

# FLEXITALLIC L.P.

## Material Safety Data Sheet

No. FDP-006  
REVISED: 13 July 2009  
Contact Number 281-604-2400

### GENERAL INFORMATION

Manufacturer:  
Flexitallic L.P.  
6915 LaPorte Road  
Deer Park, Texas 77536

Common Name, Trade Name, or Specification:  
**PTFE Filled Spiral Wound Gasket**

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
Nickel	7440-02-0	<10	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>
Chromium	7440-47-3	<15	0.5 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>
Molybdenum	7439-98-7	<3	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
PTFE	None	<95	N/A	3ppm(HFl)/2ppm(CFl)

### 2. PHYSICAL AND CHEMICAL CHARACTERISTICS

Melting Point - None  
Color - Off-White

Solubility in water - Insoluble  
Specific Gravity - 1.0 - 1.5

Odor -None  
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

<b>Carcinogenicity:</b>	<b>NTP Listed</b>	<b>IARC Listed</b>	<b>NIOSH Listed</b>	<b>OSHA Listed</b>
Nickel	Yes	Yes*	Yes	No
Chromium	No	No	No	No
Molybdenum	No	No	No	No
PTFE	No	No	No	No

\* IARC classifies nickel as "carcinogenic to humans." (Group 1)

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

#### NICKEL

**Inhalation hazards** - Prolonged exposure may cause headache, vertigo, nausea, and vomiting, and may cause reproductive problems. IARC classifies nickel as "carcinogenic to humans." (Group 1)

**Other hazards** - Acute contact exposure may cause allergic contact dermatitis, pulmonary asthma, conjunctivitis, and inflammatory reactions around nickel-containing medical implants and prostheses. Prolonged contact may cause substernal pain, cough, hyper-pnea, weakness, cyanosis, leukocytosis, pneumonitis, convulsions, and delirium. Ingestion may produce gastroenteric irritation resulting in vomiting, inflammation, and epigastric pain.

#### CHROMIUM

**Inhalation hazards** - Acute: exposure may result in cough and irritation of the respiratory system. Chronic: Prolonged exposure may cause histologic fibrosis of the lungs.

**Other hazards** - Poisonous by ingestion; may cause severe gastrointestinal irritation.

## **MOLYBDENUM**

**Inhalation hazards** - Dust may cause irritation of nasal and respiratory passages.

**Other hazards** - Molybdenum may be an eye irritant. Ingestion may cause diarrhea, loss of weight, liver and kidney damage.

### **PTFE (Teflon®)**

Inhalation of fumes from overheating PTFE may cause polymer fume fever, a temporary flu-like illness with fever, chills, and sometimes cough, of approximately 24 hours duration. Smokers should avoid contamination of tobacco products, and should wash their hands before smoking. Small amounts of carbonyl fluoride and hydrogen fluoride may also be evolved when PTFE is overheated or burned.

Inhalation of low concentrations of Hydrogen Fluoride can initially include symptoms of choking, coughing, and severe eye, nose and throat irritation. Possibly followed after a symptomless period of 1 to 2 days by fever, chills, difficulty in breathing, cyanosis, and pulmonary edema. Acute or chronic overexposure to HF can injure the liver and kidneys. Inhalation, ingestion, or skin or eye contact with Carbonyl fluoride may initially include: skin irritation with discomfort or rash; eye corrosion with corneal or conjunctival ulceration; irritation of the upper respiratory passages; or temporary lung irritation effects with cough, discomfort, difficulty breathing, or shortness of breath. Individuals with preexisting diseases of the lungs may have increased susceptibility to the toxicity of excessive exposures from thermal decomposition products.

## **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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