MATERIAL SAFETY DATA SHEET
Magnesium oxide

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Magnesium oxide

**Catalog Numbers:**
- 19343-0000, 19343-0100, 20515-0000, 20515-0025, 20515-5000, 22253-0000, 22253-1000, 22253-5000, 26383-0000, 26383-0025, 26383-5000, 42389-0000, 42389-0500, 42389-5000

**Synonyms:**
Acros Organics BVBA
Janssen Pharmaceuticaalana 3a
2440 Geel, Belgium

**Company Identification:**
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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<tbody>
<tr>
<td>1309-48-4</td>
<td>Magnesium oxide</td>
<td>215-171-9</td>
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</table>

**Hazard Symbols:** None listed

**Risk Phrases:** None listed

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

*Not available*

**Potential Health Effects**

**Eye:** Causes mild eye irritation.

**Skin:** Causes mild skin irritation.

**Ingestion:** May cause irritation of the digestive tract. May be harmful if swallowed.

**Inhalation:** May cause respiratory tract irritation. May be harmful if inhaled.

**Chronic:**

Section 4 - First Aid Measures

**Eyes:**
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:**
Flush skin with plenty of water for at least 15 minutes while removing contaminated
clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:** Wash mouth out with water. Get medical aid if irritation or symptoms occur.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**Notes to Physician:** Treat symptomatically and supportively.

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### 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. Substance is noncombustible.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

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### 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.

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### Section 7 - Handling and Storage

**Handling:** Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

**Storage:** Store in a cool, dry place. Store in a tightly closed container.

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### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**

CAS# 1309-48-4:

- United Kingdom, WEL - TWA: 10 mg/m³ TWA (inhalable dust, as Mg); 4 mg/m³ TWA (fume and respirable dust, as United Kingdom, WEL - STEL: 30 mg/m³ STEL (inhalable dust, as Mg); 12 mg/m³ STEL (fume and respirable dust,
- United States OSHA: 15 mg/m³ TWA (total particulate)
- Belgium - TWA: 10 mg/m³ VLE (fumes)
- France - VME: 10 mg/m³ VME (fume)
- Malaysia: 10 mg/m³ TWA (fume)
- Netherlands: 10 mg/m³ MAC (smoke, as Mg)
- Spain: 10 mg/m³ VLA-ED (dust and fume)

**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.

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### Section 9 - Physical and Chemical Properties

**Physical State:** Powder

**Color:** white

**Odor:** odorless
pH: 10.3 (saturated solution)

**Vapor Pressure:** 0hPa @20 deg C

**Viscosity:** Not available

**Boiling Point:** 3600 deg C @760mmHg (6,512.00°F)

**Freezing/Melting Point:** 2800 deg C (5,072.00°F)

**Autoignition Temperature:** Not available

**Flash Point:** Not available

**Explosion Limits: Lower:** Not available

**Explosion Limits: Upper:** Not available

**Decomposition Temperature:** Not available

**Solubility in water:** 6.2 mg/l (20°C), reacts generates heat a

**Specific Gravity/Density:** 3.580

**Molecular Formula:** MgO

**Molecular Weight:** 40.29

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### Section 10 - Stability and Reactivity

**Chemical Stability:** Absorbs carbon dioxide from the air. Moisture sensitive. May decompose on exposure to moist air or water. Contact with water can also cause the liberation of heat and spattering of material.

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

**Incompatibilities with Other Materials**
- Water
- Strong oxidizing agents
- Strong acids
- Bromine trifluoride
- Chlorine trifluoride
- Bromine pentafluoride
- Diphosphorus pentachloride

**Hazardous Decomposition Products**
- Oxides of magnesium.

**Hazardous Polymerization**
- Will not occur.

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### Section 11 - Toxicological Information

**RTECS#:** CAS# 1309-48-4; OM3850000

**LD50/LC50:** RTECS: Not available.

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

**Other:** The toxicological properties have not been fully investigated.

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### Section 12 - Ecological Information

**Other:** The high pH of this material makes it harmful to aquatic life.

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### Section 13 - Disposal Considerations

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

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### Section 14 - Transport Information

<table>
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<tr>
<th>IATA</th>
<th>IMO</th>
<th>RID/ADR</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Shipping Name:</th>
<th>Hazard Class:</th>
<th>UN Number:</th>
<th>Packing Group:</th>
</tr>
</thead>
</table>

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### Section 15 - Regulatory Information

**European/International Regulations**

European Labeling in Accordance with EC Directives
Hazard Symbols: Not available
Risk Phrases:
Safety Phrases:
   S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)
   CAS# 1309-48-4: 1

Canada
   CAS# 1309-48-4 is listed on Canada's DSL List

US Federal
   TSCA
      CAS# 1309-48-4 is listed on the TSCA Inventory.

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**Section 16 - Other Information**

**MSDS Creation Date:** 7/16/1996
**Revision #1 Date:** 10/28/2004

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

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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