Material Safety Data Sheet
Magnesium perchlorate

MSDS# 00910

Section 1 - Chemical Product and Company Identification

MSDS Name: Magnesium perchlorate
Catalog Numbers: AC413460000, AC413460050, AC413461000, AC413465000, M54-212, M54-500
Synonyms: Perchloric acid, magnesium salt.

Company Identification:
Acros Organics BVBA
Janssen Pharmaceuticalaan 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

CHEMTREC Phone Number, US:
800-424-9300

CHEMTREC Phone Number, Europe:
703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#:
10034-81-8

Chemical Name:
Magnesium perchlorate

EINECS#:
233-108-3

Hazard Symbols:
XI O

Risk Phrases:
14 36/37/38 8

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Danger! Strong oxidizer. Contact with other material may cause a fire. Reacts violently with water. Causes eye, skin, and respiratory tract irritation. Target Organs: Respiratory system, eyes, skin.

Potential Health Effects
Eye: Causes eye irritation.
Skin: Causes skin irritation. May be harmful if absorbed through the skin.
Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.
Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.
Chronic: Prolonged or repeated skin contact may cause dermatitis. Effects may be delayed.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Do not induce vomiting. Get medical aid.

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.

Notes to Physician: Treat symptomatically and supportively.

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. Strong oxidizer. Contact with other material may cause fire. Reacts violently with water. May accelerate burning if involved in a fire.

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

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits: Not applicable

NFPA Rating: ; Special Hazard: OX

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. Provide ventilation. Keep combustibles (wood, paper, oil, etc.,) away from spilled material. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Keep from contact with clothing and other combustible materials.

Storage: Do not store near combustible materials. Store in a cool, dry place. Store in a tightly closed container. Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium perchlorate</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: Magnesium perchlorate: None listed

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties
Physical State: Solid
Color: white
Odor: odorless
pH: Not available
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: 251 deg C (483.80°F)

Decomposition Temperature:
Solubility in water: 993 g/L (25°C)
Specific Gravity/Density: Not available.
Molecular Formula: Mg(ClO4)2
Molecular Weight: 223.21

Section 10 - Stability and Reactivity
Chemical Stability: Reacts violently with water.
Conditions to Avoid: Incompatible materials, dust generation, combustible materials, exposure to moist air or water.
Incompatibilities with Other Materials: Strong reducing agents, strong acids, alcohols, ammonia, dimethyl sulfoxide, ethylene oxide, hydrazine, phosphorus, alkenes, organic matter, metal powders, mineral acids, hydrocarbons, trimethyl phosphate, butyl fluoride.
Hazardous Decomposition Products: Hydrogen chloride, phosgene, metallic oxides.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information
RTECS#: CAS# 10034-81-8: SC8925000
LD50/LC50: RTECS: Not available.
Carcinogenicity: Magnesium perchlorate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: The toxicological properties have not been fully investigated.

Section 12 - Ecological Information
Other: Do not empty into drains.

Section 13 - Disposal Considerations
Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information
US DOT
Shipping Name: MAGNESIUM PERCHLORATE
Hazard Class: 5.1
UN Number: UN1475
Packing Group: II
Canada TDG
Shipping Name: MAGNESIUM PERCHLORATE
Hazard Class: 5.1
UN Number: UN1475
Packing Group: II

Section 15 - Regulatory Information
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: XI O
Risk Phrases:
   R 14 Reacts violently with water.
   R 36/37/38 Irritating to eyes, respiratory system and skin.
   R 8 Contact with combustible material may cause fire.

Safety Phrases:
   S 8 Keep container dry.
   S 17 Keep away from combustible material.
   S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
   S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)
   CAS# 10034-81-8: 1

Canada
   CAS# 10034-81-8 is listed on Canada's DSL List
   Canadian WHMIS Classifications: C, F, D2B
   This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
   CAS# 10034-81-8 is not listed on Canada's Ingredient Disclosure List.

US Federal
TSCA
   CAS# 10034-81-8 is listed on the TSCA Inventory.

Section 16 - Other Information
   MSDS Creation Date: 12/12/1997
   Revision #10 Date 7/20/2009
   Reviewed 2012.10.26
   10:18:03 -04'00'

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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