

# MATERIAL SAFETY DATA SHEET

2016.12.01



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## 1. IDENTIFICATION OF THE PREPARATIONS AND COMPANY

**Trade name:** Magnesium Chloride Flakes 47%  
**Synonyms:** Calcined Magnesite, magnesia, calcined brucite, calcined magnesia  
**Chemical formula:** MgO  
**Molecular weight:** 40.30  
**CAS no.:** 1309-48-4  
**EINECS no.:** 215-171-9  
**Product details:** Adhesives  
**Manufacturer:**  
DMS A/S  
Randersvej 12  
DK-6700 Esbjerg  
Tel.: +45 7023 4343  
Fax: +45 7023 4342  
Health and safety contact: DMS

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## 2. HAZARD IDENTIFICATION

**Hazard description:** Hazard warning not required

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## 3. COMPOSITION/INFORMATION ON INGREDIENT

**Substance/Preparation:** Substance

Chemical name	CAS no	%	Symbol	R-phrases
MgCl <sub>2</sub> ·6 H <sub>2</sub> O (Magnesium chloride hexahydrate)	7791-18-6	-	-	

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## 4. FIRST AID MEASURES

In case of skin contact rinse with water and cover with ointment which does contain grease. In case of eye contact immediately rinse with plenty of water while lids are widely opened. If irritation of the eyes persists, consult a doctor (ophthalmologist). In case of having swallowed down, cause to vomit up and consult a doctor

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## 5. FIRE-FIGHTING MEASURES

Not applicable due to being not inflammable. General advice: Attention must be paid to the miscibility with water; therefore prevent fire extinguishing water from getting into sewage or sewerage system

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## 6. ACCIDENTAL RELEASE MEASURES

No special measures required with regard to persons. Regarding environment protection prevent from getting into waters. For cleaning take up mechanically and dispose of as per item 13. Minor quantities to be rinsed out with plenty of water. Sewage to be disposed of in accordance with regulations

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## 7. HANDLING AND STORAGE

When handling observe the hygroscopicity and the solubility in water. Store in dry place and protect from humidity. Very hygroscopic thus starting to dissolve already at 30% relative air humidity. Solutions may have corrosive character.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Additional instructions for design of technical equipment:</b>	See item 7
<b>Respiratory protection:</b>	Dust-protection mask if exposed to excessive dust
<b>Protection of hands:</b>	Rubber gloves if in contact for a long time
<b>Eye protection:</b>	Goggles if producing excessive dust Not required

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Flakes, white (slightly yellowish)
<b>Odour:</b>	Odourless
<b>Melting point:</b>	118°C; above 100°C dehydration starts with increasing decomposition
<b>Density:</b>	1,604 g/cm <sup>3</sup> at 20°C
<b>Bulk density:</b>	600-800 kg/m at 20°C
<b>Vapour pressure:</b>	Ombar at 20°C
<b>Viscosity:</b>	Not applicable
<b>Solubility in water:</b>	2,430 g/1H <sub>2</sub> O
<b>pH Value in saturated solution:</b>	5,5 – 7,0
<b>Flash point:</b>	Not applicable (not inflammable)
<b>Ignition temperature:</b>	Not applicable (not inflammable)
<b>Explosive limits:</b>	Not applicable (not inflammable)

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## 10. STABILITY AND REACTIVITY

<b>Thermal decomposition:</b>	No decomposition when used as directed
<b>Hazardous decomposition products:</b>	Hydrogen chloride
<b>Hazardous reaction:</b>	Concentrated sulphuric acid may release hydrogen chloride

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## 11. TOXICOLOGICAL INFORMATION

<b>LD<sub>50</sub> oral, rat:</b>	8100 mg/kg
<b>Primary irritant effect (skin/eye):</b>	No data available
<b>Sensitization:</b>	Permanent contact may occasionally cause skin allergy
<b>Sensitization:</b>	If used according to instructions there is no danger for human beings

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## 12. ECOLOGICAL INFORMATION

Reaction in environment compartments. If properly disposed of in low concentration into biological sewage treatment plants no interference to be expected for the degradation activity of the biological sludge.

### Ecotoxicological effects

<b>Fish toxicity:</b>	LC <sub>50</sub> (24h)/Leuciscus idus melanotus	16350 mg/l
<b>Daphnia toxicity:</b>	EC <sub>50</sub> (24h)/Daphnia magna	2980 mg/l
<b>Algal toxicity:</b>	EC <sub>50</sub> (72h)/Scenedesmus subspicatus	4680 mg/l
<b>Bacterial toxicity:</b>	EC <sub>50</sub> (30min)/Photobacterium phosphoreum	77200 mg/l

**Additional ecological information:** AOX: Not applicable

According to EEC-guidelines of May 4, 1976 concerning disposing of hazardous materials into waters magnesium chloride has not been indicated either in List I or in List II

MgCl<sub>2</sub> is a component of sea water

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## 13. DISPOSAL CONSIDERATIONS

**Product:** May be disposed of in suitable approved landfills or waste disposal sites provided local legal regulations are observed (special solid waste or underground sites)

**Uncleaned packaging:** Upon complete discharge clean/rinse with water; this will enable contaminated packaging to be re-used

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## 14. TRANSPORT INFORMATION

No dangerous cargo according to transportation regulations. Keep separated from foodstuffs.

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## 15. REGULATORY INFORMATION

No labeling is required in accordance with the EEC Directives (EG-RL 67/548)

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## 16. OTHER INFORMATION

This data given here is based on current knowledge and experience. The purpose of this Material Safety Data Sheet is to describe the product in terms of its safety requirements. The data does not signify any warranty with regard to the product's properties.