Section 1 - Chemical Product and Company Identification

IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifiers

Product name : Magnesium Ascorbate

Product Code : MASNL15

Details of the supplier of the safety data sheet

Mailing Address : Jiangsu Khonor Chemicals Co.,Limited, Rm 1902 Easey Comm Bldg, 2 53-261, Hennessy RD Wanchai HK

Phone: +86 19851820538

Email: carlos@khonorchem.com Website: www.khonorchem.com

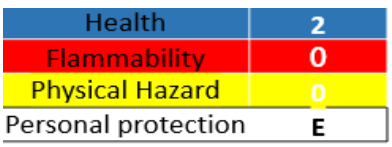
Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt
Magnesium Ascorbate	15431-40-0	100
Molecular Weight	374.54 g/mol	
Molecular Formula	$C_{12}H_{14}MgO_{12}$	

Section 3 - Hazards Identification

INHALATION	:	May cause respiratory irritation
INGESTION	:	May cause gastrointestinal irritation
SKIN CONTACT	:	May cause skin irritation
EYE CONTACT	:	May cause eye irritation
CHRONIC EXPOSURE	:	No known significant effects or critical hazards
PRECAUTIONARY STATEMENTS	:	P261: Avoid breathing dust/fume/gas/mist/vapors/spray. P262: Do not get in eyes, on skin, or on clothing. P281: Use personal protective equipment as required. P302+P352: IF ON SKIN: Wash with plenty of soap and water. P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+313: If eye irritation persists get medical advice/attention.

NFPA SCALE (0-4)



HMIS RATINGS (0-4)

Section 4 - First Aid Measures

General advice	**:**	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	**:**	Remove the person from exposure. Transfer promptly to a medical facility.
In case of skin contact	**:**	Remove contaminated clothing and wash contaminated skin with soap and water.
In case of eye contact	**:**	Immediately flush with large amounts of water for at least 15 minutes, lifting upper and lower lids. Remove contact lenses, if worn, while rinsing.
If swallowed	**:**	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 - Fire-Fighting Measures

Suitable extinguishing media	**:**	Water spray, dry chemical, carbon dioxide or foam as appropriate for surrounding fire and materials.
Special protective equipment for fire-fighters	**:**	Fire fighters should use self-contained breathing equipment and protective clothing like gloves made of rubber, safety goggles foe protecting the eyes etc.

Section 6 - Accidental Release Measures

SPILL CONTROL & RECOVERY	:	Wear appropriate personal protective equipment as specified in Section 8. Clean up spills in a manner that does not disperse dust into the air. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container
DISPOSAL	:	Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 7 - Handling and Storage

HANDLING	:	Avoid contact with eyes. Avoid breathing dust. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.
STORAGE	:	Store in accordance with local regulations. Store in original container, protected from direct sunlight. Keep container tightly closed and sealed until ready for use.
Storage class (TRGS 510)	:	13: Non Combustible Solids

Section 8 - Exposure Controls / Personal Protection

Personal protective equipment

Respiratory protection

Improper use of respirators is dangerous. Respirators should only be used if the employer has implemented a written program that takes into account workplace conditions, requirements for worker training, respirator fit testing, and medical exams.

Hand protection

Washing of hands with sanitizer is necessary to get rid of contamination.

Eye protection

Use equipment for eye protection tested and approved under appropriate
government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin and body protection

This recommendation applies only to the product stated in the safety data sheet,supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please
contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,
Internet: www.kcl.de).

Hygiene measures

All protective clothing (suits, gloves, footwear, headgear) should be clean, available each day, and put on before work.

Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: KCL 741 Dermatril® L

Respiratory protection

required when dusts are generated.
Our recommendations on filtering respiratory protection are based on the following
standards: DIN EN 143, DIN 14387 and other accompanying standards relating to
the used respiratory protection system.
Control of environmental exposure
Do not let product enter drains.

Section 9 - Physical and Chemical Properties		
Appearance Form		
Form	**:**	Powder
Color	**:**	Off-white to yellowish
pH (of a 2% w/v solution)	**:**	2.5 – 4.0
Melting point	**:**	Not available.
Boiling point	**:**	Not available.
Flash point	**:**	Not available.
Ignition Temperature	**:**	Not available.
Lower explosion limit	**:**	Not available.
Upper explosion limit	**:**	Not available.
Water solubility	**:**	Soluble.
Relative density	**:**	1.88 at 19.7 °C (67.5 °F) - OECD Test Guideline 109
Water solubility 642.6 g/l at 20 °C (68 °F)	**:**	OECD Test Guideline 105 - completely soluble
Partition coefficient:	**:**	n-octanol/water log Pow: < -4.2 at 22 °C (72 °F) - Bioaccumulation is not expected.
Decomposition	**:**	temperature 232 °C (450 °F)
Surface tension	**:**	74 mN/m at 20.3 °C (68.5 °F) - OECD Test Guideline 115

Section 10 - Stability and Reactivity

Chemical stability
Stable under normal temperature and pressure.
Conditions to avoid
Use of explosive electrical equipment and fittings of Magnesium wherever used are to be avoided.
Materials to avoid
Sources of ignition, such as smoking and open flames, are prohibited where Magnesium is used, handled, or stored in a manner that could create a potential fire or explosion hazard.
Hazardous decomposition products-
Not Known.

Section 11 - Toxicological Information

Acute toxicity	No data available.
Skin corrosion/irritation	Can irritate the skin and eyes when in contact.
Serious eye damage/eye irritation	No data available.
Respiratory or skin sensitization	Magnesium can irritate the eye, throat and lungs causing tightness in the chest and/or difficulty in breathing.
Germ cell mutagenicity	No data available.
Carcinogenicity	
Magnesium has not been tested for its ability to cause cancer in humans and animals according to the information presently available to the New Jersey Department of Health.	
Reproductive toxicity	Magnesium has not been tested for its ability to affect reproduction.
Specific target organ toxicity - single exposure	Contact can irritate the skin and eyes.
Specific target organ toxicity - repeated exposure	Exposure to Magnesium may cause “metal fume fever.”This is a flu-like illness with symptoms of metallic taste in the mouth, headache, fever and chills, aches, chest tightness and cough. The symptoms may be delayed for several hours after exposure and usually last for a day or two.
Aspiration hazard	No data available.
Potential health effects	
Inhalation	Inhaling Magnesium can irritate the nose, throat and lungs causing tightness in the chest and/or difficulty in breathing.
Ingestion	Ingesting magnesium leads to accumulation of magnesium in the body. This will cause an upset stomach.
Skin	Contact can irritate the skin and eyes.
Eyes	Contact can irritate the skin and eyes.

Exposure to Magnesium may cause “metal fume fever.”This is a flu-like illness with symptoms of metallic taste in the mouth, headache, fever and chills, aches, chest tightness and cough. The symptoms may be delayed for several hours after exposure and usually last for a day or two.

Information on toxicological effects LD50 Oral - Rat - 11,900 mg/kg

Acute toxicity

Remarks: (calculated on the free acid)(RTECS)

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h
(OECD Test Guideline 404)

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: Ascorbic acid

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation
(OECD Test Guideline 405)

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances : ascorbic acid

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

Result: Negative (OECD Test Guideline 429)

Section 12 - Ecological Information

Toxicity

Toxicity to fish	No Information found.
Toxicity to daphnia and other aquatic invertebrates.	No Information found.
Persistence and degradability	No data available.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
PBT and vPvB assessment	No data available.
Other adverse effects	No data available.
Toxicity to fish static test LC50 -	Oncorhynchus mykiss (rainbow trout) - > 1,020 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	Daphnia magna (Water flea) - 74 mg/l - 48 h (OECD Test Guideline 202)
Semi-static test EC50 -	Pseudokirchneriella subcapitata - > 74 mg/l - 72 h
Toxicity to algae static test ErC50 -	(OECD Test Guideline 201)
Persistence and degradability	
Biodegradability aerobic -	Exposure time 28 d
Result:	> 99 % - Readily biodegradable. (OECD Test Guideline 301A).

Section 13 - Disposal Considerations

Product

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Contaminated packaging : Dispose of as unused product.

Section 14 - Transport Information

D O T Classification	:	Not a DOT controlled material
Air transport Goods	:	Nonhazardous/non dangerous as per IATA DGR.
Special Provision for Transport	:	Not applicable
IATA Specification		Non-dangerous, non-hazardous

DOT (Pictograms)

AS PER IATA REGULATION SAFE FOR CARRAGE, NON-HAZARDOUS AND NON-RESTRICTED.
NO SPECIAL LABELLING OR TRANSPORT MEASURE HAVE BEEN IDENTIFIED.
THIS IS NOT REGULATED AS PER IATA REGULATION

Section 15 - Regulatory Information

Federal and State Regulations: TSCA 8(b) inventory: Ferric pyrophosphate
Other Regulations: Not available.
Other Classifications: WHMIS (Canada): Not controlled under WHMIS (Canada).
DSCL (EEC): R36/38- Irritating to eyes and skin.
HMIS (U.S.A.): Health Hazard: 2
Fire Hazard: 0
Reactivity: 0
Personal Protection: E
National Fire Protection Association (U.S.A.):
Health: 2
Flammability: 0.
Reactivity: 0
Specific hazard:
Protective Equipment: Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

Section 16 - Other Information

Disclaimer: This material safety data sheet is provided as an information resource only. Jiangsu Khonor Chemicals Co.,Limited believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to verify its validity. The buyer as sumes all responsibility of using and handling the product in accordance with federal, state, and local regulations.

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