

SAFETY DATA SHEET ACCORDING TO 1907/2006/EC, 453/2010/EU, 2015/830/EU (REACH)

AGRI-BAC FLO

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Replaces revision of / Version: N/A

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product Identifier**
Product Name : Agri-Bac Flo
Product description : Bio-fertiliser
Product Type : Beneficial rhizobacterial strains in a liquid formulation.
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
Relevant uses: Fertiliser
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet**
Rolfes Agri (Pty) Ltd
288 Mundt Street
Waltloo
Pretoria
South Africa
Tel: +27(0)12 803 0145
Fax: +27(0)12 803 8418
- 1.4 Emergency telephone number**
National advisory body/Poison Centre
Telephone number : SOUTH AFRICA
Griffon Poison Information Centre
(24 Hour Poisoning Emergency Helpline)
+27(0)82 446 8946



SECTION 2: Hazards identification**2.1 Classification of the substance or mixture:****CLP Regulation (EC) no 1272/2008:**

Not classified

2.2 Label elements**CLP Regulation (EC) no 1272/2008:****Hazard pictogram(s)** : None**Signal word** : None**Hazard statement(s)** : None**Precautionary statement(s)** :

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

P501 - Dispose of the contents/containers in accordance with the current legislation on waste treatment

2.3 Other hazards

Non-applicable

SECTION 3: Composition/information on ingredients**3.1 Substance:**

Non-applicable

3.2 Mixture:**Components:** Bacteria, naturally occurring living soil that are not pathogenic to humans, animals or plants.**Concentration:** 5×10^8 cfu/g

The composition of this material is a trade secret. It contains no other components or impurities which will influence the classification with regard to human and environmental risk assessment.

SECTION 4: First Aid Measures**4.1 Description of first aid measures**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

In case of symptoms of intoxication, remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact:

In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of modifications on the skin (stinging, redness, rashes, blisters) seek medical advice with this Safety Data Sheet

By eye contact:

Rinse eyes thoroughly for at least 15 minutes with lukewarm water, ensuring that the person affected does not rub or close their eyes. Get medical attention.

By ingestion / aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Fire Extinguishing Media

Suitable extinguishing media:

Use any means suitable for extinguishing surrounding fire.

Unsuitable extinguishing media:

None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture:

Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

5.3 Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

No specific personal protection equipment is required.

6.2 Environmental precautions:

Do not discharge into drains and water courses. Remove any intact containers.

6.3 Methods and materials for containment and cleaning up

Absorb the spillage using sand or inert absorbent and move it to a safe place.

6.4 Reference to other sections:

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Handling and Storing Precautions:

A.- Precautions for safe handling:

Keep away from heat, sparks and flames. No smoking, open flames or other sources of ignition should be in the storage facility. Good housekeeping and general dust control measures should be followed.

- B.- Technical recommendations for the prevention of fires and explosions
Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, manipulation and use.
- C.- Technical recommendations to prevent ergonomic and toxicological risks
Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.
- D.- Technical recommendations to prevent environmental risks
None

7.2 Conditions for safe storage, including any incompatibilities:

- A.- Technical measures for storage
Temperature: Between 4 and 35 °C. Temperatures above 35 °C are harmful to the bacteria and will effect the shelf-life.
Maximum time/Shelf live: 6 months
- B.- General conditions for storage
Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s)

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Respiratory Protection:

Not applicable for product in purchased form. A NIOSH/MSHA – approved respirator is recommended when the allowable exposure limits may be exceeded.

Protective Gloves:

Not required. However, cloth, canvas, or leather gloves are recommended to minimize potential mechanical irritation from handling product.

Eye Protection:

Not applicable for product in purchased form. However, safety glasses/goggles are recommended if the product is used in such a way as to generate high dust levels.

Other Protective Clothing or Equipment:

Not applicable for product in purchased form.

Work/Hygienic Practices:

Follow good hygienic and housekeeping practices. Clean up areas where product settles to avoid excessive accumulation; when dry, material is combustible.
Minimize blowdown or other practices which generate high airborne-dust concentrations.

8.2 Exposure controls

Ventilation:

Local Exhaust: Provide local exhaust as needed so that exposure limits are met.

Mechanical (general): Provide general ventilation in processing and storage areas as needed so that exposure limits are met.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	: Liquid
Colour	: Milky yellow brown
Odour	: Nil to earthy
pH	: 6.5 – 7.7

Product description:

Density at 20 °C	: 1.0 g/cm ³
Relative density at 20 °C	: Non-applicable *
Dynamic viscosity at 20 °C	: Non-applicable *
Kinematic viscosity at 20 °C	: Non-applicable *
Kinematic viscosity at 40 °C	: Non-applicable *
Vapour density at 20 °C	: Non-applicable *
Partition coefficient n-octanol/water 20 °C	: Non-applicable *
Solubility in water at 20 °C	: Non-soluble
Solubility properties	: Non-applicable *
Decomposition temperature	: Non- applicable
Melting point/freezing point	: Non-applicable *
Explosive properties	: Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat, shocks and mechanical impacts, oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture.
Oxidising properties	: Non-applicable *

Flammability:

Flash Point	: Non-applicable *
Auto ignition temperature	: Non-applicable *
Lower flammability limit	: Non-applicable *
Upper flammability limit	: Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

9.2 Other information: No additional information.

SECTION 10: Stability and reactivity

10.1 Chemical stability: Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions: Not available.

10.4 Conditions to avoid: Avoid contact with moisture, heat and combustible substances

10.5 Incompatible materials: None

10.6 Hazardous decomposition products: Ammonia

SECTION 11: Toxicological information

11.1 Information on toxicological effects

No LD50 data available for the product.

11.2 Dangerous health implications: No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

A. Ingestion (acute effect):

Swallowing can result in abdominal discomfort. There is an increased risk of gastro-intestinal infections.

B. Inhalation (acute effect):

Inhalation of dust and/or liquid mists (bio aerosols) may inflame or sensitize the nose, throat and lungs, and aggravate pre-existing conditions such as asthma and bronchitis.

C. Contact with the skin and the eyes (acute effect):

Dust and/or liquid mist (bio aerosols) may irritate the eye resulting in redness and watering, or eye infection.

Contact with skin may cause irritation and in some people may lead to skin sensitization, dermatitis or skin infection.

D. Long Term Effects:

Repeated inhalation of dust and/or liquid mists (bio aerosols) may result in respiratory irritation, inflammation or sensitization resulting in illnesses ranging from hay fever and asthma to pneumonia (eg. legionnaire's disease) and pneumonia like illnesses.

The elderly, those with pre-existing respiratory diseases, and the immunocompromised are at particular risk from these illnesses. All people working regularly with these and other landscaping products should ensure that they are adequately protected against tetanus.

Specific toxicology information on the substance:

No data available

SECTION 12: Ecological information

The experimental information related to the eco-toxicological properties of the product itself is not available.

12.1 Toxicity: Not available.

12.2 Persistence and degradability: Biodegradable

12.3 Bio accumulative potential: Not available.

12.4 Mobility in soil: Not available

12.5 Results of PBT and vPvB assessment: Not available

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

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal:

The generation of waste should be avoided or minimised wherever possible.

Hazardous waste:

Non-hazardous waste.

Packaging**Methods of disposal:**

The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions:

This material and its container must be disposed of in a safe way.

SECTION 14: Transport information

	Land transport (ADR/RID)	Inland waterway transport (AND/ADNR)	Sea Transport (IMDG)	Air transport (ICAO-TI / IATA- DGR)
14.1 UN Number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.
14.6 Special precautions for user	Not available.	Not available.	Not available.	Not available.
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:	Not applicable	Not applicable	Not applicable	Not applicable

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

Regulation (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc.): Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

Regulation (EC) No 2003/2003 of the European Parliament and of the Council of 13 October 2003 relating to fertilisers

- 15.2 Chemical Safety Assessment:**
Not available.

SECTION 16: Other information

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) N° 1907/2006 (Regulation (EU) N° 453/2010, Regulation (EC) N° 2015/830)

Texts of the legislative phrases mentioned in section 2:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

Texts of the legislative phrases mentioned in section 3: Non applicable

CLP Regulation (EC) n° 1272/2008 (refer to section 3): Not classified

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://echa.europa.eu>
www.dguv.de/ifa/gestis-dnel
<http://eur-lex.europa.eu>

Relevant P-, H- and EUH-phrases (number and full text)

P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read label before use.
P501 - Dispose of the contents/containers in accordance with the current legislation on waste treatment

Abbreviations and acronyms:

ADR - European agreement concerning the international carriage of dangerous goods by road
IMDG - International maritime dangerous goods code
IATA - International Air Transport Association
ICAO - International Civil Aviation Organisation

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Notice to reader

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