Section 1 - Chemical Product and Company Identification

MSDS Name: Aluminium, powder
Catalog Numbers: 20093-0000, 20093-0025, 20093-0250, 20093-5000, 34904-0000, 34904-0100, 34904-0500, 40053-0000, 40053-5000
Synonyms:

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaalana 3a
2440 Geel, Belgium

Company Identification: (USA)
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11
Emergency Number, Europe: +32 14 57 52 99
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>%</th>
<th>EINECS#</th>
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</thead>
<tbody>
<tr>
<td>7429-90-5</td>
<td>Aluminium</td>
<td>&gt;99%</td>
<td>231-072-3</td>
</tr>
</tbody>
</table>

Hazard Symbols: F

Risk Phrases: 15 17

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Contact with water liberates extremely flammable gases. Spontaneously flammable in air.

Potential Health Effects

Eye: May cause eye irritation.
Skin: May cause skin irritation.
Ingestion: Ingestion of large amounts may cause gastrointestinal irritation.
Inhalation: May cause respiratory tract irritation.
Chronic:

Section 4 - First Aid Measures
### Section 5 - Fire Fighting Measures

**General Information:**
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dusts at sufficient concentrations can form explosive mixtures with air. Water Reactive. Material will react with water and may release a flammable and/or toxic gas. Dust can be an explosion hazard when exposed to heat or flame. Dangerous fire hazard in the form of dust when exposed to heat or flame.

**Extinguishing Media:**
Use foam, dry chemical, or carbon dioxide. DO NOT USE WATER!

### Section 6 - Accidental Release Measures

**General Information:**
Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**
Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Remove all sources of ignition. Use a spark-proof tool. Do not expose spill to water.

### Section 7 - Handling and Storage

**Handling:**
Use with adequate ventilation. Minimize dust generation and accumulation. Ground and bond containers when transferring material. Avoid contact with skin and eyes. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Handle under an inert atmosphere. Keep from contact with clothing and other combustible materials.

**Storage:**
Keep away from heat, sparks, and flame. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Do not expose to air. Store under an inert atmosphere.

### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:**
Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Region</th>
<th>Limitations</th>
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<tr>
<td>CAS# 7429-90-5:</td>
<td>United Kingdom, WEL - TWA: 10 mg/m3 TWA (inhalable dust); 4 mg/m3 TWA (respirable dust) United Kingdom, WEL - STEL: 30 mg/m3 STEL (inhalable dust); 12 mg/m3 STEL (respirable dust) United States OSHA: 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) Belgium - TWA: 10 mg/m3 VLE (metal); 5 mg/m3 VLE (fume) France - VME: 10 mg/m3 VME (metal); 5 mg/m3 VME (dust) Japan: 0.5 mg/m3 OEL (respirable dust); 2 mg/m3 OEL (total dust) Malaysia: 10 mg/m3 TWA (metal dust) Netherlands: 10 mg/m3 MAC</td>
</tr>
</tbody>
</table>
Spain: 10 mg/m³ VLA-ED (dust)

Personal Protective Equipment

**Eyes:** Wear chemical splash goggles.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### Section 9 - Physical and Chemical Properties

**Physical State:** Powder

**Color:** grey

**Odor:** odorless

**pH:** Not available

**Vapor Pressure:** Not available

**Viscosity:** Not available

**Boiling Point:** 2327 deg C @760mmHg (4,220.60°F)

**Freezing/Melting Point:** 660 deg C (1,220.00°F)

**Autoignition Temperature:** 400 deg C (752.00 deg F)

**Flash Point:** Not available

**Explosion Limits: Lower:** Not available

**Explosion Limits: Upper:** Not available

**Decomposition Temperature:** Not available

**Solubility in water:** Insoluble

**Specific Gravity/Density:**

**Molecular Formula:** Al

**Molecular Weight:** 26.98

### Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures. Air sensitive. Moisture sensitive.

**Conditions to Avoid:** Incompatible materials, exposure to air, combustible materials, exposure to moist air or water.

**Incompatibilities with Other Materials**

Water, strong acids, bases, ammonium persulfate, bromates, carbon dioxide, chlorates, chlorinated solvents, chlorine trifluoride, fluorine, iron oxide, lead oxide, liquid chlorine, nitrates, nitrites, nitro compounds, potassium chlorates, sodium carbonate, sodium chlorate, sodium hydroxide, sodium peroxide, oxygen, sodium carbide, halogenated organics (e.g. dibromoethane, hexachlorobenzene, methyl chloride, trichloroethylene), bromine, carbon disulfide, barium chloride, calcium chloride, magnesium chloride, zinc chloride, barium iodate, calcium bromate, calcium iodate, iodates, magnesium bromate, magnesium iodate, palladium, potassium iodate, sodium bromate, sulfur dichloride, zinc bromate, zinc iodate, chlorinated hydrocarbons, potassium perchlorate, magnesium perchlorate.

**Hazardous Decomposition Products**

Aluminum oxide.

**Hazardous Polymerization**

Will not occur.

### Section 11 - Toxicological Information

**RTECS#:** CAS# 7429-90-5: BD0330000 BD1020000
**LD50/LC50:** RTECS: Not available.

**Carcinogenicity:** Aluminium - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

**Other:** See actual entry in RTECS for complete information.

### Section 12 - Ecological Information

**Ecotoxicity:**
- Daphnia: EC50: 1.4 mg/l; 48h; .
- Daphnia: EC50: 1.4 mg/l; 48h; .

### Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

### Section 14 - Transport Information

<table>
<thead>
<tr>
<th>IATA</th>
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<th>RID/ADR</th>
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<tbody>
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<td>UN Number:</td>
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<tr>
<td>Packing Group:</td>
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</tr>
</tbody>
</table>

### Section 15 - Regulatory Information

**European/International Regulations**

European Labeling in Accordance with EC Directives

- **Hazard Symbols:** F
- **Risk Phrases:**
  - R 15 Contact with water liberates extremely flammable gases.
  - R 17 Spontaneously flammable in air.
- **Safety Phrases:**
  - S 7/8 Keep container tightly closed and dry.
  - S 43A In case of fire, use dry chemical (never use water).
- **WGK (Water Danger/Protection)**
  - CAS# 7429-90-5: 0

**Canada**

- CAS# 7429-90-5 is listed on Canada's DSL List

**US Federal**

- **TSCA**
  - CAS# 7429-90-5 is listed on the TSCA Inventory.

### Section 16 - Other Information

**MSDS Creation Date:** 7/16/1996

**Revision #2 Date:** 8/25/2004

**Revisions were made in Sections:** General revision.

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The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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