
VALAGRO Safety Sheet
Date: December 12, 2019 Rev. 1.0
Product: SEAVOLUTION G
Code: 12673
Print Date: 12 December 2019

SAFETY SHEET

SEAVOLUTION G

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Trade name: SEAVOLUTION G
Chemical Name: Ascophyllum nodosum, ext.
CAS Registry number: 84775-78-0
EC N°: 283-907-6

1.2. Other means of identification

N.A.

1.3. Recommended use of the chemical and restrictions on use:

Produced and packed by:
VALAGRO Spa
Via Cagliari, 1 Zona Industriale
66041 Atessa (CH) ITALY
Tel. (+39) 08728811 Fax (+39) 0872881382
www.valagro.com

Distributed and guaranteed by:
Valagro USA Inc.
2020 Ponce de Leon Blvd, Ste. 1203
Coral Gables, FL 33134
Phone +1-786-230-1020 / +1-786-230-1019

Competent person responsible for the safety data sheet:

regulatory@valagro.com

1.4. Emergency telephone number:

Valagro USA Inc Phone +1-786-230-1020 / +1-786-230-1019

SECTION 2: HAZARD(S) IDENTIFICATION

2.1. Classification of the substance or mixture:

Classification according to OSHA Hazard Communication Standard (29 CFR 1910.1200):

The product is not classified as dangerous

2.2. Label elements

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Hazardous components within the meaning of OSHA Hazard Communication Standard (29 CFR 1910.1200) and CLP regulation and related classification: None

SECTION 4: FIRST AID MEASURES

VALAGRO Safety Sheet

Date: December 12, 2019 Rev. 1.0

Product: SEAVOLUTION G

Code: 12673

Print Date: 12 December 2019

4.1. Description of necessary measures:

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Never give anything by mouth to an unconscious person; if person is conscious rinse mouth with water and then give plenty of water to drink. Do not induce vomiting unless instructed to do so by medical personnel. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms/effects, acute and delayed:

Possible symptoms that may occur:

Inhalation:

Possible irritation to the respiratory tract

Skin:

Possible irritation according to the contact time with the product

Eye:

Possible irritation according to the contact time with the product

Ingestion:

Possible irritation of mouth and digestive tract.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

No data available

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Suitable (and unsuitable) extinguishing media.

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces smoke containing carbon oxides, nitrogen oxides

5.3. Special protective equipment and precautions for fire-fighters.

Use suitable breathing apparatus, protective clothing, eye protection and gloves resistant to chemicals according to EN469

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

VALAGRO Safety Sheet

Date: December 12, 2019 Rev. 1.0

Product: SEAVOLUTION G

Code: 12673

Print Date: 12 December 2019

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothes giving a total skin protection, nitrile gloves and safety glasses.

See protective measures under point 7 and 8.

Ensure adequate ventilation, move people in a safe place.

Avoid dust generation

Avoid any accumulation of electrostatic charge which may create a hazardous condition and cause an ignition.

6.2. Methods and material for containment and cleaning up

Collect the product for example using shovel and broom

Avoid raising dust

Wash with plenty of water and adsorb with organic material or sand collect the product absorbed for example using shovel and broom

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Dilute with water and retain contaminated wash water and dispose in authorized facilities or pick up in clean plastic labeled containers and reuse as fertilizer.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep in the original package in a cool well-ventilated place, away from sources of heat

Keep away from food, drink and feed.

Incompatible materials:

Bases, acids, oxidizing and reducing agents.

Instructions as regards storage premises:

Adequately ventilated premises.

Avoid dust generation.

Dusts at sufficient concentrations can form explosive mixtures with air

Avoid any accumulation of electrostatic charge which may create a hazardous condition and cause an ignition.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Exposure limit values:

N.A.

8.2. Appropriate engineering controls.

It is recommended that the workers wear appropriate gloves, protective glasses and use a anti-powder mask

8.3. Individual protection measures, such as personal protective equipment:

VALAGRO Safety Sheet

Date: December 12, 2019 Rev. 1.0

Product: SEAVOLUTION G

Code: 12673

Print Date: 12 December 2019

Please observe the usual precautionary measures for handling of chemicals.
The personal protective equipment must be compliant to the regulation UNI –EN in force

Eye protection:

Use close fitting safety goggles according to the standard EN 166, don't use eye lens

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. nitrile, P.V.C., neoprene or rubber according to EN 374

Respiratory protection:

In case of dust generation, use anti-powder mask with P2 (FFP2) filters according to the EN 149:2001

The powder exposition limit must be respected.

Thermal Hazards:

None Known

Environmental exposure controls:

None

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-------------------------------|------------------------|
| Appearance: | Black micro-flakes |
| Odour: | odour of seaweed |
| pH 1% water solution at 68°F: | 10 |
| Apparent density: | 0.6 Kg/dm ³ |
| Solubility in water: | 450 g/l at 68°F |

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

N.A.

10.4. Conditions to avoid

Avoid high temperatures.

10.5. Incompatible materials

Bases, acids, oxidizing and reducing agents.

10.6. Hazardous decomposition products

In case of fire and high temperatures can develop carbon oxides (CO_x), nitrogen oxides (NO_x).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No acute toxicity study is provided because due the nature of the substance is not deemed to pose any toxicological hazard

Possible symptoms that may occur:

Inhalation:

Possible irritation to the respiratory tract

VALAGRO Safety Sheet

Date: December 12, 2019 Rev. 1.0

Product: SEAVOLUTION G

Code: 12673

Print Date: 12 December 2019

Skin:

Possible irritation according to the contact time with the product

Eye:

Possible irritation according to the contact time with the product

Ingestion:

Possible irritation of mouth and digestive tract.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Short-term toxicity to fish:

LC50 (96h) Danio rerio (freshwater): > 100 mg/L

(OECD Guideline 203 Fish acute Toxicity Test; Neri, M.C. & Noé F. (2010b))

Short-term toxicity to aquatic invertebrates:

IC50 (48 h) Daphnia magna (freshwater): > 100 mg/L

(OECD Guideline 202 Daphnia sp. Acute immobilisation test) toxicity; Neri, M. C. & Noé, F. 2010)

Toxicity to algae and aquatic plant:

EyC50 (72 h) Pseudokirchnerella sub capitata (freshwater): 60.35 mg/L based on yield rate

ErC50 (72 h) Pseudokirchnerella sub capitata (freshwater): > 100mg/L based on grow rate

EyC10 (72 h) Pseudokirchnerella sub capitata (freshwater): 17.74 mg/L based on yield rate

ErC10 (72 h) Pseudokirchnerella sub capitata (freshwater): 39.52 mg/L based on grow rate

EyC20 (72 h) Pseudokirchnerella sub capitata (freshwater): 25.99 mg/L based on yield rate

ErC20 (72 h) Pseudokirchnerella sub capitata (freshwater): 63.51 mg/L based on grow rate

(OECD Guideline 201 Alga, Growth Inhibition Test; Neri, M. C. & Noé, F. 2010c)

12.2. Persistence and degradability

Biodegradable organic substance which may require a Biochemical Oxygen Demand.

In general, the plant extract appear to be biodegradable with a low environmental impact (>60% of biodegradation is reached within 17 days). The degradation products are naturally occurring elements.

12.3. Bioaccumulative potential

The product is very soluble in water and logKow is negative, therefore a low potential for bioaccumulation or bioconcentration is expected.

12.4. Mobility in soil

The product is very soluble in water, therefore it is not expected to adsorb to the sediment

12.5. Results of PBT and vPvB assessment

The A. nodosum extract is neither a PBT nor a vPvB substance

The aschophyllum nodosum extract does not bioaccumulate or bioconcentrate due to its high water solubility and negative calculated log Kow.

In addition the product is readily biodegradable, >60% of biodegradation is reached within 17 days and the degradation products are normally occurring elements

12.6. Other adverse effects

None

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:

Product :Recover if possible. In so doing, comply with the local and national regulations

currently in force. Contact local authorities who will provide guidance regarding the disposal of special waste.

Packaging: Dispose according to regulations.

VALAGRO Safety Sheet
Date: December 12, 2019 Rev. 1.0
Product: SEAVOLUTION G
Code: 12673
Print Date: 12 December 2019

SECTION 14: TRANSPORT INFORMATION

- 14.1. UN number
Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name
N.A.
- 14.3. Transport hazard class(es)
N.A.
- 14.4. Packing group
N.A.
- 14.5. Environmental hazards
ADR-Environmental Pollutant: No
IMDG-Marine pollutant: No
- 14.6. Special precautions for user
N.A.
- 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
N.A.

SECTION 15: REGULATORY INFORMATION

Hazard Communication Standard (HCS) Haz Com 2012
OSHA, 29 CFR 1910.1200(g) and Appendix D. United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), third revised edition, United Nations, 2009. Hazard Communication Standard
United Nations Recommendations on the Transport of Dangerous Goods.
OSHA Permissible Exposure Limit
[29 CFR 1926.55 Appendix A](#)
American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV)
National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Limit (REL)
Chemical Abstracts Service (CAS) Registry Number

SECTION 16: OTHER INFORMATION , INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of preparation of the SDS: revision 1.0, Date: December 12, 2019.
This document was prepared by a competent person who has received appropriate training.
The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This SDS cancels and replaces any preceding release.

N.A. no data available
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
CLP: Classification, Labeling, Packaging.
DNEL: Derived No Effect Level.
EINECS: European Inventory of Existing Commercial Chemical Substances.

VALAGRO Safety Sheet

Date: December 12, 2019 Rev. 1.0

Product: SEAVOLUTION G

Code: 12673

Print Date: 12 December 2019

| | |
|-------------|---|
| GefStoffVO: | Ordinance on Hazardous Substances, Germany. |
| GHS: | Globally Harmonized System of Classification and Labeling of Chemicals. |
| IATA: | International Air Transport Association. |
| IATA-DGR: | Dangerous Goods Regulation by the "International Air Transport Association" (IATA). |
| ICAO: | International Civil Aviation Organization. |
| ICAO-TI: | Technical Instructions by the "International Civil Aviation Organization" (ICAO). |
| IMDG: | International Maritime Code for Dangerous Goods. |
| INCI: | International Nomenclature of Cosmetic Ingredients. |
| KSt: | Explosion coefficient. |
| LC50: | Lethal concentration, for 50 percent of test population. |
| LD50: | Lethal dose, for 50 percent of test population. |
| LTE: | Long-term exposure. |
| PNEC: | Predicted No Effect Concentration. |
| RID: | Regulation Concerning the International Transport of Dangerous Goods by Rail. |
| STE: | Short-term exposure. |
| STEL: | Short Term Exposure limit. |
| STOT: | Specific Target Organ Toxicity. |
| TLV: | Threshold Limiting Value. |
| TWATLV: | Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard). |
| WGK: | German Water Hazard Class. |