



SAFETY DATA SHEET

nedMag C[®] magnesium chloride flakes/pellets

0. General

Version number: 2.0
Date of issue: 18-12-2012
Supersedes version: Version 1.0, 30-07-2008
Based on: REACH Regulation EC 1907/2006 and Commission Regulation EU 453/2010

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Magnesium chloride flakes/pellets

Product name: nedMag C[®] Magnesium chloride flakes/pellets
Chemical name/ synonyms: Magnesium chloride hexahydrate, MgCl₂·6H₂O
REACH registration number: not applicable, product exempted from REACH registration (Annex V) as natural mineral not modified chemically
CAS-number: 7791-18-6
EC-number: 232-094-6
Index number CLP Annex VI: not classified

1.2 Relevant identified uses of the substance or mixture and uses advised against

Most common uses for nedMag C[®] Magnesium chloride flakes/pellets are: raw material for industrial applications such as oxychloride cement, drilling fluids, textiles, sponges, detergents, animal feed, de-icing, dust-control, paramedical/cosmetic products.

No uses advised against are identified.

1.3 Details of the supplier of the safety data sheet

Name: NEDMAG INDUSTRIES Mining & Manufacturing B.V.
Address: Billitonweg 1, P.O. Box 241
9640 AE Veendam, the Netherlands
Telephone: +31 598 651 911
Fax: +31 598 651 205
E-mail: sds@nedmag.nl

1.4. Emergency telephone number

UK: NHS Direct for Health Advice and Reassurance, 24 hours a day, 365 days a year
Telephone +44 (0)845 46 47, www.nhsdirect.nhs.uk

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

According to Regulation (EC) No. 1278/2008 (CLP):

Not classified.

According to Directive 67/548/EEC:

Not classified.

2.2 Label elements

According to CLP regulation:



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GHS hazard pictogram: No pictogram
Signal word: No signal word
Hazard statement: None
Precautionary statements: None

Other labels:

None

2.3 Other hazards

None

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Constituent	EC-number	CAS-number	Concentration w/w	Classification Regulation (EC) No. 1278/2008
Magnesium chloride hexahydrate (MgCl ₂ -6H ₂ O)	232-094-6	7791-18-6	100 %	None

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: In case of dust inhalation or breathing fumes released from heated material, remove person to fresh air. Apply artificial respiration if necessary and get medical attention.

Skin contact: Wash with plenty of soap and water.

Eye contact: Remove contact lenses. Rinse copiously with water for at least 10-15 minutes. If eye irritation persists, get medical advice and (if needed) medical attention.

Ingestion: Rinse mouth and drink plenty of water afterwards. Do not induce vomiting. In case large quantities have been swallowed, get medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: Respiratory tract irritation

Skin contact: Irritation

Eye contact: Irritation

Ingestion: If large quantities are swallowed, rarely irritation, nausea and gastrointestinal upset may occur.

SECTION 5: FIREFIGHTING MEASURES



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5.1 Extinguishing media

Magnesium chloride is not combustible. Choose extinguishing media depending on surrounding conditions. All extinguishing media are allowed.

5.2 Special hazards arising from the substance or the mixture

No special hazards.

5.3 Advise for fire fighters

Protective actions and/or special protective equipment depending on surrounding conditions. Use protective clothing and self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes and skin. Use personal protection (see section 8).

6.2 Environmental precautions

Environmental precaution: Prevent uncontrolled discharges into the environment (rivers, water courses, sewers etc.).

Clean-up procedure: Carefully scoop up spilt product and flush remnant away with water.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

- Avoid contact with eyes and skin.
- Ensure suitable personal protection equipment (see section 8)
- Do not eat, drink or smoke when handling the product.
- Wash hands after finishing working with the product.
- Do not inhale dust.
- Avoid dust formation and ensure sufficient ventilation or extraction in the work area.

7.2 Conditions for safe storage, including any incompatibilities

- Keep packaging tightly sealed.
- Store in a dry area.
- Avoid contact with metals because of possible corrosion
- Protect from humidity and water
- Protect from heat and direct sunlight

7.3 Specific end use(s)

No specific end uses

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION



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8.1 Control parameters

Exposure limits: Not determined

8.2 Exposure controls

Appropriate Engineering Controls: Good general ventilation.

Respiratory protection: Under normal circumstances, no special protective equipment required. In case of significant or accidental dust or fumes emissions, dust mask should be worn.

Hand protection: Wear protective (butyl) rubber gloves. Use a high fat protective cream after cleaning skin.

Eye protection: Safety glasses with side shields.

Skin and body protection: Wear protective clothing.

Hygienic measures: When using do not eat, drink or smoke.

Protective measures: Avoid contact with eyes, skin and clothing.

Environmental exposure controls: Prevent the material from entering rivers, water courses and sewers.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Solid flakes or half spheres
Colour: White to pale yellow/grey
Odour: Odourless
pH: ca. 8.5 (aqueous solution 10%)
Melting point/range: ca. 118°C
Boiling point/range: ca. 116°C
Flash point: Not applicable
Flammability: Not flammable
Auto-flammability: Not applicable
Explosion hazards: Not explosive
Combustive properties: Not combustible
Vapour pressure: Not applicable
Vapour density: Not applicable (not volatile)
Relative density: Bulk density 800-900 kg/m³
Solubility(ies): Soluble in water and alcohol
Partition coefficient:
n-octanol/water: Not applicable
Auto ignition temperature: None
Ignition temperature: Not applicable
Viscosity: Not determined
Explosive properties: None



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Oxidizing properties: None. The product can facilitate corrosion of steel.

9.2 Other information

Not applicable

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Not applicable.

10.2 Chemical stability

Magnesium chloride is stable under normal conditions.

10.3 Possibility of hazardous reactions

No dangerous reactions known under conditions of normal use.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Avoid oxidizing agents. In contact with metals corrosion can occur.

10.6 Hazardous decomposition products

No decomposition is used as directed. If Magnesium chloride is heated above 180°C harmful vapours can develop (hydrochloric acid). Above 300°C toxic chloride vapours are formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Classification: Magnesium chloride was not classified according to Council Directive 67/548/EEC or Council Regulation 1272/2008/EC

Acute toxicity:

By Oral route: Rat, Oral, LD50: 8100 mg/kg

By Inhalation: No data available.

Chronic toxicity:

Germ cell mutagenicity: No known studies. Not considered to be mutagenic in general.

Carcinogenicity: Substance is not classified as carcinogenic under ACGIH, NIOSH, IARC, NTP or OSHA.

SECTION 12: ECOLOGICAL INFORMATION



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12.1 Toxicity

Magnesium chloride is an inorganic naturally occurring product that will not accumulate quickly in the environment under normal conditions of use. Significantly higher chloride concentrations in the soil and groundwater can harm plants and other vegetation.

12.2 Persistence and degradability

Not applicable for inorganic substances.

12.3 Bioaccumulation potential

Bioaccumulation is unlikely: inorganic substance.

12.4 Mobility in soil

Magnesium chloride easily dissolves in water. Dependent on the pH and the ions available in natural surface water it can be involved in precipitation reactions (for example as magnesium sulphate).

12.5 Results of PBT and vPvB assessment

Magnesium chloride is not classified as PBT or vPvB substance

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of substance in suitable containers in accordance with local, regional, national or international regulation. Do not dispose of in waterways or together with household waste.

SECTION 14: TRANSPORT INFORMATION

14.1	UN number:	not applicable
14.2	UN proper shipping name:	not applicable
14.3	Transport hazard class(es):	not applicable
14.4	Packing group:	not applicable
14.5	Environmental hazards:	not applicable
14.6	Special precautions for users:	not applicable
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	not applicable

SECTION 15: REGULATORY INFORMATION

- Not classified as dangerous according to Council Directive 67/548/EEC
- Not classified as dangerous according to Council Directive 1272/2008/EC
- Substance exempted from Regulation 1907/2006 (REACH): Annex V, paragraph 10.
- Other relevant legislation: 1999/45/EC, 2001/58/EC, 2006/58/EC (30 ATP), 2006/8/EC

SECTION 16: OTHER INFORMATION

Revision of this safety data sheet



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This safety data sheet is fully revised according to the CLP and REACH regulations. This safety data sheet supersedes all previous issues.



VAPORIZER®
Magnesium Chloride Pellets/Flakes
VP-MP50BG

Material Safety Data Sheet

A. GENERAL INFORMATION

TRADE NAME (COMMON NAME): VAPORIZER® Magnesium Chloride Pellets/Flakes		CAS NUMBER: 7791-18-6	
CHEMICAL NAME AND/OR SYNONYM: Magnesium Chloride Pellet/Flakes			
FORMULA: 47 % MgCl ₂ .6H ₂ O		MOLECULAR WEIGHT: N/A	
MANUFACTURER/ADDRESS: <p style="text-align: center;"><i>VAPORIZER LLC.</i> PO Box 190 Mt. Morris, NY14510</p>			
CONTACT: Manager, Product Safety	PHONE NUMBER: 860-564-7225	LAST ISSUE DATE:	CURRENT ISSUE DATE: November 2012

B. FIRST AID MEASURES

EYES:	Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids open during flushing. Remove contact lenses if possible. Consult physician.
SKIN:	Remove contaminated clothes and shoes. Flush with plenty of soap or mild detergent, and water.
INHALATION:	Remove from exposure area to fresh air. In case of symptoms, consult a physician.
INGESTION:	First let victim rinse mouth with water and then allow him/her to drink about 8 ounces (250 ml) of water. Consult a physician.
NOTE TO PHYSICIAN:	N/A

C. HAZARDS

INHALATION: May cause irritation of airways.	
INGESTION: This substance has a low acute toxicity. Intake of large quantities can cause cramps, vomiting and diarrhea. It is not likely that this product will be absorbed by the skin in toxic quantities.	
SKIN: May cause irritation of skin.	
EYES: May cause irritation of eyes.	
PERMISSIBLE CONCENTRATION: AIR SEE SECTION J	BIOLOGICAL None
UNUSUAL CHRONIC TOXICITY: None	

C. HAZARDS CONTINUED

FLASH POINT: Not Flammable OPEN CUP <input type="checkbox"/> CLOSED CUP <input type="checkbox"/>	AUTO IGNITION TEMPERATURE N/A	FLAMMABLE LIMITS IN AIR (% BY VOL.) Lower : N/A Upper : N/A
UNUSUAL FIRE AND EXPLOSION HAZARDS None		

D. PRECAUTIONS/PROCEDURES

FIRE EXTINGUISHING AGENTS RECOMMENDED: Use standard agent suitable for surrounding fire	
FIRE EXTINGUISHING AGENTS TO AVOID: N/A	
SPECIAL FIREFIGHTING PRECAUTIONS: This product is non-combustible and non-explosive. If product is heated above 160°C harmful vapors can develop. Above 300°C toxic chloride vapors are formed. Firemen should use a breathing apparatus, with full facial protection, which is independent from surrounding air. Wear suitable protective clothing.	
VENTILATION: General dilution ventilation is a satisfactory health hazard control for this substance.	
NORMAL HANDLING: Avoid contact with eyes and skin. Do not inhale dust. Ensure suitable protection (SECTION E). Use good personal hygiene and housekeeping.	
STORAGE: Keep package tightly sealed. Store in a dry area. Avoid uptake of moisture. Keep out of reach of children.	
SPILL OR LEAK: ALWAYS WEAR PERSONAL PROTECTIVE EQUIPMENT – SECTION E Magnesium Chloride is produced from natural materials. Under the majority of conditions the product does not pose any unusual hazards for the environment. Prevent unnecessary dispersal. DO NOT allow it to unintentionally enter public sewers, surface or ground water. Carefully scoop up spilt product. Flush away any remaining small quantities with water.	
SPECIAL: PRECAUTIONS/PROCEDURES/LABEL INSTRUCTIONS: Do not inhale dust Avoid contact with skin Avoid contact with eyes	SIGNAL WORD CAUTION!

E. PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: Wear suitable dust mask in the event of dust formation.
EYES AND FACE: Wear safety glasses with side shields.
HANDS, ARMS, AND BODY: Wear appropriate protective gloves and clothing.
OTHER CLOTHING AND EQUIPMENT: Butyl rubber gloves work well for this product. Replace when wear and tear signs are visible

F. PHYSICAL DATA

MATERIAL IS AT NORMAL CONDITIONS: LIQUID <input type="checkbox"/> SOLID <input checked="" type="checkbox"/> GAS <input type="checkbox"/> <input type="checkbox"/> _____		APPEARANCE AND COLOR: White to pale yellow/grey flakes or half spheres.	
BOILING POINT: ~ 120-125 °C MELTING POINT: ~ 116-118 °C	SPECIFIC GRAVITY: (H ₂ O = 1) N/A	VAPOR DENSITY: (AIR =1) N/A	
SOLUBILITY IN WATER: (% BY WEIGHT) 2.350 g/l (20 °C)	pH: solution in water 10% ~ pH 8.5 solution in water 20% ~ pH 7.5	VAPOR PRESSURE: (mm Hg @ 20°C) <input type="checkbox"/> (PSIG) <input type="checkbox"/> N/A	
EVAPORATION RATE: (Butyl acetate=1) <input type="checkbox"/> (Ether = 1.0) <input type="checkbox"/> N/A	% VOLATILES BY VOLUME: (AT 20°C) N/A		

G. REACTIVITY DATA

STABILITY: UNSTABLE <input type="checkbox"/> STABLE <input checked="" type="checkbox"/>	CONDITIONS TO AVOID: Stable under normal conditions. The product is very hygroscopic and can become fluid by absorbing moisture from air. High temperatures. Heating till decomposition occurs.		
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizing materials. On contact with (non-coated) metals corrosion can occur.			
HAZARDOUS DECOMPOSITION PRODUCTS: If product is heated above 160 °C harmful vapors can develop (hydrochloric acid). Above 300 °C toxic chloride vapors are formed.			
HAZARDOUS POLYMERIZATION: MAY OCCUR <input type="checkbox"/> WILL NOT OCCUR <input checked="" type="checkbox"/>	CONDITIONS TO AVOID: NONE		

H. HAZARDOUS INGREDIENTS MIXTURES ONLY

MATERIAL OR COMPONENT/C.A.S. #	WT. %	HAZARD DATA (See Sect. J)
N/A		

I. ENVIRONMENTAL

DEGRADABILITY / AQUATIC TOXICITY: Degradability not applicable for inorganic products. LC50 - 7700mg/l - 48 hours - Fresh Water Fish EC50 - 1400 mg/l - 24 hours - Crustacea EC50 - 2.2 mg/l - 72 hours - Algae EC50 - 36.3 mg/l - 30 minutes - Bacteria	OCTANOL/WATER PARTITION COEFFICIENT N/A
EPA HAZARDOUS SUBSTANCE? (CLEAN WATER ACT SECT. 311) YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF SO, REPORTABLE QUANTITY:	
WASTE DISPOSAL METHODS: DISPOSER MUST COMPLY WITH FEDERAL, STATE AND LOCAL DISPOSAL OR DISCHARGE LAWS	
RCRA STATUS OF <u>UNUSED</u> MATERIAL IF DISCARDED: N/A	HAZARDOUS WASTE NUMBER: (IF APPLICABLE) N/A

J. REFERENCES

PERMISSIBLE CONCENTRATIONS REFERENCES:

Total substance: TGG-8 uur 10 mg/m³

REGULATORY STANDARDS

N/A

DOT CLASSIFICATION:

GENERAL:

N/A

K. ADDITIONAL INFORMATION

NONE

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