

**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 05/05/2015

Reviewed on 05/05/2015

**\* 1 Identification**

- **Product identifier**
- **Trade name: 3% Magnesium**
- **Relevant identified uses of the substance or mixture and uses advised against**  
For agricultural use only. Not for human or animal consumption.
- **Product description**  
A commercial agricultural product used to improve soil and/or plant health and for improved growth.  
NPK Values: 0 - 0 - 0; 3% Magnesium
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Actagro, LLC  
4516 N. Howard Ave  
Kerman, CA 93630  
Phone: (559) 369-2222  
Fax: (559) 843-2845
- **Emergency telephone number:** INFOTRAC: (800) 535-5053

**\* 2 Hazard(s) identification**

- **Classification of the substance or mixture**  
The product does not need classification according to OSHA HazCom Standard 29 CFR paragraph (d) of §1910.1200(g) and GHS Rev 03.
- **Label elements**
- **GHS label elements** Non-Regulated Material
- **Hazard pictograms** Non-Regulated Material
- **Signal word** Non-Regulated Material
- **Hazard statements** Non-Regulated Material
- **Unknown acute toxicity:**  
35.4 percent of the mixture consists of ingredient(s) of unknown toxicity.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

- **Hazard(s) not otherwise classified (HNOC):** None known

**\* 3 Composition/information on ingredients**

CAS: 7732-18-5 RTECS: ZC 0110000	water, distilled, conductivity or of similar purity	25-50%
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- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

(Contd. on page 2)

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<b>· Dangerous Components:</b>		
CAS: 7487-88-9 RTECS: OM 4500000	Magnesium Sulphate ⚠ STOT SE 3, H335	25-50%
CAS: 1415-93-6	Leonardite ⚠ STOT SE 3, H335; Eye Irrit. 2B, H320; Combustible Dust	5-10%

### \* 4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Generally the product does not irritate the skin.  
Wash areas with soap and water.  
If skin irritation occurs, consult a doctor.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Consume large amounts of water. If symptoms persist, consult a physician.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### \* 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**  
If incinerated, product will release the following toxic fumes: Oxides of Carbon, Magnesium, Potassium, Silicon, Sodium and Sulfur.
- **Advice for firefighters**
- **Protective equipment:**  
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

### \* 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation  
Material can create slippery conditions.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (ie. sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to section 13.  
Ensure adequate ventilation.  
Dispose of the collected material according to regulations.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

(Contd. on page 3)

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### \* 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**  
Store away from strong acids, strong oxidizing agents and strong reducing agents.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

### \* 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**  
All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.
- **Components with occupational exposure limits:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.
- **Material of gloves** Not required.
- **Penetration time of glove material** Not applicable.
- **Eye protection:** Not required.
- **Body protection:** Not required.

### \* 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
- **Form:** Liquid
- **Color:** Black
- **Odor:** Odorless
- **Odor threshold:** Not determined.
- **pH-value @ 20 °C (68 °F):** 8.4
- **Change in condition**
- **Melting point/Melting range:** Not determined.
- **Boiling point/Boiling range:** 100 °C (212 °F)
- **Flash point:** Not applicable.

(Contd. on page 4)

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- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:**
  - **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - **Lower:** 0.0 Vol %
  - **Upper:** 0.0 Vol %
- **Vapor pressure @ 20 °C (68 °F):** 23 hPa (17 mm Hg)
- **Density @ 20 °C (68 °F):** 1.271 g/cm<sup>3</sup> (10.606 lbs/gal)
- **Relative density** Not determined.
- **Vapor density** Not determined.
- **Evaporation rate** Not determined.
- **Solubility in / Miscibility with Water:** Soluble.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - **Dynamic:** Not determined.
  - **Kinematic:** Not determined.
- **Solvent content:**
  - **Organic solvents:** 0.0 %
  - **Water:** 33.7 %
- **Other information** No further relevant information available.

**\* 10 Stability and reactivity**

- **Reactivity** No further relevant information available.
- **Chemical stability** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** None known.
- **Hazardous decomposition products:** Oxides of Carbon, Magnesium, Potassium, Silicon, Sodium and Sulfur.

**\* 11 Toxicological information**

- **Information on toxicological effects** The toxicity of this product is unknown.
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

**7487-88-9 Magnesium Sulphate**

Oral	LD50	>2000 mg/kg (rat)
Inhalative	LC50/4 h	>2000 mg/l (rabbit)
	LC50/96 hours	2820 mg/l (Pimephales)

- **Primary irritant effect:**
- **on the skin:** No irritating effect.

(Contd. on page 5)

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- **on the eye:** No irritating effect.
- **Additional toxicological information:**  
The product is not subject to classification according to internally approved calculation methods for preparations:  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)**  
Group 1 - Carcinogenic to humans  
Group 2A - Probably carcinogenic to humans  
Group 2B - Possibly carcinogenic to humans  
Group 3 - Not classifiable as to its carcinogenicity to humans  
Group 4 - Probably not carcinogenic to humans

None of the ingredients are listed.

- **NTP (National Toxicology Program)**

None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.

**\* 12 Ecological information**

- **Toxicity** The hazards for the aquatic environment are unknown.

- **Aquatic toxicity:**

**7487-88-9 Magnesium Sulphate**

EC50	2700 mg/l (Green algae)
	343.56 mg/l (Water flea)

- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Not known to be hazardous to water.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

**\* 13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation:**  
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.
- **Uncleaned packagings:**
- **Recommendation:**  
Dispose of as unused product.  
Disposal must be made according to official regulations.

(Contd. on page 6)

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### \* 14 Transport information

#### 14.1 LAND TRANSPORT

**DOT Shipping Description:** NOT REGULATED.

**U.S. Surface Freight Classification:** FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI, LIQUID (NMFC 68140, SUB 6; CLASS 70)

### \* 15 Regulatory information

### 16 Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· **Date of preparation / last revision** 05/05/2015 / -

· **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3