irritant

SECTION III – CHEMICAL COMPOSITION

Components:	CAS #	%
Silicon Oxide	7631-869	0.8
Zirconium Oxide	1314-143	3
Aluminum Oxide	1344-28-1	95
Magnesium Oxide	1309-48-4	0.5
Titanium Oxide	13463-677	0.4
Hafnium Oxide	12055-231	0.2

Note: Specific percentages of chemical composition have been withheld due to proprietary information.

SECTION IV – FIRST AID MEASURES

Inhalation: Exposure by inhalation is unlikely. Remove to fresh air in the event of inhalation of fine dust particles.
Eyes: Flush with water for 15 minutes. Get medical attention if irritation persist.
Skin: Wash with soap and water. Get medical attention if irritation persist.
Ingestion: Do not induce vomiting. Drink large quantities of water. Get medical attention.

SECTION V – FIRE-FIGHTING MEASURES

Auto Ignition Temperature: None
Extinguishing Media: Product will not burn. In the event of a fire, extinguish area with water.
Special Fire Fighting Procedures: Avoid procedures that will cause a dust cloud of the material to be formed.
Unusual Fire and Explosion Hazard: None

SECTION VI – ACCIDENTAL RELEASE CONTROL MEASURES

Steps to be taken in case of a spill: Do not crush product. Avoid practices that produce dust.

SECTION VII – HANDLING AND STORAGE

Eye Protection: Wear protective goggles
Skin Protection: Impervious gloves are recommended
Storage: Store in a dry environment. Avoid strong oxidizing agents and acids.

SECTION VIII – EXPOSURE CONTROL/PERSONAL PROTECTION PROCEDURES

Components:	CAS #	%	OSHA PEL	ACGIH TLV
Silicon Oxide	7631-869	0.8	15 mg/m3 Total dust as (Si) 5 mg/m3 Respirable fraction	N/A
Zirconium Oxide	1314-143	3	5 mg/m3 as (Zr)	5 mg/m3 as (Zr)
Aluminum Oxide	1344-28-1	95	15 mg/m3 Total dust 5 mg/m3 Respirable fraction	1mg/m3 as (Al)
Magnesium Oxide	1309-48-4	0.5	15 mg/m3 Total dust	10 mg/m3
Titanium Oxide	13463-677	0.4	15 mg/m3 Total dust	10 mg/m3
Hafnium Oxide	12055-231	0.2	0.5 mg/m3	0.5 mg/m3

Control Measures:
Ventilation: Local exhaust recommended to maintain exposure below the permissible limit.
Respiratory Protection: Use NIOSH approved respirator for exposure above permissible limit.
Protective Gloves: Impervious gloves are recommended.
Eye Protection: Dust goggles or safety glasses with side shields are recommended.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Porous body off-white or ivory. Odorless
Specific Gravity ($H_2O = 1$) 4.1 g/cc
Solubility in water: None
Flash Point: None
PH: N/A
Evaporation Rate: None
Vapor Pressure: None
Vapor Density: None
LEL: None
UEL: None
Auto Ignition Temp: None
Boiling Point: Not determined
Melting Point: 2977 F
Flammability: None
Viscosity: None
Decomposition Temp: Not determined
Partition Coefficient: Not determined

SECTION X – STABILITY AND REACTIVITY DATA

Stability Data: Unstable - Stable – X
Incompatibility (Conditions to avoid) Strong oxidizing agents, acids
Hazardous Polymerization: May Occur - Will Not Occur – X
Hazardous Decomposition Products: Hafnium oxide, Magnesium oxide, Zirconium oxide, Aluminum oxide, Titanium oxide

SECTION XI – TOXOLIGICAL INFORMATION

Effects of Overexposure:

Inhalation:	May cause irritation to mucus membranes and respiratory system. May cause liver damage.
Eyes:	May cause irritation to outer surface of eyes.
Skin:	May cause skin irritation.
Ingestion:	May cause gastrointestinal disturbances, irritation and nausea.

Some recent studies have caused the International Agency for Research on Cancer (IARC) to categorize titanium oxide (titanium dioxide) as a Group 2B carcinogen. A Group 2B carcinogen is one that is possibly carcinogenic to humans.

SECTION XII – ECOLOGICAL INFORMATION

Hazard to Ozone Layer:	Not determined
Aquatic Toxicity Classification:	Mixture
Acute Aquatic Toxicity:	Not determined
Chronic Aquatic Toxicity:	Not determined

SECTION XIII – DISPOSAL METHODS

Dispose of in accordance with local, state, and federal regulations.

SECTION VX – TRANSPORT INFORMATION

Not Regulated
Non-powdered, non-metallic forms of hafnium are not regulated for transportation shipping.

SECTION XV – REGULARATORY INFORMATION

OSHA Standard for General Industry (29CFR Part 1910)
American Conference of Governmental Industrial Hygienist TLV's
U.S. Department of Transportation
International Agency for Research on Cancer (IARC)
International Maritime Code
RECRA 40 CFR, Parts 239 – 282 Subtitle D

SECTION XVI – SDS PREPARATION DATE

December 2013