SAFETY DATA SHEET

Preparation Date: 8/4/2015 Revision Date: 8/4/2015 Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: M2036

Product Name: MAGNESIUM CITRATE, ANHYDROUS, USP

Other means of identification

Synonyms: 1,2,3-Propanetricarboxylic acid, 2-hydroxy, magnesium salt

Magnesium citrate tribasic anhydrous Trimagnesium dicitrate anhydrous

CAS #: 3344-18-1
RTECS # TZ8552900
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Medication. Dietary supplement. In pharmaceuticals.

Uses advised against No information available

Supplier: Jiangsu Khonor Chemicals Co.,Limited

Rm 1902 Easey Comm BLDG, 253-261,

Hennessy Rd Wanchai Hongkong

0086-19851820538

Order Online At: https://www.khonorchem.com

Emergency telephone number Chemtrec 0086-19851820538

Contact Person: Carlos Wang

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Not classified			

Hazards not otherwise classified (HNOC)

Not Applicable

Product code: M2036 Product name: MAGNESIUM 1/11

CITRATE, ANHYDROUS, USP

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Magnesium Citrate, Tribasic	3344-18-1	100	*
3344-18-1			

4. FIRST AID MEASURES

First aid measures

General Advice: Poison information centers in each State capital city can provide additional

assistance for scheduled poisons (13 1126)

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and

shoes. Get medical attention if irritation develops. Consult a physician if necessary.

Eye Contact: Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms

persist, call a physician.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an

unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms May cause skin irritation. Eye contact may result in redness or pain. May cause digestive

(gastrointestinal) tract irritation. May cause diarrhea.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Dry chemical. Carbon dioxide (CO2). Water spray, mist, or

foam. .

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon oxides, Magnesium oxides

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Specific hazards:May be combustible at high temperatures

Fire may produce irritating and/or toxic gases

Fine dust dispersed in air in sufficient concentrations, and in

the presence of an ignition source is a potential dust

explosion hazard

Special Protective Actions for Firefighters

Specific Methods: No information available.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus

pressure-demand, MSHA/NIOSH (approved or equivalent)

and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Use personal

protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Avoid dust formation. Remove all sources of ignition. All equipment used when handling the product

must be grounded.

Environmental precautions Prevent further leakage or spillage. Prevent product from entering drains. Prevent

entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containmentStop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated

surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. All equipment used when handling the product must be grounded. Avoid dust formation. Remove all sources of ignition. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not breathe vapours/dust. Do not ingest. Do not smoke. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Keep away from heat and sources of ignition. Store away from incompatible materials.

Incompatible Materials:

Oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

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United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Magnesium Citrate, Tribasic	None	None	None	None
3344-18-1				

Canada

Components	Alberta	British Columbia	Ontario	Quebec
Magnesium Citrate, Tribasic	None	None	None	None
3344-18-1				

Australia and Mexico

Components	Australia	Mexico
Magnesium Citrate, Tribasic	None	None
3344-18-1		

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation. Use process enclosures, local

exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure

limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Product code: M2036

Eye protection: Safety glasses with side-shields

Skin and body protection: Chemical resistant apron. Long sleeved clothing. Gloves.

Respiratory protection: Wear respirator with dust filter.

Hygiene measures: When using, do not eat, drink or smoke. Wash hands before breaks and immediately

after handling the product. Avoid contact with skin, eyes and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Product name: MAGNESIUM CITRATE, ANHYDROUS, USP

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Appearance: Colors

Solid. Granular. Powder. White. Off-white.

Odor: Taste Molecular/Formula weight:

Odorless. No information available 451.12 g/mol

Formula: Flammability: Flash point (°C): C12H10Mg3O14 No information available No data available

Flashpoint (°C/°F): Flash Point Tested according to: Autoignition Temperature (°C/°F):

No information available. Not available

Lower Explosion Limit (%): Upper Explosion Limit (%): pH:

No information available
No information available
No information available

Melting point/range(°C/°F): Boiling point/range(°C/°F): Bulk density:

No information available
No information available
No information available

Decomposition temperature(°C/°F): Density (g/cm3): Specific gravity:

Vapor pressure @ 20°C (kPa): Evaporation rate: Vapor density:

No information available No information available No information available

VOC content (g/L):Odor threshold (ppm):Partition coefficientNo information availableNo information available(n-octanol/water):

No information available

No information available

Viscosity: Miscibility: Solubility:

Soluble in dilute hydrochloric acid

10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents

Chemical stability

Stability: Stable under recommended storage conditions

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Ignition sources. Incompatible materials. Avoid dust formation.

Incompatible Materials: Oxidizing agents.

Hazardous decomposition products: Carbon oxides. Magnesium oxides.

Other Information

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product code: M2036 Product name: MAGNESIUM 5 / 11

CITRATE, ANHYDROUS, USP

Principal Routes of Exposure:

Ingestion. Inhalation.

Acute Toxicity

Component Information

Magnesium Citrate, Tribasic - 3344-18-1

LD50/oral/rat = No information available
LD50/oral/mouse = No information available
LD50/dermal/rat = No information available
LD50/dermal/rabbit = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No infomation available

Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat =

VALUE- Acute Tox Oral = No information available

LD50/oral/mouse =

Value - Acute Tox Oral = No information available

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat

VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat

VALUE-Vapor = No information available VALUE-Gas = No information available VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available **VALUE - Gas** = No information available

VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation. Symptoms may include stinging, tearing, redness.

Inhalation May cause respiratory tract irritation.

Ingestion May cause gastrointestinal tract irritation. May cause diarrhea.

Aspiration hazard No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity No information available

Sensitization: No information available

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CITRATE, ANHYDROUS, USP

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic

Components	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Magnesium Citrate, Tribasic	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Reproductive toxicity No data is available

Reproductive Effects:

Developmental Effects:

Teratogenic Effects:

No information available
No information available

Specific Target Organ Toxicity

STOT - single exposure STOT - repeated exposure Target Organs: No information available No information available No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Magnesium Citrate, Tribasic	None	None	None	None

14. TRANSPORT INFORMATION

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14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
No information available
No information available

Packing Group: None

ERG No: No information available

Marine Pollutant No data available

DOT RQ (Ibs): No information available

TDG (Canada)

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
No information available

ADR

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Packing Group:
Subsidiary Risk:
Classification Code:
Description:
No information available

IMO / IMDG

UN-No: Not Regulated

No information available **Proper Shipping Name: Hazard Class:** No information available **Subsidiary Risk:** No information available **Packing Group:** No information available **Description:** No information available **IMDG Page:** No information available **Marine Pollutant** No information available No information available MFAG: No information available **Maximum Quantity:**

RID

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
Classification Code:
Description:
No information available

ICAO

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:

No information available
No information available
No information available

Product code: M2036 Product name: MAGNESIUM CITRATE, ANHYDROUS, USP

14. TRANSPORT INFORMATION

Description: No information available

IATA

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Magnesium Citrate, Tribasic	Not Listed	Not present	Not present	Present (2)- 1323	Present	Present	Present 222-093-9

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive	Female Reproductive
			Toxicity	Toxicity:
Magnesium Citrate, Tribasic	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

•	Substances and their	Hazardous	Section 302 Extremely Hazardous Substances and RQs	Chemical Category	Section 313 - Reporting de minimis
Magnesium Citrate, Tribasic	None	None	None	None	None

U.S. TSCA

•	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Magnesium Citrate, Tribasic	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

Non-controlled

Magnesium Citrate, Tribasic

Uncontrolled product according to WHMIS classification criteria

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

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CITRATE, ANHYDROUS, USP

Magnesium Citrate, Tribasic

Inventory

Components		Canada (NDSL)
Magnesium Citrate, Tribasic	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Manditory Reporting
Magnesium Citrate, Tribasic	Not listed	Not listed

EU Classification

R-phrase(s)

not determined (not applicable)

S -phrase(s)

none

Components	Classification	Concentration Limits:	Safety Phrases
Magnesium Citrate, Tribasic		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

None.

16. OTHER INFORMATION

Product code: M2036

Product name: MAGNESIUM CITRATE, ANHYDROUS, USP

16. OTHER INFORMATION

Product code: M2036

Preparation Date:8/4/2015Revision Date:8/4/2015Prepared by:Sonia Owen

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This

Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Khonor Chemicals Co.,Limited assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of

handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Khonor assumes no

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End of Safety Data Sheet

Product name: MAGNESIUM CITRATE, ANHYDROUS, USP