

# FLEXITALLIC L.P.

## Material Safety Data Sheet

No. FDP-031

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Contact Number 281-604-2400

### GENERAL INFORMATION

Manufacturer:

Flexitallic Limited

Scandinavia Mill, Hunsworth Lane

Cleckheaton, West Yorkshire, England BD19 5BT

Common Name, Trade Name, or Specification:

**SF 5000**

DOT Hazard Code - N/A

### 1. HAZARDOUS INGREDIENTS AND EXPOSURE LIMITS

Although several of the ingredients used to formulate this product may be hazardous in the raw state, the manufacturing process results in a solid, infusible form, binding or otherwise rendering the mixture inert. We have identified below those hazardous constituents present in quantities greater than 1% (0.1% for carcinogens) that may be released from the product by overheating, burning, machining, abrading, or riveting.

Component	CAS Number	%	OSHA PEL	ACGIH TLV
Rubber	None	<15	N/A	N/A
Aramid Fiber	NONE	<5	2 fibers/cc(respirable)*	N/A
Carbon Fiber	070892-43-2	<10		
Silica(Quartz)	14808-60-7	<35	0.1 mg/m <sup>3</sup> (total dust)	0.1 mg/m <sup>3</sup> (total dust)
Barium Sulfate	7727-43-7	<20	10mg/m <sup>3</sup> (total dust)	10 mg/m <sup>3</sup> (total dust)

\* No OSHA limit has been established for this substance. The limit shown is a recommended limit established by the manufacturer.

### 2. PHYSICAL AND CHEMICAL CHARACTERISTICS

Melting Point - None

Solubility in water - Insoluble

Odor -

Color -

Specific Gravity -

Form - Solid

### 3. FIRE AND EXPLOSION DATA

Auto-ignition Temperature: This product is inherently flame resistant.

Flammable Limits in Air: % in Air by Volume: LEL: N/A UEL: N/A

Extinguisher Media: Carbon dioxide, chemical, or foam

Special Firefighting Procedure: Material in or near fires should be cooled with a water spray or fog. A self-contained breathing apparatus, operating in the positive pressure mode, and full fire fighting protective clothing should be worn for combative fires.

Unusual Fire and Explosion Hazards: Thermal decomposition or combustion may produce dense smoke, oxides of carbon, and low molecular weight organic compounds whose composition has not been characterized.

#### 4. PHYSICAL HAZARDS AND REACTIVITY DATA

Stability: Stable at normal temperatures and storage conditions

Incompatibility: None

Hazardous Decomposition Products: None

Hazardous Polymerization: Will not polymerize. This product is fully cured in the manufacturing process.

#### 5. HEALTH HAZARDS

Carcinogenicity:	NTP Listed	IARC Listed	NIOSH Listed	OSHA Listed
Aramid Fiber	No	No	No	No
Carbon Fiber				
Rubber	No	No	No	No
Silica(Quartz)	Yes	Yes*	Yes	No
Barium Sulfate	No	No	No	No

\* IARC classifies quartz as "probably carcinogenic to humans." (Group 2A)

#### Symptoms and Effects of Exposure to the Individual Components:

##### RUBBER (POWDERED)

Inhalation hazards - May cause mild irritation of respiratory tract. Repeated and prolonged inhalation of dust may lead to a benign pneumoconiosis. This condition may cause some lung function impairment but is reversible with reduced exposure.

Other hazards - Eyes - may cause mild transient eye irritation.

##### ARAMID FIBERS

Inhalation hazards - Overexposure to respirable fibers by inhalation may cause mild and temporary upper respiratory irritation, with discomfort or cough. Based on animal testing, prolonged and repeated exposure to excessive concentrations of respirable fibers may cause permanent lung injury.

Other hazards - Skin sensitization has not been observed in human tests. The mechanical action of fibers may cause slight skin irritation at clothing binding points and mild irritation of the eyes and nasal passages.

##### SILICA DUST

Inhalation hazards - Acute: Exposure to silica dust may cause paroxysmal coughing, wheezing,

dyspnea and upper respiratory tract irritation. Chronic: Prolonged exposure to silica dust may cause silicosis. Quartz has been classified by IARC as "probably carcinogenic to humans." (Group 2A) Other hazards - Eye or skin contact can cause temporary discomfort and irritation.

## CARBON FIBER

### MAN-MADE MINERAL FIBERS - (MMMF - GLASSWOOL, SLAGWOOL, LOOSE WOOL, AND ROCKWOOL)

Inhalation hazards - Exposure to respirable fibers by inhalation may cause temporary upper respiratory irritation, with discomfort and cough. Prolonged exposure may cause chronic lung disease. IARC classifies man-made mineral fibers (diameter <1 µm) as "possibly carcinogenic to humans." (Group 2B). ACGIH classifies synthetic vitreous fibers (rock wool fibers) as "animal carcinogen" (TLV-A3).

Other hazards - The mechanical action of fibers may cause skin irritation and irritation of the eyes and nasal passages. Ingestion may cause gastrointestinal irritation, vomiting, and diarrhea.

## 6. FIRST AID

Inhalation: Move to fresh air. Obtain medical attention.

Eyes: Flush with water to remove particulate. Obtain medical attention.

Skin: Wash thoroughly with soap and water. If persistent irritation develops, obtain medical attention.

Ingestion: Obtain medical attention.

## 7. SPECIAL PRECAUTIONS AND SPILL / LEAK PROCEDURES

Handling and Storage : Shipping and storage may result in accumulation of dust in shipping containers. If this occurs, dispose of the container in an airtight polyethylene bag (see disposal instructions below) or remove dust by vacuuming or wet mopping. Vacuums used for this purpose should be equipped with HEPA filters. Do not use compressed air to blow dust from storage containers.

Release or Spill : If a release of dust occurs during machining, abrading, or riveting, remove dust by vacuuming or wet mopping. Vacuums used for this purpose should be equipped with HEPA filters. Do not use compressed air to blow dust from the workplace.

Waste Disposal : Disposal of solid waste is regulated by federal and state law. Waste should be placed in airtight containers, and disposed of properly. Contact local regulatory agency for guidance.

## 8. PERSONAL PROTECTION AND CONTROL

Respiratory Protection : Use NIOSH-approved respirator if exposure to dust, vapors, or fumes in concentrations exceeding PEL's or TLV's is possible. (See 29 CFR 1910.134 for respiratory protection standards)

Ventilation : Any operations which may produce dust, including machining, grinding, riveting, or abrading of this product, should be adequately exhausted to prevent inhalation of dust.

**Personal Protective Equipment :** Suitable respiratory protection should be worn if dust exposure is possible. All regulations and safe practices related to the use of respiratory protection must be observed. Refer to OSHA standards and NIOSH guidelines. If skin irritation occurs, gloves and other protective garments may be worn.

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