**ALUMINIUM POWDER**

<table>
<thead>
<tr>
<th>CAS No: 7429-90-5</th>
<th>RTECS No: BD0330000</th>
<th>EC No: 013-001-00-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum powder</td>
<td>AI</td>
<td>Atomic mass: 27.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TYPES OF HAZARD/EXPOSURE</th>
<th>ACUTE HAZARDS/SYMPTOMS</th>
<th>PREVENTION</th>
<th>FIRST AID/FIRE FIGHTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE</td>
<td>Flammable.</td>
<td>NO contact with acid(s), alcohol, oxidants and water.</td>
<td>Dry sand, special powder. NO water. NO carbon dioxide, foam.</td>
</tr>
<tr>
<td>EXPLOSION</td>
<td>Finely dispersed particles form explosive mixtures in air. Risk of fire and explosion on contact with acid(s), alcohol, oxidants and water.</td>
<td>Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXPOSURE</th>
<th>PREVENT DISPERSION OF DUST!</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Local exhaust or breathing protection. Fresh air, rest.</td>
</tr>
<tr>
<td>Skin</td>
<td>Protective gloves. Rinse skin with plenty of water or shower.</td>
</tr>
<tr>
<td>Eyes</td>
<td>Safety goggles. First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Do not eat, drink, or smoke during work. Rinse mouth.</td>
</tr>
</tbody>
</table>

**SPILLAGE DISPOSAL**

Sweep spilled substance into covered and dry containers. (Extra personal protection: P2 filter respirator for harmful particles).

**PACKAGING & LABELLING**

F Symbol
R: 15-17
S: (2-)7/8-43
UN Hazard Class: 4.3
UN Pack Group: II

**EMERGENCY RESPONSE**

Transport Emergency Card: TEC (R)-43G14 NFPA Code: H0; F3; R1; (uncoated)

**STORAGE**

Separated from strong oxidants, strong bases, strong acids and water. See Chemical Dangers. Dry. Well closed.
**0988** ALUMINIUM POWDER

### IMPORTANT DATA

**Physical State; Appearance**
WHITE TO GREY POWDER.

**Physical dangers**
Dust explosion possible if in powder or granular form, mixed with air.

**Chemical dangers**
Reacts with water and alcohols, and violently with oxidants, strong acids, strong bases, and chlorinated hydrocarbons causing fire and explosion hazard.

**Occupational exposure limits**
- TLV (as Al): 5 mg/m³ (as TWA) (pyro powder) (ACGIH 2000).
- TLV: 10 mg/m³ (as TWA) (metal dust) (ACGIH 2000).

**Routes of exposure**
The substance can be absorbed into the body by inhalation.

**Inhalation risk**
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly.

**Effects of long-term or repeated exposure**
Lungs may be affected by repeated or prolonged exposure to dust particles. The substance may have effects on the nervous system, resulting in impaired functions.

### PHYSICAL PROPERTIES

- Boiling point: 2327°C
- Melting point: 660°C
- Density: 2.7 g/cm³
- Solubility in water: none, reaction
- Auto-ignition temperature: 590°C

### ENVIRONMENTAL DATA

### NOTES

Other UN number: UN1309 Aluminium powder, coated, Hazard class 4.1, Pack group II.

### ADDITIONAL INFORMATION

<table>
<thead>
<tr>
<th>LEGAL NOTICE</th>
<th>Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information</th>
</tr>
</thead>
</table>