Protective Equipment: Fire fighters and others exposed should wear self-contained

breathing apparatus.

**Unusual Fire and Explosion Hazards:** None

## 6. ACCIDENTAL RELEASE MEASURES

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.

## 7. HANDLING AND STORAGE

Store in a dry place. 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.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

As shipped, friction materials are not considered hazardous but operations (overheating, burning, machining, abrading, or riveting) that can create airborne dust should be avoided. Such operations could cause concentrations in excess of permissible exposure limits for the respective ingredient and therefore should be considered hazardous. Exposure limits are shown below. Crystalline silica (Quartz CAS # 14808-60-7) is present as a trace element in some of the ingredients listed below but its total content is below the 0.1% de minimis level.

| Component  | OSHA PEL  | ACGIH TLV               | NIOSH   |
|--|---|-------------------------|---|
| Aramid fiber   | 2 fibers/cc(respirable)*                                    | None established        | None established  |
| Graphite   | 15 mppcf  | 2.0 mg/m³ (respirable)  | 2.5 mg/m³ (respirable)<br>IDLH : 1250 mg/m³                             |
| Hydrated Lime  | 15 mg/m <sup>3</sup> total dust TWA                         | 5 ppm                   | 5 mg/m <sup>3</sup> TWA   |
| Mullite (as Kaolin)  | 10 mg/m³ (total dust)<br>5 mg/m³ (respirable)               | 2 mg/m³ TWA             | 10 mg/m³ (total dust)<br>5 mg/m³ (respirable)                           |
| Zinc (as Zinc Oxide dust)  | 15 mg/m³ total dust TWA<br>5 mg/m3 (respirable)             | 10 mg/m³ TWA            | 5 mg/m³ (respirable) IDLH<br>: 500 mg/m³                                |
| Barium Sulfate, Cashew<br>Resin – Cured, Iron,<br>Kyanite, Magnesium<br>Oxide, Nitrile Rubber,<br>Phenolic Resin-Cured,<br>Steel Fiber | 15 mg/m <sup>3</sup> total dust TWA<br>5 mg/m3 (respirable) | 10 mg/m³ total dust TWA | 10 mg/m <sup>3</sup> total dust TWA<br>5 mg/m <sup>3</sup> (respirable) |

No OSHA limit has been established for this substance. The limit shown is a recommended limit established by DuPont, a manufacturer of Aramid fibers (Kevlar<sup>®</sup>).

Respiratory Protection: Use NIOSH-approved respirator if exposure to dust, vapors, or fumes in

Federal-Mogul Friction Products

MSDS - OE Semi-Metallic

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