Flexitallic Ltd

MATERIAL SAFETY DATA SHEET

PRODUCT SAFETY DATA SHEET FOR:   Sigma 533

ISSUE DATE:  22/11/2010                                Issue Number 1

1: IDENTIFICATION OF THE SUBSTANCE / PREPARATION & THE COMPANY

<table>
<thead>
<tr>
<th>1.1 Chemical Identification</th>
<th>Sigma 533</th>
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<tbody>
<tr>
<td>1.2 Application</td>
<td>A filled P.T.F.E gasket material intended for use as a sealing material between flanges, can be in the form of sheets or cut gaskets.</td>
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<td>1.3 Company Identification</td>
<td>Flexitallic Ltd</td>
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<td>Hunsworth Lane</td>
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</table>

2: COMPOSITION / INFORMATION ON INGREDIENTS

| 2.1 Chemical Description      | High performance biaxially orientated P.T.F.E sheet material with Barium Sulphate filler. |
| 2.2 Hazardous Ingredients     | Cas No | Wt % | R Phrases |

3: HAZARD IDENTIFICATION

Do not inhale high temperature thermal decomposition products. Do not smoke in presence of P.T.F.E, contamination of tobacco products must be avoided.

4: FIRST AID MEASURES

| 4.1 Eye Contact               | Wash eye with water.         |
| 4.2 Skin Contact              | No known hazard in general use. |
| 4.3 Ingestion                 | Unlikely to occur in general use. |
| 4.4 Inhalation                | In the product as supplied no significant health hazard. |
5: FIRE FIGHTING MEASURES

5.1 Extinguishing Media  Water, Carbon dioxide, Dry powder, Foam.

5.2 Fire and Explosion Hazards  
Low fire hazard. However, combustion or thermal decomposition will evolve toxic and corrosive vapours.

5.3 Protection Measures  
In the event of a fire, wear a self contained breathing apparatus and a complete suit protecting against chemicals. Wear neoprene gloves when handling refuse from fire.

6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions  
Recommendations given in section 8.

6.2 Environmental Precautions  
Waste disposal, see section 13.

6.3 Cleaning Up  
Remove any dust generated by vacuum or damp cloth.

7: STORAGE AND HANDLING

7.1 Storage  
Cool, dry conditions away from direct sunlight and electrical discharge.

7.2 Recommended Shelf Life  
Indefinite if stored correctly.

7.3 Handling  
Wear gloves.

8: EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Occupational Exposure Limits

8.2 Engineering Measures  
Recommend local exhaust ventilation when cutting, grinding machining or drilling operations involved.

8.3 Personal Protective Equipment  

Respiratory Protection  
Use suitable respirator if dust exposure limits are exceeded during cutting, grinding or drilling.

Hand Protection  
Wear cotton or rubber gloves.

Eye Protection  
Use approved eye protection when machining.

Skin Protection  
Wear overalls.
9: PHYSICAL / CHEMICAL PROPERTIES

| 9.1 Appearance | White coloured sheet or gasket. |
| 9.2 Odour       | Not applicable. |
| 9.3 PH          | Not applicable. |
| 9.4 Boiling Point | Not applicable. |
| 9.5 Melting Point | 327-342 Deg C. |
| 9.6 Flash Point | Not applicable. |
| 9.7 Decomposition Temperature | > 300oC (degrees) |
| 9.8 Explosive Properties | Not applicable. |
| 9.9 Vapour Pressure | Not applicable. |
| 9.10 Relative Density | 3.0 g/cc |
| 9.11 Solubility | Insoluble in water. |

10: STABILITY AND REACTIVITY

| 10.1 Stability | Stable under recommended storage conditions. |
| 10.2 Conditions to Avoid | Temperatures above 300 Deg C. |
| 10.3 Materials to Avoid | Aluminium powder, strong oxidising agents and alkali metals. |
| 10.4 Hazardous Decomposition Products | Hydrogen fluoride, carbonyl fluoride and fluorinated olefines. |

11: TOXICOLOGICAL INFORMATION

| 11.1 Short Term Effects |
| Eye Contact | May cause irritation. |
| Skin Contact | May cause temporary irritation. |
| Ingestion | Not established. |
11.1 Inhilation
High temperature thermal decomposition products may cause polymer fume fever with flu-like symptoms, symptoms usually occur after 2 hours and decline within the next 36 to 48 hours. No persistent or cumulative effects have been observed.

11.2 Chronic Effects

12: ECOLOGICAL INFORMATION

12.1 LC50
Not applicable.

12.2 COD
Not applicable.

12.3 BOD
Not applicable.

12.4 Other
Not applicable.

13: DISPOSAL CONSIDERATIONS
Bury on authorised landfill site or incinerate under approved controlled conditions. This product may be incinerated above 800 Deg C using a scrubber to remove Hydrogen Fluoride. Disposal should be in accordance with local, state or national legislation.

14: TRANSPORT INFORMATION

14.1 Packaging
Pack to prevent damage and liberation of any dust.

14.2 Freight Classifications
Not classified as dangerous goods.

ADR Number
Not applicable.

IMDG Code
Not applicable.

Packing Group
Not applicable.

Trem Card
Not applicable.

UN Number
Not applicable.

15: REGULATORY INFORMATION

15.1 CPL Classification
Not applicable.

Hazard Pictogram
Not applicable.
15.1 **Risk Phrases**  
Not applicable.

**Safety Phrases**  
S21, S23, S41

NOTE: This Data Sheet does not constitute a users assessment of workplace risk as required by HSW act, COSHH, Management of Health and Safety at Work regulations or other Health and Safety legislation.

16: **OTHER INFORMATION**

Text of any Risk Phrases/Safety Phrases listed in 15.1

- **S22**  
  Do not breathe dust.

- **S35**  
  This material and its container must be disposed of in a safe way.

- **S37**  
  Wear suitable gloves.

**Significant Contents:**

Polytetrafluorethylene (PTFE)  
Barium Sulphate (Barytes)

**Further information and relevant advice can be found in:-**

Health and Safety at Work Act 1974

The Control of Substances Hazardous to Health Regulations 1988

NOTE: The information contained in this Safety Data Sheet is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.