

United States
Material Safety Data Sheet

Miracle-Gro Lawn Products Inc
 14111 Scottslawn Road
 Marysville, Ohio 43041
 United States

24 h. EMERGENCY TELEPHONE NUMBER
 CHEMTREC (U.S.) 1-800-424-9300
 CHEMTREC (International) 1-703-527-3887
 Non-Emergency Calls
 1-937-644-0011

**NATURE'S CARE ORGANIC & NATURAL VEGETABLE, FRUIT &
 FLOWER FOOD 3-4-2**

1. Product and company identification

MSDS # : 320000005105

2. Hazards identification

Physical state : solid [Granule]

Color : Brown.

Odor : Fertilizer

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Emergency Overview : No harmful effects expected.

Potential acute health effects

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin : No known significant effects or critical hazards.

Eyes : No known significant effects or critical hazards.

Target organs : None known.

Potential chronic health effects : See section 11 for more information.

Over-exposure signs/symptoms

Inhalation : No specific data.

Ingestion : No specific data.

Skin : No specific data.

Eyes : No specific data.

Medical conditions aggravated by over-exposure : Pre-existing skin disorders may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

*Report
 version.Re
 port*
Version: version

Date of issue/Date of revision: Validity date***.

Date of previous issue: 12/17/2012

3. Composition/information on ingredients

Name	CAS number	%
Carbonic acid calcium salt (1:1)	471-34-1	>10 - <=15

4. First aid measures

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

- Flammability of the product** : No specific fire or explosion hazard.

Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.

- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Hazardous thermal decomposition products** : No specific data.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Report
version.Re
port
Version: version Date of issue/Date of revision: Validity date*** Date of previous issue: 12/17/2012

- Small spill** : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Occupational exposure limits

Ingredient	Exposure limits
Carbonic acid calcium salt (1:1)	OSHA PEL (1993-06-30) PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust OSHA PEL (1993-06-30) PEL: Permissible Exposure Level 5 mg/m3 Form: Respirable fraction

Consult local authorities for acceptable exposure limits.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- Engineering measures** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the

Report
version.Re
port
Version: version

Date of issue/Date of revision: Validity date***.

Date of previous issue: 12/17/2012

workstation location.

Personal protection

- | | | |
|--|---|--|
| Respiratory | : | Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. |
| Hands | : | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. |
| Eyes | : | Protective eyewear is not required, but may be used in situations where contact is expected. |
| Skin | : | No special protective clothing is required. |
| Environmental exposure controls | : | Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. |

9. Physical and chemical properties

- | | | |
|-----------------------------------|---|---------------------------|
| Physical state | : | solid [Granule] |
| Flash point | : | Not Applicable |
| Burning time | : | Not Applicable |
| Auto-ignition temperature | : | Not Applicable |
| Flammable limits | : | Not Applicable |
| Density | : | 0.5126 kg/dm ³ |
| Color | : | Brown. |
| Odor | : | Fertilizer |
| pH | : | Not Applicable |
| Boiling/condensation point | : | Not Applicable |
| Melting/freezing point | : | Not Applicable |
| Relative density | : | Not Applicable |
| Vapor pressure | : | Not Applicable |
| Vapor density | : | Not Applicable |
| Volatility | : | Not Applicable |
| Odor threshold | : | Not Applicable |
| Evaporation rate | : | Not Applicable |
| Viscosity | : | Not Applicable |
| Solubility | : | Not Applicable |
| Solubility in water | : | Not Applicable |

10. Stability and reactivity

- | | | |
|---|---|--|
| Chemical stability | : | The product is stable. |
| Conditions to avoid | : | No specific data. |
| Incompatible materials | : | No specific data. |
| Hazardous decomposition products | : | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| Possibility of hazardous reactions | : | Under normal conditions of storage and use, hazardous reactions will not occur. |

Report
version.Re
port
Version: version

Date of issue/Date of revision: Validity date***.

Date of previous issue: 12/17/2012

11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Carbonic acid calcium salt (1:1)	LD50 Oral	Rat	6,450 mg/kg	-
Conclusion/Summary	No known significant effects or critical hazards.No known significant effects or critical hazards.			

Irritation/Corrosion

Skin	Non-irritating
Eyes	May cause eye irritation.
Respiratory	Non-irritating

Sensitizer

Conclusion/Summary	Skin	Not sensitizing - based on the individual components.
	Respiratory	Not sensitizing - based on the individual components.

Chronic toxicity

Conclusion/Summary	No known significant effects or critical hazards.No known significant effects or critical hazards.
--------------------	--

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Conclusion/Summary	No known significant effects or critical hazards.			

Mutagenicity

Conclusion/Summary	No known significant effects or critical hazards.
--------------------	---

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Conclusion/Summary	No known significant effects or critical hazards.No known significant effects or critical hazards.			

Reproductive toxicity

Conclusion/Summary	No known significant effects or critical hazards.No known significant effects or critical hazards.
--------------------	--

12. Ecological information

Ecotoxicity : No known significant effects or critical hazards.

Aquatic ecotoxicity

Conclusion/Summary : No known significant effects or critical hazards.

Persistence/degradability

Conclusion/Summary : No known significant effects or critical hazards.

Partition coefficient: n- : No known significant effects or critical hazards.

Report
version.Re
port
Version: version Date of issue/Date of revision: Validity date***. Date of previous issue: 12/17/2012

octanol/water

Other adverse effects : No known significant effects or critical hazards.

13. Disposal considerations

Waste disposal Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport information

<u>Regulatory information</u>	<u>UN no.</u>	<u>Proper shipping name</u>	<u>Class</u>	<u>PG*</u>	<u>Note</u>
DOT		Not Regulated			
IATA (C)		Not Regulated			
IATA (P)					
IMDG		Not Regulated			
TDG		Not Regulated			
PG* : Packing group					

15. Regulatory informationUnited States

U.S. Federal regulations : **United States - TSCA 12(b) - Chemical export notification:** None of the components are listed.
United States - TSCA 8(a) - Inventory update rule (IUR): Not determined
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: No products were found.
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Carbonic acid calcium salt (1:1): Acu
Clean Air Act (CAA) 112 accidental release prevention: No products were found.

United States inventory (TSCA 8b) : All components are listed or exempted.

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California Prop. 65 : Not listed

Report
version.Re
port
Version: version Date of issue/Date of revision: Validity date***. Date of previous issue: 12/17/2012

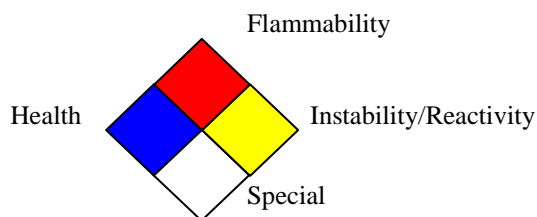
International regulations

- Canada inventory** : At least one component is not listed.
- International lists** :
- Australia inventory (AICS):** At least one component is not listed.
 - Japan inventory:** At least one component is not listed.
 - China inventory (IECSC):** At least one component is not listed.
 - Korea inventory:** At least one component is not listed.
 - New Zealand Inventory of Chemicals (NZIoC):** At least one component is not listed.
 - Philippines inventory (PICCS):** At least one component is not listed.
 - Taiwan inventory (CSNN):** Not determined.
 - Malaysia Inventory (EHS Register):** Not determined.

16. Other information**Hazardous Material Information System (U.S.A.) :**

Health	1
Flammability	0
Physical hazards	0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868. The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.):

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

- Date of printing** : Print date
- Date of issue** : Validity date***.
- Version** : Report version. Report version

Report version. Report version

Version: *version* **Date of issue/Date of revision:** *Validity date***.* **Date of previous issue:** 12/17/2012

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

*Report
version.Re
port
Version: version* *Date of issue/Date of revision: Validity date***.* *Date of previous issue: 12/17/2012*