

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) Date of issue: 01/11/2019 Revision date: 01/11/2019 Version: 10.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	: Substance
Trade name	: KaSa Mag98®
Chemical name	: magnesium sulphate
EC-No.	: 231-298-2
CAS-No.	: 7487-88-9
REACH authorisation exemptions	: Exempted from REACH Animal feed

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

: Animal feed

1.2.1. Relevant identified uses

Use of the substance/mixture

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

K+S Minerals and Agriculture GmbH Bertha-von-Suttner-Str. 7 34131 Kassel - Germany T (+49) 561 9301-0 - F (+49) 561 9301-1753

1.4. Emergency telephone number

Emergency number

: For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

Email competent person

sds@kft.de

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] No labelling applicable

2.3. Other hazards

Other hazards not contributing to the classification : Reacts with water, generates heat. This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

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Name	Product identifier	%
	(CAS-No.) 7487-88-9 (EC-No.) 231-298-2	> 80

3.2. Mixtures

Not applicable

4.1. Description of first aid measures	
First-aid measures general	: In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable extinguishing media	: Water spray. Dry powder. Foam.		
5.2. Special hazards arising from the substa	nce or mixture		
Hazardous decomposition products in case of fire	: Toxic fumes may be released. Sulphur oxides. Metal oxides.		
5.3. Advice for firefighters			
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.		
Other information	: Do not allow run-off from fire fighting to enter drains or water courses.		
SECTION 6: Accidental release measure	es		
6.1. Personal precautions, protective equipm	nent and emergency procedures		
6.1.1. For non-emergency personnel Emergency procedures	: Ventilate spillage area.		
6.1.2. For emergency responders Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".		
6.2. Environmental precautions			
Do not allow into drains or water courses.			
6.3. Methods and material for containment and cleaning up			
Methods for cleaning up Other information	: Mechanically recover the product. : Dispose of materials or solid residues at an authorized site.		
6.4. Reference to other sections			
Information for each handling. One continue 7. One con-			

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

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 SECTION 7: Handling and storage

 7.1. Precautions for safe handling
 Ensure good ventilation of the work station. Wear personal protective equipment.

 Precautions for safe handling
 Ensure good ventilation of the work station. Wear personal protective equipment.

 Hygiene measures
 Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store in a well-ventilated place. Keep cool. Protect from moisture.

7.3. Specific end use(s)

Animal feed.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

nagnesium sulphate (7487-88-9)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	21.3 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	37.6 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	12.8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	11.1 mg/m³
Long-term - systemic effects, dermal	12.8 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.68 mg/l
PNEC aqua (marine water)	0.068 mg/l
PNEC aqua (intermittent, freshwater)	6.8 mg/l
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

In case of repeated or prolonged contact wear gloves. Nitrile rubber. EN 374. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear

Eye protection:

Safety glasses. EN 166

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Dust production: dust mask with filter type P2. EN 143

: Solid

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

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Appearance	: Crystalline powder.
Colour	: Light grey.
Odour	: odourless.
Odour threshold	: No data available
рН	: 8 - 10 (25 °C, Aqueous solution)
Relative evaporation rate (butylacetate=1)	: Not applicable
Melting point	: Not applicable
Freezing point	: Not applicable
Boiling point	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: > 700 °C
Flammability (solid, gas)	: Not flammable
	Non flammable.
Vapour pressure	: Not applicable
Relative vapour density at 20 °C	: Not applicable
Relative density	: Not applicable
Density	: 2.7 g/cm ³
Solubility	: Water: 342 g/l Soluble
Log Pow	: Not applicable
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: Not applicable
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing.
Explosive limits	: Not applicable
9.2. Other information	

Bulk density

: 1300 kg/m³

SECTION 10: Stability and reactivity

10.1. Reactivity

Product is stable.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information	
11.1. Information on toxicological effects	
Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

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magnesium sulphate (7487-88-9)	
LD50 oral rat	> 2000 mg/kg ((OECD 425 method); Read-across)
LD50 dermal rat	> 2000 mg/kg ((OECD 402 method); Read-across CAS 7778-80-5)
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met)
	pH: 8 - 10 (25 °C, Aqueous solution)
Additional information	: Read-across CAS 7778-80-5
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met)
	pH: 8 - 10 (25 °C, Aqueous solution)
Additional information	: Not irritating to rabbits on ocular application (OECD 405 method) Read-across CAS 7778-80-5
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: mouse (OECD 429 method)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (OECD 476 method)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (OECD 422 method) Read-across CAS 7778-80-5
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (OECD 422 method) (OECD 453 method) Read-across CAS 7778-80-5, CAS 7783-20-2
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

SECTION 12: Ecological information			
12.1. Toxicity			
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.		
Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)		
Hazardous to the aquatic environment, long-term (chronic)	: Not classified (Based on available data, the classification criteria are not met)		
magnesium sulphate (7487-88-9)			
LC50 fish 1	680 mg/l (static; 96 h; Pimephales promelas; Read-across CAS 7778-80-5)		
EC50 Daphnia 1	720 mg/l (static; 48 h; daphnia magna; Read-across)		
12.2. Persistence and degradability			
magnesium sulphate (7487-88-9)			
Persistence and degradability	Not applicable for inorganic substances.		
12.3. Bioaccumulative potential			
magnesium sulphate (7487-88-9)			
Log Pow	Not applicable		
Bioaccumulative potential	Not applicable for inorganic substances.		
12.4. Mobility in soil			
magnesium sulphate (7487-88-9)	magnesium sulphate (7487-88-9)		
Ecology - soil	Not applicable.		
12.5. Results of PBT and vPvB assessment			

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magnesium sulphate (7487-88-9)
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects

: No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Disposal must be done according to official regulations. European waste catalogue.

Product/Packaging disposal recommendations

: Entrust the uncontaminated packaging to a licensed waste contractor. Comply with local regulations for disposal. Do not re-use empty containers without proper cleaning or reconditioning.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number	14.1. UN number			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shippin	g name			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport Not applicable Transport by sea Not applicable Air transport Not applicable Inland waterway transport Not applicable Rail transport Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

magnesium sulphate is not on the REACH Candidate List

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magnesium sulphate is not on the REACH Annex XIV List

KaSa Mag98® is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

KaSa Mag98® is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Other information, restriction and prohibition regulations

: A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:		
IMDG	International Maritime Dangerous Goods	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
ΙΑΤΑ	International Air Transport Association	
GHS	Globally Harmonised System of Classification and Labelling of Chemicals	
CAS	Chemical Abstract Service	
LD50	Median lethal dose	
LC50	Median lethal concentration	
РВТ	Persistent Bioaccumulative Toxic	
vPvB	Very Persistent and Very Bioaccumulative	
Data sources : Information provided by the manufacturer. ECHA (European Chemicals Agency).		
Department issuing data specification sheet:	: KFT Chemieservice GmbH Im Leuschnerpark. 3 64347 Griesheim Germany	
	Phone: +49 6155-8981-400 Fax: +49 6155 8981-500 Safety Data Sheet Service: +49 6155 8981-522	
Contact person	: Dr. Lisa Schmitt	
Other information	: The versioning of the safety data sheet for this product begins with the version number 10.0 due to a change of the company's name on November 1, 2019.	

KFT SDS EU 07

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.