

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Printing date 05/18/2015

Reviewed on 05/18/2015

1 Identification

· **Product identifier:**

· **Trade name:** Bio-Más G

· **Relevant identified uses of the substance or mixture and uses advised against:**

Bio-Más G is applied to turfgrass and ornamental plants to increase rooting, plant health, and overall vigor.

· **Product description:**

The product is a blend of compounds comprising amino acids, micro and macro elements, and cytokinins.

· **Application of the substance / the mixture:**

The mixture is applied as a spray solution to turfgrass and ornamental plants.

· **Details of the supplier of the safety data sheet:**

· **Manufacturer/Supplier:**

Turf Associated Marketing

115 Beechwood Trail

Roswell, GA 30075

Phone: (404) 434-6084

2 Hazard(s) identification

· **Classification of the substance or mixture:**



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H335 May cause respiratory irritation.

· **Label elements:**

· **GHS label elements:**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms:**



GHS05 GHS07

· **Signal word:** Danger

· **Hazard-determining components of labeling:**

Potassium Silicate

· **Hazard statements:**

Causes skin irritation.

Causes serious eye damage.

May cause respiratory irritation.

· **Precautionary statements:**

Avoid breathing dust/fume/gas/mist/vapors/spray

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Use only outdoors or in a well-ventilated area.

Wear protective gloves.

Wear eye protection / face protection.

Wash thoroughly after handling.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a poison center/doctor.

Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If skin irritation occurs: Get medical advice/attention.

If on skin: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Unknown acute toxicity:**

11.8 percent of the mixture consists of ingredient(s) of unknown toxicity.

· **Classification system:**· **NFPA ratings (scale 0 - 4)**

Health = 1

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 1

Fire = 0

Reactivity = 0

· **Hazard(s) not otherwise classified (HNOC):** None known**3 Composition/information on ingredients**· **Chemical characterization: Mixtures**· **Description:** Mixture of substances listed below with nonhazardous additions.· **Dangerous Components:**

1312-76-1	Potassium Silicate	5-35%
	☞ Eye Dam. 1, H318; ☞ Skin Irrit. 2, H315; STOT SE 3, H335	

4 First-aid measures· **Description of first aid measures**· **After inhalation:** Remove affected person to fresh air. Seek medical attention if symptoms persist.

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- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation occurs, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If swallowed and symptoms occur, consult a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media:**
- **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Advice for firefighters:**
- **Protective equipment:**
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Dispose of the collected material according to regulations.
- **Reference to other sections:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling:** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities:**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s):** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**
- **Components with occupational exposure limits:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.

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- **Exposure controls:**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Immediately remove all soiled and contaminated clothing and wash before reuse.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

- **Eye protection:**



Safety glasses

9 Physical and chemical properties

- **Information on basic physical and chemical properties:**
- **General Information:**
- **Appearance:**
 - Form:** Powder
 - Color:** Steel Grey
- **Odor:** Odorless
- **Odor threshold:** Not determined.
- **pH-value:** Not applicable.
- **Change in condition**
 - Melting point/Melting range:** Not determined.
 - Boiling point/Boiling range:** Not determined.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not determined.
- **Ignition temperature:**
 - Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
 - Lower:** Not determined.
 - Upper:** Not determined.
- **Vapor pressure:** Not applicable.
- **Density:**
 - Relative density:** Not determined.
 - Vapor density:** Not applicable.
 - Evaporation rate:** Not applicable.

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- **Solubility in / Miscibility with Water:** Soluble.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic:** Not applicable.
 - Kinematic:** Not applicable.
- **Other information:** No further relevant information available.

10 Stability and reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects:**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

7647-14-5 Sodium Chloride

Oral	LD50	3000 mg/kg (rat)
Dermal	LD50	>10000 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:**
 - Strong irritant with the danger of severe eye injury.
 - Causes serious eye irritation.
- **Additional toxicological information:**
 - The product shows the following dangers according to internally approved calculation methods for preparations:
 - Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

Substance is not listed.

- **NTP (National Toxicology Program)**

None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.

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12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Not known to be hazardous to water.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods:**
- **Recommendation:** Recycle or dispose with household trash.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class** Non-Regulated Material
- **Packing group**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **Transport/Additional information:**
- **DOT**
- **Quantity limitations** On passenger aircraft/rail:
On cargo aircraft only:
- **UN "Model Regulation":** -

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15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

- **TSCA (Toxic Substances Control Act):**

1312-76-1 Potassium Silicate

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

- **Carcinogenic categories:**

- **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients are listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed.

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS05 GHS07

- **Signal word:** Danger

- **Hazard-determining components of labeling:**

Potassium Silicate

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· **Hazard statements:**

Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.

· **Precautionary statements:**

Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area.
Wear protective gloves.
Wear eye protection / face protection.
Wash thoroughly after handling.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center/doctor.
Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If skin irritation occurs: Get medical advice/attention.
If on skin: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

· **State Right to Know:**

1312-76-1	Potassium Silicate	5-35%
	☞ Eye Dam. 1, H318; ☞ Skin Irrit. 2, H315; STOT SE 3, H335	

All ingredients are listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· **Date of preparation / last revision:** 05/18/2015 / 1

· **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists

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EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3