

SAFETY DATA SHEET

BIOSTIMULUS

This safety data sheet complies with the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



SDS # : 10043-1-A
Revision Date: 2018-01-02
Format: EU
Version 1

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Code 10043-1-A
Product name BIOSTIMULUS

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use: A biostimulant, boosting natural processes of metabolism in plants
Restrictions on use Use as recommended by the label

1.3. Details of the supplier of the safety data sheet

Supplier CHEMINOVA AGRO DE ARGENTINA S.A.
Aldecoa N° 1277 – (B1868DTO) Avellaneda
Buenos Aires - Argentina
Tel: +5411- 4228-7047

For further information, please contact:

Contact Point Tel: +5411- 4228-7047

1.4. Emergency telephone number

Emergency telephone Tel: +5411- 4228-7047

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture Regulation (EC) No 1272/2008

Hazard symbol not required.

EUH208: Contains hexamine. May produce an allergic reaction.

2.2. Label elements

Hazard pictograms

Hazard symbol not required.

Hazard Statements

EUH208: Contains hexamine. May produce an allergic reaction.

Precautionary Statements

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P332 + P313 - If skin irritation occurs: Get medical advice/attention

2.3. Other hazards

This product is not identified as a PBT/vPvB substance.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

The product is a mixture, not a substance.

3.2 Mixture containing the following hazardous ingredients:

| Chemical Name | EC-No | CAS-No | Weight percent | GHS Classification | REACH registration number |
|--|-----------|-----------|----------------|---|---------------------------|
| N-ACETYLTHIAZOLIDINE-4-CARBOXYLIC ACID | 225-713-6 | 5025-82-1 | 1-10 | Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) | No data available |
| Sodium carbonate | 207-838-8 | 497-19-8 | 1-10 | Eye Irrit. 2 (H319) | 01-2119485498-19-XXXX |

Additional Information

For the full text of the H-, R- and EUH- phrases mentioned in this Section, see Section 16.

Contains hexamine (CAS number 100-97-0) at a level below the concentration limit for classification of the mixture as sensitising.

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

| | |
|---------------------|---|
| Eye contact | Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Call a poison control centre or doctor for treatment advice. |
| Skin Contact | Wash off immediately with soap and plenty of water. If symptoms persist, call a doctor. |
| Inhalation | Remove person from exposure ensuring one's own safety while doing so. |
| Ingestion | Do NOT induce vomiting. Rinse mouth. Call a poison control center or doctor immediately for treatment advice. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|--|---|
| Most important symptoms and effects, both acute and delayed | Skin contact: May see mild irritation at the site of contact. |
| | Eye contact: Possible irritation and redness. |
| | Ingestion: Possible irritation of the throat. |
| | Inhalation: May experience irritation of the throat with a feeling of tightness in the chest. |
| | Delayed/Immediate effects: Immediate effects can be expected after short-term exposure. |

4.3. Indication of any immediate medical attention and special treatment needed

| | |
|---|------------------------|
| Indication of immediate medical attention and special treatment needed, if necessary | Treat symptomatically. |
|---|------------------------|

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO₂, water spray or regular foam. Cool containers / tanks with water spray.

Unsuitable extinguishing media

No information available

5.2. Special hazards arising from the substance or mixture

Toxic fumes may be released in fire situations.

Hazardous combustion products Carbon oxides, Sulphur oxides, Nitrogen oxides (NO_x).

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear. Wear protective clothing to prevent contact with skin and eyes.

Section 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures****Personal precautions**

For personal protection see section 8. Stop leak if you can do it without risk. In case of spill, avoid contact. Isolate area and keep out animals and unprotected persons. In the case of large spills (1 ton or more), alert the appropriate authorities.

For further clean-up instructions, call Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Do not discharge into drains or rivers. Contain the spillage using bunding. Accidental release into water courses must be alerted to the appropriate regulatory body.

6.3. Methods and material for containment and cleaning up**Methods for containment**

Surface drains within close vicinity of the spill should be covered. Dike to confine spill and absorb with non-combustible absorbent such as clay, sand or soil.

Methods for cleaning up

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see Section 13).

6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE**7.1. Precautions for safe handling****Handling**

Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin, eyes and clothing.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities**Storage**

Store above 5°C. Keep in a dry, cool and well-ventilated place. Keep away from direct sunlight. Keep away from heat. Keep out of reach of children and animals. Keep away from food, drink and animal feedingstuffs.

Packageing material

Must only be kept in original packaging.

7.3. Specific end use(s)**Specific use(s)**

No data available.

Risk Management Methods (RMM)

The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection Safety glasses with side-shields. Provide emergency on-site eyewash.

Hand protection Protective gloves. Impervious butyl rubber gloves. Wear chemical protective gloves made of materials such as nitrile or neoprene.

Skin and body protection Impervious clothing.

Respiratory Protection Not required under normal use.

Environmental exposure controls Refer to specific Member State legislation for requirements under Community environmental legislation.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

| | |
|-------------------------------------|--------------------------|
| Physical state | Liquid |
| Appearance | Liquid suspension |
| Odour | Odourless |
| Colour | Yellow |
| Odour threshold | No information available |
| pH | 6.0 - 7.0 |
| Melting point/freezing point | No information available |
| Boiling point/boiling range | > 100 |
| Flash point | No information available |
| Evaporation Rate | No information available |
| Flammability (solid, gas) | No information available |
| Flammability Limit in Air | |
| Upper flammability limit: | No information available |
| Lower flammability limit: | No information available |
| Vapour pressure | 15.92 mm Hg at 20°C |
| Vapour density | No information available |
| Specific gravity | ~1.03 |
| Water solubility | Soluble in water |
| Solubility in other solvents | No information available |
| Partition coefficient | No information available |
| Autoignition temperature | No information available |
| Decomposition temperature | No information available |
| Viscosity, kinematic | No information available |
| Viscosity, dynamic | No information available |

Explosive properties No information available
Oxidising properties Non-oxidizing (by EC criteria)

9.2. Other information

Softening point No information available
Molecular weight No information available
VOC content (%) No information available
Density No information available
Bulk Density No information available
K_{st} No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

None under normal use conditions

10.2. Chemical stability

Stable under recommended storage conditions.

Explosion data

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

10.3. Possibility of hazardous reactions**Hazardous polymerisation**

Hazardous polymerisation does not occur.

Hazardous reactions

None under normal processing. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Heat, Humid air, Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidising agents. Metals.

10.6. Hazardous decomposition products

May emit toxic fumes under fire conditions. See Section 5 for more information.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects**Acute toxicity****Product Information**

Product does not present an acute toxicity hazard based on known or supplied information.

LD50 Oral 9620 mg/kg (rat)
LD50 Dermal > 4000 mg/kg (rat)

| Chemical Name | LD50 Oral | LD50 Dermal | Inhalation LC50 |
|------------------|------------------|-------------------|-----------------|
| Sodium carbonate | 2800 mg/kg (rat) | >2000 mg/kg (rat) | |

Skin corrosion/irritation No information available.
Serious eye damage/eye irritation No information available.

Sensitisation No information available
Mutagenicity No information available.
Carcinogenicity No information available.

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.

Symptoms

Skin contact: May see mild irritation at the site of contact.

Eye contact: Possible irritation and redness.

Ingestion: Possible irritation of the throat.

Inhalation: May experience irritation of the throat with a feeling of tightness in the chest.

Delayed/Immediate effects: Immediate effects can be expected after short-term exposure.

Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

There is no data available for this product.

| Sodium carbonate (497-19-8) | | | | |
|------------------------------------|-----------|------------------|---------|-------|
| Active Ingredient(s) | Duration | species | VALUE | UNITS |
| Sodium Carbonate | 96 h LC50 | Bluegill sunfish | 300 | mg/l |
| Sodium Carbonate | 48 h EC50 | Ceriodaphnia | 200-227 | mg/l |

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

Mobility in soil
No information available.

Mobility
Readily absorbed to soil.

12.5. Results of PBT and vPvB assessment

This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

| | |
|--|--|
| Waste from residues / unused products | Transfer to a suitable container and arrange for collection by specialised disposal company. Do not contaminate ponds, waterways or ditches with chemical or used containers. Do not discharge to sewer systems. |
| Contaminated Packaging | Clean container with water. Dispose of rinse water in accordance with local and national guidelines. Empty containers should be taken to an approved waste handling site for recycling or disposal. |
| OTHER INFORMATION | NOTE : The user's attention is drawn to the possible existence of specific European, national or local regulations regarding disposal. |

Section 14: TRANSPORT INFORMATION

| | |
|-------------|--|
| Note | NOT CLASSIFIED AS DANGEROUS IN THE MEANING OF TRANSPORT REGULATIONS. |
|-------------|--|

IMDG/IMO

| | |
|---|--|
| 14.1 UN/ID no | Not regulated |
| 14.2 Proper shipping name | Not regulated |
| 14.3 Hazard class | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Marine pollutant | Not applicable |
| 14.6 Special Provisions | None |
| 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Este producto no se transporta en contenedores a granel. |

RID

| | |
|---------------------------|----------------|
| 14.1 UN/ID no | Not regulated |
| 14.2 Proper shipping name | Not regulated |
| 14.3 Hazard class | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazard | Not Applicable |
| 14.6 Special Provisions | None |

ADR/RID

| | |
|---------------------------|----------------|
| 14.1 UN/ID no | Not regulated |
| 14.2 Proper shipping name | Not regulated |
| 14.3 Hazard class | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazard | Not Applicable |
| 14.6 Special Provisions | None |

ICAO/IATA

| | |
|---------------------------|----------------|
| 14.1 UN/ID no | Not regulated |
| 14.2 Proper shipping name | Not regulated |
| 14.3 Hazard class | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazard | Not Applicable |
| 14.6 Special Provisions | None |

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not Applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not Applicable

International Inventories

| Chemical Name | TSCA (United States) | DSL (Canada) | EINECS/ELINCS (Europe) | ENCS (Japan) | China (IECSC) | KECL (Korea) | PICCS (Philippines) | AICS (Australia) |
|---|-------------------------|-----------------|---------------------------|-----------------|------------------|--------------|------------------------|---------------------|
| N-ACETYLTHIAZOLIDINE-4-CARBOXYLIC ACID 5025-82-1 | X | X | X | | | | | |
| Sodium carbonate 497-19-8 | X | X | X | X | X | X | X | X |

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: OTHER INFORMATION**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of R-phrases referred to under sections 2 and 3**

Not applicable

Full text of H-Statements referred to under sections 2 and 3

EUH208 - May produce an allergic reaction

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

Legend

| | |
|--------------------------------------|---|
| ADR: | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| CAS: | CAS (Chemical Abstracts Service) |
| Ceiling: | Maximum limit value: |
| DNEL: | Derived No Effect Level (DNEL) |
| EINECS: | EINECS (European Inventory of Existing Chemical Substances) |
| GHS: | Globally Harmonised System (GHS) |
| IATA: | International Air Transport Association (IATA) |
| ICAO: | International Civil Aviation Organization |
| IMDG: | International Maritime Dangerous Goods (IMDG) |
| LC50: | LC50 (lethal concentration) |
| LD50: | LD50 (lethal dose) |
| PBT: | Persistent, Bioaccumulative, and Toxic (PBT) Chemicals |
| RID: | Regulations Concerning the International Transport of Dangerous Goods by Rail |
| STEL: | Short term exposure limit |
| SVHC: Substances of Very High | SVHC: Substances of Very High Concern for Authorisation: |

Concern for Authorisation:

TWA: time weighted average
vPvB: very Persistent and very Bioaccumulative

Revision Date: 2018-01-02

Reason for revision: Format Change.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

Prepared By

FMC Corporation

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End of Safety Data Sheet