SAFETY DATA SHEET

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name: Expando HR Plus (Black)

Supplier: Federal-Mogul Corporation, Manchester International
Office Centre
Styal Road, Manchester M22 5TN
England
Tel: +44 (0) 161 955 5200
Fax: +44 (0) 161 955 5204

Emergency telephone:
24hr EP (INFOTRAC): 1-800-535-5053
International: (001) 352-323-3500

Intended use: Protective Sleevng

2 HAZARDS IDENTIFICATION

This material is not considered to be hazardous according to regulatory guidelines (see Section 15). Under normal conditions of processing and use, exposure to the chemical constituents in this product is unlikely. Used as intended, this product is not expected to generate potentially hazardous quantities of dust or fumes.

Potential health effects

Inhalation: Not relevant, due to the form of the product.

Eye contact: No adverse effects due to eye contact are expected.

Skin contact: No adverse effects due to skin contact are expected.

Ingestion: Not relevant, due to the form of the product.

Other health effects: Not relevant, due to the form of the product.

Potential physical / chemical effects: This product is not flammable. Will burn if involved in a fire.

Environment: The environmental hazard of the product is considered to be limited.

3 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>EC No.</th>
<th>CAS-No.</th>
<th>Concentration *</th>
<th>Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polytetraflouroethylene</td>
<td>Polymer</td>
<td>9002-84-0</td>
<td>1.5 - 2%</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The full text for all R-phrases is displayed in Section 16.
4 FIRST-AID MEASURES

Inhalation: No specific first aid measures noted.

Eye contact: No specific first aid measures noted. However, immediately flush with plenty of water for at least 15 minutes.

Skin contact: No adverse effects due to skin contact.

Ingestion: No adverse effects due to ingestion are expected.

5 FIRE-FIGHTING MEASURES

Extinguishing media: This product is not flammable. Will burn if involved in a fire. Use fire-extinguishing media appropriate for surrounding materials.

Inappropriate extinguishing media: None.

Special fire fighting procedures: Use standard firefighting procedures and consider the hazards of other involved materials.

Unusual fire & explosion hazards: During fire, gases hazardous to health may be formed.

Hazardous combustion products: Carbon dioxide, Carbon monoxide, Carbonyl fluoride, Nitrogen oxides

Protective measures: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions: Used as intended, this product is not expected to generate potentially hazardous quantities of dust or fumes. See Section 8 for personal protective equipment.

Spill cleanup methods: Collect and dispose of spillage as indicated in section 13.

Environmental precautions: No specific precautions.

7 HANDLING AND STORAGE

Handling: Normal handling and use of this product should not generate dust or fumes. Observe good industrial hygiene practices.

Storage: Store in closed original container in a dry place.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values: No exposure limits noted for ingredient(s).

Engineering controls: Used as intended, this product is not expected to generate potentially hazardous quantities of...
dust or fumes. No special control measures are required for the normal handling and dispensing of this medication.

**Respiratory protection:** No protection is ordinarily required under normal conditions of use and with adequate ventilation.

**Eye protection:** No special precautions.

**Hand protection:** It is a good industrial hygiene practice to minimise skin contact.

**Skin protection:** No skin protection is ordinarily required under normal conditions of use.

**Hygiene measures:** Wash hands after contact.

### PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th><strong>Physical state:</strong></th>
<th>Solid (Sleeve)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Colour:</strong></td>
<td>Black</td>
</tr>
<tr>
<td><strong>Odour:</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Odour threshold:</strong></td>
<td>No data available.</td>
</tr>
<tr>
<td><strong>pH:</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Melting point:</strong></td>
<td>230°C (446°F)</td>
</tr>
<tr>
<td><strong>Freezing point:</strong></td>
<td>No data available.</td>
</tr>
<tr>
<td><strong>Boiling Point:</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Relative density:</strong></td>
<td>1.65 - 1.7</td>
</tr>
<tr>
<td><strong>Vapour pressure:</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Vapour density (air=1):</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Evaporation rate:</strong></td>
<td>No data available.</td>
</tr>
<tr>
<td><strong>Solubility in water:</strong></td>
<td>Insoluble</td>
</tr>
<tr>
<td><strong>Solubility (other):</strong></td>
<td>No data available.</td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water):</strong></td>
<td>No data available.</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Volatile organic compounds (VOC):</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Flash point:</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Autoignition temperature:</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Flammability limit - lower(%):</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Flammability limit - upper (%):</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Explosive properties:</strong></td>
<td>No data available</td>
</tr>
</tbody>
</table>

### STABILITY AND REACTIVITY

**Stability:** Stable under normal temperature conditions and recommended use.

**Conditions to avoid:** No special precautions.

**Incompatible materials:** Alkali metals.

**Hazardous decomposition products:**

| At elevated temperatures: | Carbon dioxide, Carbon monoxide, Carbonyl fluoride, Nitrogen oxides |
Possibility of hazardous reactions: Will not occur.

### 11 TOXICOLOGICAL INFORMATION

**Inhalation:** Not relevant, due to the form of the product.

**Eye contact:** No adverse effects due to eye contact are expected.

**Skin contact:** No adverse effects due to skin contact are expected.

**Ingestion:** No adverse effects due to ingestion are expected.

**Sensitisation:** Not applicable.

### Listed carcinogens:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polytetraflouroethylene</td>
<td>3</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

- IARC: 1 = Carcinogenic to Humans; 2A = Probably Carcinogenic to Humans; 2B = Possibly Carcinogenic to Humans; 3 = Not classifiable as to carcinogenicity to humans; 4 = Probably not carcinogenic to humans; Not listed = Not evaluated by IARC.
- ACGIH: A1 = Confirmed Human Carcinogen; A2 = Suspected Human Carcinogen; A3 = Confirmed Animal Carcinogen; A4 = Not classifiable as a human carcinogen; A5 = Not suspected to be a human carcinogen; Not listed = Not evaluated by ACGIH.

**Mutagenesis:** No data available.

**Reproductive toxicity:** No data available.

**Other effects:** Not relevant, due to the form of the product.

### 12 ECOLOGICAL INFORMATION

**Ecotoxicity:** The product is not expected to be hazardous to the environment.

**Mobility:** Not relevant, due to the form of the product.

**Persistence and degradability:** Not relevant.

**Bioaccumulation potential:** Not relevant.

### 13 DISPOSAL CONSIDERATIONS

**General information:** Dispose of waste and residues in accordance with local authority requirements.

**Disposal methods:** Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

**European waste codes**

- **Unused product:** 16 03 04

### 14 TRANSPORT INFORMATION

**ADR/RID** Not regulated.
The product has not been classified as dangerous according to the legislation in force.

Wording of the R-phrases in sections 2 and 3: None

Inventory status: All ingredients are either listed or exempt from listing on EINECS/ELINCS.

Issue date: 24-Jan-2013
Supercedes date:
SDS No.: Expando HR Plus (Black)_UK
Disclaimer: The information provided on this data sheet was abstracted from supplier safety data sheets and standard references in occupational health and toxicology. Federal-Mogul makes no representation or warranty with respect to the information obtained from such references. The information is however, as of the date provided, true and accurate to the best of Federal-Mogul's knowledge, and should be used to make an independent determination of the methods to safeguard workers and the environment.