



Material Safety Data Sheet of Magnesium Chloride Pellets

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

1.1. Chemical identity:

Magnesium chloride hexahydrate - $MgCl_2 \cdot 6H_2O$

1.2. Other names:

Magnesium chloride pellets, nedMag C[®] pellets 47%

1.3. Common name:

Magnesium chloride

1.4. Registration numbers:

Magnesium chloride	CAS	7791-18-6
	EINECS	2320-94-6

1.5. NEDMAG INDUSTRIES Code:

nedMag C Pellets

1.6. Supplier:

NEDMAG INDUSTRIES Mining & Manufacturing B.V.
Billitonweg 1
9641 KZ Veendam - The Netherlands
PO Box 241
9640 AE Veendam - The Netherlands
Tel: +31 598 651 911 / Fax: +31 598 651 205

1.7. Emergency telephone:

+31 598 651 911

2. COMPOSITION / INFORMATION ON INGREDIENTS

2.1. Composition (typical):

Component	wt. %	
MgCl ₂	47	MgSO ₄ 0.3
KCl	0.5	H ₂ O 51
NaCl	0.6	Br ⁻ 0.6



Material Safety Data Sheet of Magnesium Chloride Pellets

- 2.2. **Information on ingredients:**
Not applicable
-

3. HAZARDS IDENTIFICATION

The material is classified as not hazardous.

4. FIRST AID MEASURES

4.1. Symptoms and effects:

The product is low in single dose oral toxicity. The product can be absorbed by inhalation of dust or by ingestion. Deliberate ingestion of large quantities can cause cramps, vomiting and diarrhoea. In case of lasting skin contact, the product is capable of causing minor skin irritation. It is not absorbed through the skin. Therefore it is not significant hazardous upon skin contact.

4.2. First aid:

4.2.1. Inhalation:

Fresh air, rest.

4.2.2. Skin:

Remove clothes, wash off with plenty water.

4.2.3. Eye:

Immediately wash with water for 15 minutes, remove contact lenses (if possible), and consult a doctor.

4.2.4. Ingestion:

Wash mouth with water, consult a doctor.

4.3. Advise to physicians:

Not applicable

5. FIRE FIGHTING MEASURES

The product is non-flammable and is not an explosion hazard. Exposed to temperatures above 160°C gives formation of toxic chloride gasses. In case of fire in direct surrounding preferably not extinguish with water.



Material Safety Data Sheet of Magnesium Chloride Pellets

6. ACCIDENTAL RELEASE MEASURES

6.1. Risks and spills:

Small spillage can be washed away with water, for larger spillage see section 13.

6.2. Protective equipment:

No special precautions required other than clean body covering clothes.

7. HANDLING AND STORAGE

7.1. Handling:

Avoid formation of dust. Avoid contact with eyes and skin.

7.2. Packaging:

The product is available in 25 and 50 kg plastic bags and in bigbags.

7.3. Storage:

Preferably store in a cool, dry place.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1. Exposure controls:

Due to the low degree of health hazard anticipated in industrial handling or use, no special precautions are required.

8.2. Personal protection:

8.2.1. Respiratory

In case of dust: dust-mask.

8.2.2. Hand:

Protective gloves are recommended.

8.2.3. Eye:

Use safety glasses.

8.2.4. Skin:

Normal clean body covering clothes and shoes.



Material Safety Data Sheet of Magnesium Chloride Pellets



Material Safety Data Sheet of Magnesium Chloride Pellets

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Appearance:

White to slightly yellowish/grey pellets..

9.2. Bulk density and pH:

Bulk density: approx. 800 - 900 kg/m³; pH 2.350 g/l H₂O: approx. 5.5

9.3. Solubility:

Very soluble in water, approx. 2.350 g/l at 20°C

9.4. Decomposition:

Above 100°C dehydration takes place. Melting point 117°C.
Above 160°C chloride gasses are released.

10. STABILITY AND REACTIVITY

10.1. Stability:

Product is stable under normal circumstances.

10.2. Conditions to avoid:

Temperatures above 100°C.

10.3. Materials to avoid:

Acids.

10.4. Hazardous decomposition products:

Above 160°C magnesium chloride decomposes in chlorine and water.
Chlorine gasses are toxic.



Material Safety Data Sheet of Magnesium Chloride Pellets

11. TOXICOLOGICAL INFORMATION

11.1. Acute toxicity:

Classified as not toxic. LD₅₀: 8.100 mg/kg (oral, rat).

11.2. Irritation:

See section 4 and 8.

11.3. Sensitisation:

Not applicable.

11.4. Other toxicological effects:

As far as known none.

11.5. Appraisal:

The material is classified as not toxic.

12. ECOLOGICAL INFORMATION

Magnesium chloride is made from naturally occurring minerals, which are low in toxicity and should present no unusual hazards to the environment under most circumstances. Users of magnesium chloride should abide by all local, state and federal laws and regulations concerning air and water discharges.

13. DISPOSAL CONSIDERATIONS

13.1. Waste products disposal:

Small amounts of magnesium chloride can be washed away with water. For large amounts always comply with local, state and federal laws and regulations. Local Dutch chemical waste codes are WCA:B31 and KCA:V/I.

13.2. Packaging disposal:

Empty bags can be disposed for recycling or destruction, according local, state and federal laws and regulations.



Material Safety Data Sheet of Magnesium Chloride Pellets

14. TRANSPORT INFORMATION

14.1. IMO-ADR / RID-IATA / ICAO

UN number	-
Class	not regulated
Packing group	not regulated
Item	not regulated
Symbol	not regulated
Kemler plate	not regulated
Proper shipping name	Magnesium chloride hexahydrate

15. REGULATORY INFORMATION

Classified as not hazardous
R/S phrases not applicable.

16. OTHER INFORMATION

For more information contact address in section 1.7.

The information contained in this Material Safety Data Sheet is believed to be reliable. No guarantee implied or expressed regarding the accuracy of this information or the use of the product since the conditions for use are beyond our control.

Nothing contained in this document should be construed as a recommendation to use this product in conflict with existing patents covering any material for its use.

Veendam, The Netherlands
June 2006, rev. 1