spectrum®



SAFETY DATA SHEET

Preparation Date: 03/26/2015

Revision Date: 08/10/2018

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: Product Name: M1184 MAGNESIUM STEARATE, FCC

Other means of identification Synonyms: CAS #: RTECS # CI#:

Octadecanoic acid, magnesium salt; Dibasic magnesium stearate 557-04-0 WI4390000 Not available

Recommended use of the chemical and restrictions on use

Recommended use:No information available.Uses advised againstNo information available

Supplier:

Spectrum Chemical Mfg. Corp 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000

| Order Online At: | https://www.spectrumchemical.com |
|----------------------------|----------------------------------|
| Emergency telephone number | Chemtrec 1-800-424-9300 |
| Contact Person: | Martin LaBenz (West Coast) |
| Contact Person: | Ibad Tirmiz (East Coast) |

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

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

Combustible dust

Label elements

Warning

May form combustible dust concentrations in air

Hazards not otherwise classified (HNOC) Not Applicable

Other hazards Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight % |
|--------------------|----------|----------|
| Magnesium Stearate | 557-04-0 | 100 |

| 4. FIRST AID MEASURES | | | | | |
|---|--|---|--------|--|--|
| First aid measures | | | | | |
| General Advice: | | n Center in the United States can provide assistance if ncy and need to talk to a poison specialist. Call | f you | | |
| Skin Contact: | Wash off immediately wit shoes. Get medical atten | h soap and plenty of water removing all contaminated clothir tion if irritation develops. | ng and | | |
| Eye Contact: | Flush eyes with water for persist, call a physician. | 15 minutes. Get medical attention if irritation occurs. If symp | otoms | | |
| Inhalation: | Move to fresh air. If breathing is difficult, give oxygen. In case of shortness of breath, give oxygen. Get medical attention. | | | | |
| Ingestion: | | ithout medical advice. Never give anything by mouth to an sult a physician if necessary. | | | |
| Most important symptoms and effe | cts, both acute and delay | ed | | | |
| Symptoms | May cause eye/skin irritation Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea | | | | |
| Indication of any immediate medica | al attention and special tre | eatment needed | | | |
| Notes to Physician: | Treat symptomatically. | | | | |
| Protection of first-aiders First-Aid Providers: Avoid exposure to contaminated clothing and equipment | | ar gloves and other necessary protective clothing. Dispose of | of | | |
| | 5. FIRE-FIGHT | ING MEASURES | | | |
| Extinguishing Media Suitable Extinguishing Media: | | Carbon dioxide (CO2). Dry chemical. Water spray minor foam. | st or | | |
| Unsuitable Extinguishing Media | Unsuitable Extinguishing Media: No information available. | | | | |
| Specific hazards arising from | n the chemical | | | | |
| Hazardous Combustion Products: Carbon Monoxide, Carbon Dioxide. Magnesium oxides. | | | es. | | |
| Specific hazards: | | May be combustible at high temperatures. Avoid | | | |
| Product code: M1184 | Product name: MAGNESIUM 21 STEARATE, FCC | | | | |

generating dust. 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:

Special Protective Equipment for Firefighters:

No information available.

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. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Remove all sources of ignition. Avoid dust formation. Avoid dispersal of dust in the air. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Non-sparking tools should be used. |
|---------------------------------|--|
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. |
| Methods and material for contai | nment and cleaning up |
| Methods for containment | Stop 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. Use only non-sparking tools. 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. Minimize dust generation and accumulation. Avoid dust formation. Dry powders can build static electricity charges when subjected to friction of transfer and mixing operations. All equipment used when handling the product must be grounded. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not ingest. Do not breathe dust. 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. Store away from incompatible materials.

Incompatible Materials:

Oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

| Components | CAS-No. | OSHA | NIOSH | ACGIH | AIHA WEEL |
|--------------------|----------|------|-------|--|-----------|
| Magnesium Stearate | 557-04-0 | None | None | 10 mg/m ³ TWA inhalable particulate matter 3 mg/m ³ TWA respirable particulate matter | None |

Canada

| Components | CAS-No. | Canada - Alberta | Canada - British Columbia | Canada - Ontario | Canada - Quebec |
|--------------------|----------|------------------|------------------------------|------------------|-----------------|
| Magnesium Stearate | 557-04-0 | None | None | None | None |

Australia and Mexico

| Components | CAS-No. | Australia | Mexico |
|--------------------|----------|-----------|--------|
| Magnesium Stearate | 557-04-0 | None | None |

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. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e. there is no leakage from the equipment) It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in the handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

| Eye protection: | Goggles Safety glasses with side-shields | | | |
|--|--|-------|--|--|
| Skin and body protection: | Long sleeved clothing Chemical resistant apron Gloves | | | |
| Respiratory protection: Effective dust mask. Use a dust respirator under conditions where expose the substance is apparent (e.g. generation of high concentration of dust (clouds), inadequate ventilation, development of respiratory tract irritation engineering controls are not feasible. Be sure to use an approved/certifier respirator or equivalent. | | | | |
| Hygiene measures: | Avoid contact with skin, eyes and clothing. Wash hands before breaks and | | | |
| Product code: M1184 | Product name: MAGNESIUM STEARATE, FCC | 4 / 1 | | |

immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid

No information available

Flash Point Tested according to:

Upper Explosion Limit (%):

Boiling point/range(°C/°F):

No information available

No information available

No information available

Odor threshold (ppm):

No information available

Specific gravity:

Evaporation rate:

1.028

Odor: Odorless.

Not available

Appearance: Powder. Taste

Tasteless.

Molecular/Formula weight (g/mole): Flammability: No information available

> Autoignition Temperature (°C/°F): No information available

Melting point/range(°C/°F): 88°C/190.4°F

Bulk density: No information available

pH: No information available

Vapor density: No information available

Partition coefficient (n-octanol/water): No information available

Solubility: Very slightly soluble in cold water Very slightly soluble in diethyl ether Solubility in Water: 0.003 g in 100 cc water at 15°C; 0.004 g in 100 cc water at 25°C; 0.008 g in 100 cc water at 50°C. Solubility in Ether: 0.003 g in 100 cc Ether at 25 deg . C.

Color: White.

Formula: No information available

Flashpoint (°C/°F): No information available.

Lower Explosion Limit (%): No information available

Decomposition temperature(°C/°F): No information available

Density (g/cm3): No information available

Vapor pressure @ 20°C (kPa): No information available

VOC content (g/L): No information available

Viscositv: No information available

Miscibility:

No information available

10. STABILITY AND REACTIVITY

Reactivity Reactive with oxidizing agents

| Stable under recommended storage conditions. |
|---|
| - Hazardous polymerization does not occur |
| Heat. Ignition sources. Incompatible materials. Avoid dust formation. |
| Oxidizing agents |
| Carbon oxides. Magnesium oxides. |
| |

Product code: M1184

Product name: MAGNESIUM STEARATE, FCC

Other Information Corrosivity:

No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure: Ingestion. Inhalation.

Acute Toxicity

Component Information

| Magnesium Stearate | | | |
|---|---------------------------------|--|--|
| CAS-No. | 557-04-0 | | |
| LD50/oral/rat = No informatio | | | |
| LD50/oral/mouse = No inform | | | |
| LD50/dermal/rabbit = No info LD50/dermal/rat = No inform | | | |
| LC50/inhalation/rat = No info | | | |
| LC50/inhalation/mouse = No | | | |
| | tion = No information available | | |
| Product Information | | | |
| | | | |
| LD50/oral/rat = | | | |
| VALUE- Acute Tox Oral = No in | Iformation available | | |
| | | | |
| LD50/oral/mouse = Value - Acute Tox Oral = No infe | armation available | | |
| | | | |
| LD50/dermal/rabbit | | | |
| VALUE-Acute Tox Dermal = No information available | | | |
| LD50/dermal/rat | | | |
| VALUE -Acute Tox Dermal = No | o information available | | |
| | | | |
| LC50/inhalation/rat | | | |
| VALUE-Vapor = No information | | | |
| VALUE-Gas = No information av | | | |
| VALUE-Dust/Mist = No informat | ion available | | |
| LC50/Inhalation/mouse | | | |
| VALUE-Vapor = No information | available | | |
| VALUE - Gas = No information a | | | |
| VALUE - Dust/Mist = No information | ation available | | |
| Symptoms | | | |
| <u>Symptoms</u> | | | |
| Skin Contact: | May cause skin irritation. | | |
| Eve Contact | May cause ave irritation | | |
| Eye Contact: | May cause eye irritation. | | |
| | | | |

Product code: M1184

| Inhalation | May cause respiratory irritation. |
|-------------------------------|--|
| Ingestion | Health injuries are not known or expected under normal use. |
| 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. |
| Mutagenic Effects: | No information available |

Carcinogenic effects: Not considered carcinogenic.

| Components | CAS-No. | IARC | ACGIH - Carcinogens | NTP | OSHA HCS - Carcinogens | Australia - Notifiable Carcinogenic Substances | Australia - Prohibited Carcinogenic Substances |
|--------------------|----------|------------|------------------------|------------|---------------------------|---|---|
| Magnesium Stearate | 557-04-0 | Not listed | Not listed | Not listed | Not listed | Not listed | Not listed |

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

<u>Reproductive toxicity</u> No data is available

| Reproductive Effects: | No information available |
|------------------------|--------------------------|
| Developmental Effects: | No information available |
| Teratogenic Effects: | No information available |

Specific Target Organ Toxicity

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

| Persistence and degradability: | No information available |
|--------------------------------|--------------------------|
| Persistence and degradability: | No information available |

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Product code: M1184

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 | CAS-No. | RCRA - F Series Wastes | RCRA - K Series Wastes | RCRA - P Series Wastes | RCRA - U Series Wastes |
|--------------------|----------|---------------------------|---------------------------|---------------------------|---------------------------|
| Magnesium Stearate | 557-04-0 | None | None | None | None |

14. TRANSPORT INFORMATION

DOT

| DOT | |
|---|--|
| UN-No: | Not Regulated |
| Proper Shipping Name: | No information available |
| Hazard Class: | No information available |
| Subsidiary Class | No information available |
| Packing group: | No information available |
| Emergency Response Guide | No information available |
| Number | |
| Marine Pollutant | No data available |
| DOT RQ (Ibs): | No information available |
| Special Provisions | No Information available |
| Symbol(s): | No information available |
| Description: | No information available |
| | |
| TDG (Canada) | |
| UN-No: | Not Regulated |
| Proper Shipping Name: | No information available |
| Hazard Class: | No information available |
| Subsidiary Risk: | No information available |
| Packing Group: | No information available |
| Marine Pollutant | No Information available |
| Description: | No information available |
| ADR | |
| | |
| | Not Pogulated |
| UN-No: Proper Shipping Name: | Not Regulated |
| Proper Shipping Name: | No information available |
| Proper Shipping Name: Hazard Class: | No information available No information available |
| Proper Shipping Name: Hazard Class: Packing Group: | No information available No information available No information available |
| Proper Shipping Name: Hazard Class: | No information available No information available |
| Proper Shipping Name: Hazard Class: Packing Group: | No information available No information available No information available |
| Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: | No information available No information available No information available No information available |
| Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: IMO / IMDG UN-No: | No information available No information available No information available |
| Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: IMO / IMDG | No information available No information available No information available No information available Not Regulated |
| Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: IMO / IMDG UN-No: Proper Shipping Name: Hazard Class: | No information available No information available No information available No information available Not Regulated No information available |
| Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: IMO / IMDG UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: | No information available No information available No information available No information available Not Regulated No information available No information available |
| Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: IMO / IMDG UN-No: Proper Shipping Name: Hazard Class: | No information available No information available No information available No information available Not Regulated No information available No information available No information available |
| Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: IMO / IMDG UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: | No information available No information available |
| Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: IMO / IMDG UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: Marine Pollutant RID | No information available No information available |
| Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: IMO / IMDG UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: Marine Pollutant RID UN-No: | No information available No information available |
| Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: IMO / IMDG UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: Marine Pollutant RID UN-No: Proper Shipping Name: | No information available No information available |
| Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: IMO / IMDG UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: Marine Pollutant RID UN-No: Proper Shipping Name: Hazard Class: | No information available No information available |
| Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: IMO / IMDG UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: Marine Pollutant RID UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: | No information available No information available |
| Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: IMO / IMDG UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: Marine Pollutant RID UN-No: Proper Shipping Name: Hazard Class: | No information available No information available |

| ICAO | |
|-----------------------|--------------------------|
| UN-No: | Not Regulated |
| Proper Shipping Name: | No information available |
| Hazard Class: | No information available |
| Subsidiary Risk: | No information available |
| Packing Group: | No information available |
| ΙΑΤΑ | |
| UN-No: | Not Regulated |
| Proper Shipping Name: | No information available |
| Hazard Class: | No information available |
| Subsidiary Risk: | No information available |
| Packing Group: | No information available |
| ERG Code: | No information available |
| Special Provisions | No information available |

15. REGULATORY INFORMATION

International Inventories

| Components | CAS-No. | U.S. TSCA | KOREA KECL | Philippines (PICCS) | Japan ENCS | CHINA | Australia (AICS) | EINECS-No. |
|--------------------|----------|--------------|---------------------|------------------------|--------------------|---------|---------------------|----------------------|
| Magnesium Stearate | 557-04-0 | PresentACTIV | Present KE-26390 | Present | Present (2)-611 | Present | Present | Present 209-150-3 |
| | | | 112-20390 | | (2)-011 | | | 203-130-3 |

U.S. Regulations

Magnesium Stearate

 FDA - Food Additives Generally Recognized as Safe (GRAS):
 21 CFR 184.1440

 FDA - Direct Food Additives
 21 CFR 173.340

 FDA - 21 CFR - Total Food Additives
 172.863, 173.340, 175.300, 179.45, 181.29, 184.1440

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

Chemicals Known to the State of California to Cause Cancer:

WARNING: This product contains a chemical known to the State of California to cause cancer. (See table below)

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

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (See table below)

| Components | CAS-No. | Carcinogen | Developmental Toxicity | Male | Female |
|--------------------|----------|------------|------------------------|--------------|--------------|
| | | | | Reproductive | Reproductive |
| | | | | Toxicity | Toxicity: |
| Magnesium Stearate | 557-04-0 | Not Listed | Not Listed | Not Listed | Not Listed |

CERCLA/SARA

| Components | CAS-No. | CERCLA - Hazardous Substances and their Reportable Quantities | Section 302 Extremely Hazardous Substances and TPQs | Section 302 Extremely Hazardous Substances and RQs | Section 313 - Chemical Category | Section 313 - Reporting de minimis |
|-----------------------|----------|---|---|--|------------------------------------|--|
| Magnesium Stearate | 557-04-0 | None | None | None | None | None |

U.S. TSCA

| Components | | TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS) | TSCA 8(d) -Health and Safety Reporting |
|--------------------|----------|---|---|
| Magnesium Stearate | 557-04-0 | Not Applicable | Not Applicable |

Canada

WHIMIS 2015 - GHS Classifications

| WHMIS 2015 Hazard Classification Information: | Not a dangerous product according to HPR classification criteria. |
|--|--|
| Canada Hazardous Products Regulation | This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR |
| WILINIE 4000 Herend Class | |

WHMIS 1988 Hazard Class

Non-controlled

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.

Inventory

| Components | CAS-No. | Canada (DSL) | Canada (NDSL) |
|------------|----------|--------------|---------------|
| | 557-04-0 | Present | Not Listed |

| Components | CAS-No. | CEPA Schedule I - Toxic Substances |
|--------------------|----------|---|
| Magnesium Stearate | 557-04-0 | Not listed |
| Components | | CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting |
| Magnesium Stearate | 557-04-0 | Not listed |

EU Classification

EU GHS - SV - CLP 1272/2008

| Components | CAS-No. | EU GHS - SV - CLP (1272/2008) |
|--------------------|----------|-------------------------------|
| Magnesium Stearate | 557-04-0 | |

EU - CLP (1272/2008)

R-phrase(s)

not determined (not applicable)

S -phrase(s)

none

| Components | CAS-No. | Classificatio | n | Concentration Limits: | Safety Phrases |
|--------------------|----------|---------------|------------|--------------------------|----------------|
| Magnesium Stearate | 557-04-0 | | | No information | |
| | 141 11 | • • • • • | N 1 | | |

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

Indication of danger: None.

16. OTHER INFORMATION

| Preparation Date: | 03/26/2015 |
|-------------------|------------|
| Revision Date: | 08/10/2018 |

| Prepared 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. Spectrum Chemicals & Laboratory Products, Inc. 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, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein. |

End of Safety Data Sheet