

MATERIAL SAFETY DATA SHEET  
Magnesium nitrate hexahydrate

## Section 1 - Chemical Product and Company Identification

**MSDS Name:** Magnesium nitrate hexahydrate

**Catalog Numbers:** 21756-0000, 21756-0010, 21756-5000, 42388-0000, 42388-0050, 42388-5000

**Synonyms:**

**Company Identification:** Acros Organics BVBA  
Janssen Pharmaceuticaaan 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

CAS#	Chemical Name:	%	EINECS#	Hazard Symbols:	Risk Phrases:
13446-18-9	Magnesium nitrate hexahydrate		unlisted		

Text for R-phrases: see Section 16

**Hazard Symbols:** XI O**Risk Phrases:** 36/37/38 8

## Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

*Irritating to eyes, respiratory system and skin. Contact with combustible material may cause fire.***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. Ingestion of nitrate containing compounds can lead to methemoglobinemia.**Inhalation:** Causes respiratory tract irritation. May be harmful if inhaled.**Chronic:**

#### Section 4 - First Aid Measures

<b>Eyes:</b>	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
<b>Skin:</b>	Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
<b>Ingestion:</b>	Get medical aid. Wash mouth out with water.
<b>Inhalation:</b>	Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
<b>Notes to Physician:</b>	Treat symptomatically and supportively.

#### Section 5 - Fire Fighting Measures

<b>General Information:</b>	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.
<b>Extinguishing Media:</b>	Use water only!

#### Section 6 - Accidental Release Measures

<b>General Information:</b>	Use proper personal protective equipment as indicated in Section 8.
<b>Spills/Leaks:</b>	Vacuum or sweep up material and place into a suitable disposal container. Do not let this chemical enter the environment.

#### Section 7 - Handling and Storage

<b>Handling:</b>	Minimize dust generation and accumulation. Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Avoid ingestion and inhalation. Use only in a chemical fume hood.
<b>Storage:</b>	Do not store near combustible materials. Store in a cool, dry place. Store in a tightly closed container.

#### Section 8 - Exposure Controls, Personal Protection

##### 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

CAS# 10377-60-3:

CAS# 13446-18-9:

##### Personal Protective Equipment

<b>Eyes:</b>	Wear chemical splash goggles.
<b>Skin:</b>	Wear appropriate protective gloves to prevent skin exposure.
<b>Clothing:</b>	Wear appropriate protective clothing to prevent skin exposure.
<b>Respirators:</b>	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:** Crystals

**Color:** white  
**Odor:** odorless  
**pH:** 5.0-8.2 (5% aq. sol.)  
**Vapor Pressure:** Not available  
**Viscosity:** Not available  
**Boiling Point:** 330 deg C @760mmHg ( 626.00°F)  
**Freezing/Melting Point:** 89 deg C ( 192.20°F)  
**Autoignition Temperature:** Not available  
**Flash Point:** 93.3 deg C ( 199.94 deg F)  
**Explosion Limits: Lower:** Not available  
**Explosion Limits: Upper:** Not available  
**Decomposition Temperature:**  
**Solubility in water:** 420 g/l (20°C)  
**Specific Gravity/Density:** 1.630  
**Molecular Formula:** MgN2O6.6H2O  
**Molecular Weight:** 256.4

#### Section 10 - Stability and Reactivity

**Chemical Stability:** Hygroscopic: absorbs moisture or water from the air.  
**Conditions to Avoid:** Incompatible materials, heating to decomposition, exposure to moist air or water.  
**Incompatibilities with Other Materials** Strong oxidizing agents, strong reducing agents, strong acids.  
**Hazardous Decomposition Products** Nitrogen oxides, oxides of magnesium.  
**Hazardous Polymerization** Will not occur.

#### Section 11 - Toxicological Information

**RTECS#:** CAS# 10377-60-3: None listed  
CAS# 13446-18-9: OM3756000  
**LD50/LC50:** RTECS: Not available. RTECS:  
**CAS# 13446-18-9:** Draize test, rabbit, eye: 500 mg/24H Mild;  
Draize test, rabbit, skin: 500 mg/24H Mild;  
Oral, rat: LD50 = 5440 mg/kg;  
Other:  
**Carcinogenicity:** Magnesium nitrate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.  
Magnesium nitrate hexahydrate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.  
**Other:** The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

#### Section 12 - Ecological Information

**Ecotoxicity:** Not available  
**Other:** Do not empty into drains.  
Log Pow anhydrous = -0.61 (calc)

#### Section 13 - Disposal Considerations

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

#### Section 14 - Transport Information

	<b>IATA</b>	<b>IMO</b>	<b>RID/ADR</b>
<b>Shipping Name:</b>	MAGNESIUM NITRATE	MAGNESIUM NITRATE	MAGNESIUM NITRATE
<b>Hazard Class:</b>	5.1	5.1	5.1
<b>UN Number:</b>	1474	1474	1474
<b>Packing Group:</b>	III	III	III

## Section 15 - Regulatory Information

### European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI O

Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system and skin.

R 8 Contact with combustible material may cause fire.

Safety Phrases:

S 17 Keep away from combustible material.

S 36 Wear suitable protective clothing.

S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)

CAS# 10377-60-3: 1

CAS# 13446-18-9: 1

Canada

CAS# 10377-60-3 is listed on Canada's DSL List

### US Federal

TSCA

CAS# 10377-60-3 is listed on the TSCA Inventory.

CAS# 13446-18-9 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the Inventory (40CFR720.3(u)(2)).

## Section 16 - Other Information

### Text for R-phrases from Section 2

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

**Revision #1 Date** 12/12/2005

**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 merchantability 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.*

-----