FLEXITALLIC L.P.

Material Safety Data Sheet

No. FDP-016
REVISED: July 2009
Contact Number 281-604-2400

GENERAL INFORMATION
Manufacturer:
Flexitallic Ltd.
Lancashire Mill, Hunsworth Lane
Cleckheaton England BD19 4LN

Common Name, Trade Name, or Specification:
SF 3300 Sheet Gasket Material 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	<20	N/A	N/A
Barium Sulfate	7727-43-7	<20	10 mg/m^3(total dust)	10 mg/m^3(total dust)
Sodium Carbonate	497-19-8	<1	N/A	N/A
Aramid Fiber	NONE	<20	2 fibers/cc(respirable)*	N/A
Silica(Quartz)	14808-60-7	<10	0.1 mg/m^3(total dust)	0.1 mg/m^3(total dust)
Fibrous Glass	NONE	<10	15 mg/m^3(total dust)**	10 mg/m^3
Phenolic Resin	None	<1	N/A	N/A
Acrylonitrile	107-13-1	<1	2 ppm	2 ppm
Methyl Isobutyl Ketone	108-10-1	<1	205 mg/m^3	50 ppm
Ethyl Alcohol	64-17-5	<1	1900 mg/m^3	1000 ppm
Methyl Ethyl Ketone	78-93-3	<1	590 mg/m^3	200 ppm

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

** The formulation for this product is made with continuous filament fibrous glass. If the end product is finely ground, a fibrous glass dust may result which has a proposed OSHA PEL of 1 f/cc and a NIOSH REL of 3 f/cc.

2. PHYSICAL AND CHEMICAL CHARACTERISTICS

Melting Point - None	Solubility in water - Insoluble	Odor -Rubber
Color - Light Yellow	Specific Gravity - 1.5 - 2.0	Form - Solid

3. FIRE AND EXPLOSION DATA

Auto-ignition Temperature: This product is inherently flame resistent.
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
Phenolic Resin	No	No	No	No
Acrylonitrile	Yes	Yes*	Yes	Yes
M.I.B.K	No	No	No	No
Ethyl Alcohol	No	No	No	No
M.E.K	No	No	No	No
Barium Sulfate	No	No	No	No
Silica(Quartz)	Yes	Yes**	Yes	No

Carcinogenicity:	NTP Listed	IARC Listed	NIOSH Listed	OSHA Listed
Rubber	No	No	No	No
Sodium Carbonate	No	No	No	No
Aramid Fibers	No	No	No	No
Fibrous Glass	No	No***	No	No

* IARC classifies quartz as "probably carcinogenic to humans." (Group 2A)
** IARC classifies acrylonitrile as "probably carcinogenic to humans." (Group 2A)
*** IARC classifies “continuous filament glass dust” as "not classifiable with respect to human carcinogenicity." (Group 3) IARC and NTP classify “fibrous glass dust” as “possibly carcinogenic to humans.” (Group 2B)

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.

BARIUM SULFATE
Inhalation hazards - Should be treated as a nuisance dust. Exposure to Barium Sulfate may cause paroxsymal coughing, wheezing, difficult breathing and upper respiratory tract irritation.
Other hazards - No adverse effects have been reported from ingestion. Eye contact may cause temporary discomfort and irritation.

SODIUM CARBONATE
Inhalation hazards - moderately toxic by inhalation and subcutaneous routes. Other hazards - Poison by intraperitoneal route. May irritate eyes and skin on conact.

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.

FIBROUS GLASS
Inhalation hazard - Acute: mechanical irritation of mouth, nose, throat. Itching and irritation of upper respiratory tract.
Other hazards - transient mechanical irritation to skin. Direct contact with eyes will cause mechanical irritation. May cause unpleasant deposits in eyes, ears and nasal passages. IARC categorizes “continuous filament glass dust” as not classifiable relative to human carcinogenicity (Group 3). However, if the end product is finely ground, a fibrous glass dust may result, which IARC classifies as “possibly carcinogenic to humans” (Group 2B).

PHENOLIC RESIN
Inhalation hazards - Dust may cause irritation of nasal and respiratory tracts. If formaldehyde vapors are present, inhalation may cause a form of nasal cancer. Other hazards - Prolonged exposure can cause irritation, redness, and tearingof the eyes and may lead to sensitization of the skin and dermatitis.

ACRYLONITRILE
Inhalation Hazards - Exposure to acrylonitrile may cause somnolence, general anesthesia, cyanosis, and

diarrhea. Symptoms include flushing of the face, salivation, irritation of the eyes and nose, photophobia, deepened respiration, nausau, weakness, and headache. IARC classifies acrolynitrile as "probably carcinogenic to humans." (Group 2A)
Other hazards - Acrolynitrile is a human systematic irritant and may be poisonous by skin absorption and ingestion. Target organs include the liver, central nervous system, brain, kidneys, and cardiovascular system.

METHYL ISOBUTYL KETONE (HEXONE)
Inhalation hazards - M.I.K. is a systemic irritation.
Other hazards - exposure will irritate skin, eyes and mucous membranes. Moderately toxic by ingestion. Narcotic in high concentrations.

ETHYL ALCOHOL
Inhalation hazards - Moderately toxic if inhaled, may cause cough or irritation of lungs.
Other hazards - Ethyl Alcohol is moderately toxic by ingestion. May cause sleep disorders, convulsions, nausea or coma. Prolonged exposure may cause headache, iritation of the eyes and skin.

METHYL ETHYL KETONE (M.E.K.)
Inhalation hazards - M.E.K. is a systemic irritation.
Other hazards - Moderately toxic by ingestion, skin contact, and imperitoneal routes. Will irritate eyes and nasal passages.

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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