

PlantiPower Shield – Safety Data Sheet (SDS)

Complies with Regulation (EC) No 1907/2006 (REACH) Version: 1.0 (EN) –
Date of issue: 16-02-2024

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

1.1 Product identification

● Product name: PlantiPower Shield ● Product code: 002 ● Product type: water-soluble, foliar fertilizer spray

1.2 Relevant identified uses and uses advised against

1.2.1 Relevant identified uses

● Main category of use: industrial, professional, consumer ● Use of the substance/mixture:
○ Professional use of the foliar spray for agricultural purposes ○ Professional use of the foliar spray in greenhouses ○ Professional use in agriculture, forestry and horticulture sectors

1.2.2 Uses discouraged

● Do not use for purposes other than those stated above.

1.3 Details of the supplier of the safety data sheet

1.3.1 Manufacturer/supplier address

PLANTIPOWER B.V.

Tolhuisweg 12

6071 RG Swalmen The Netherlands Tel.: +31 (0)649794270

1.3.2 Email address of the person responsible for this SDS

C.WEIJERS@PLANTIPOWER.COM

1.4 Emergency telephone number

● National Poison Information Center: +31 30 274 88 88 ● Netherlands:
National Poison Center: +31 30 274 88 88 (24 hours)

SECTION 2. Hazard Identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP)

● Classification: Not dangerous

2.1.2 Classification according to Directive 1999/45/EC (DPD)

● Classification: Not dangerous ● Human health hazards: None in particular

2.2 The labeling element

2.2.1 Labelling according to CLP (EC) No. 1272/2008

● Hazard pictograms: Not applicable ● Signal word: Not applicable ●
Hazardous ingredients: Not applicable ● Hazard statements: Not applicable

2.2.2 Precautions

- Prevention:
 - P101 – If medical advice is needed, have product container or label at hand.
 - P102 – Keep out of reach of children.
- Response: Not applicable

2.3 Other hazards

● PBT criteria (REACH Annex XIII): Not applicable ● vPvB criteria (vPvB, REACH Annex XIII): Not applicable ● Other hazards without classification: Not applicable

SECTION 3. Composition and information on ingredients

3.1 Substances and mixtures

No substance to be reported as hazardous ingredient.

●98.5% Emulsifier based on rapeseed oil (CAS 8002-13-9, EC 232-299-0)
●>1% Emulsifier based on castor oil (CAS 8001-79-4, EC 232-293-8) ●>0.5% Calcium lactate (CAS 814-80-2, EC 212-406-7) ●>0.5% Magnesium alginate (CAS 37251-44-8)

SECTION 4. First aid measures

4.1 Description of first aid measures

Inhalation: Ventilate the area. Immediately remove the person from the contaminated area and allow them to rest in a well-ventilated area. If you feel unwell, seek medical advice.

●Skin contact (pure product): Wash thoroughly with soap and running water.

●Eye contact (pure product): Rinse immediately and thoroughly with running water for at least 10 minutes.

Ingestion: Not hazardous. Activated charcoal can be administered in water or liquid paraffin (for medicinal purposes).

4.2 Most important symptoms and effects (acute and delayed)

●After inhalation: No specific data ●After skin contact: No specific data

●After eye contact: No specific data ●After swallowing: No specific data

4.3 Immediate medical attention and special treatment

Note to physician: If consulting a physician, have product container and label at hand. If decomposition products are inhaled in a fire, symptoms may be delayed. Medical observation for up to 48 hours may be necessary.

●Specific treatment: No specific treatment

SECTION 5. Firefighting measures

5.1 Fire extinguishing agents

Suitable extinguishing media: Suitable for the surrounding environment. Water spray, CO₂, foam, chemical powder, depending on the materials involved in the fire.

Unsuitable extinguishing media: Water jet. Use water jet only to cool the surfaces of fire-exposed containers.

5.2 Special hazards arising from the substance or mixture ● Hazards of the substance/mixture: No specific data ● Hazardous combustion products: No specific data

5.3 Advice for firefighters

Wear respiratory protection, a safety helmet, and a full protective suit. Water spray can be used to protect affected individuals. Use self-contained breathing apparatus, especially in confined or poorly ventilated areas and when using halogenated extinguishing agents (Halon 1211, fluobrene, Solkan 123, NAF, etc.). Keep containers cool with water spray.

SECTION 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel: Leave the area where the spill occurred. Do not touch or walk on the spilled product. Do not smoke.

6.1.2 For emergency responders: Wear gloves and protective clothing. Eliminate open flames and possible ignition sources. Do not smoke. Ensure adequate ventilation. Evacuate the danger area and consult an expert if necessary.

6.2 Environmental precautions

Contain with earth or sand. If product enters waterways/sewage or contaminates soil/vegetation, report this to the authorities. Dispose of in accordance with regulations.

6.3 Containment and cleaning methods

6.3.1 Inclusion

Contain spillage. Recover product for disposal or reuse, if possible. Absorb with inert material (e.g., sand, vermiculite). Prevent entry into drains.

6.3.2 Cleaning procedure(s)

Rinse the spilled area thoroughly with water. Clean equipment and clothing.

6.3.3 Other information

Dispose of according to the degree and type of contamination, as fertilizer or via a certified waste processor.

6.4 Reference to other sections See sections 8 and 13 for further information.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

- Wear suitable personal protective equipment (see section 8).
- Do not swallow.
- Avoid contact with eyes, skin and clothing.

General advice for personal hygiene:

Do not eat, drink, or smoke while working with this product. Wash hands and other exposed skin areas with mild soap and water before eating, drinking, or smoking and before leaving the work area. Contaminated work clothing should not be allowed to leave the work area.

7.2 Conditions for safe storage (incl. incompatibilities)

Store in original, tightly closed packaging. Do not store in open or unlabeled containers. Store containers upright and securely, avoiding drops or collisions. Store in a cool, dry place away from heat sources and direct sunlight.

7.3 Specific end use

Agriculture, forestry and horticulture sector.

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

No data available.

8.2 Exposure control measures

8.2.1 Exposure control

Use in accordance with good agricultural practices. Provide adequate ventilation to reduce exposure to airborne contaminants.

8.2.2 Personal protective equipment / health measures

Wash hands, forearms, and face thoroughly after handling, before eating, smoking, using the toilet, and at the end of the workday. Wash contaminated clothing before reuse. An eyewash station or water should be available for cleaning eyes and skin.

- Eye/face protection: Not required under normal use
- Skin and body protection: Not required under normal use
- Hand protection: Not required under normal use
- Respiratory protection: Not required under normal use
- Thermal hazards: None to report

8.2.3 Environmental protection measures

Work according to good practices to prevent environmental pollution.

SHIELD

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of Matter	Liquid	Auto-ignition temperature	Not determined
Color	Yellow	Decomposition temperature	Not determined
Scent	Characteristic, light scent		
Odor Threshold	Not Determined	Viscosity	Not determined
pH	Not determined	Explosive properties	Not explosive
Melting/freezing point	0°C	Oxidizing properties	Not determined
Initial boiling point/boiling range	100°C		
Flash point	Not relevant		
Evaporation rate	Not determined		
Flammability (solid/gas)	Not relevant		
Upper/lower explosion/flammability limit	Not relevant		
Vapor pressure	Not determined		
Vapor density	Not determined		
Relative density	Not determined		
Solubility in water	100% soluble		
Partition coefficient n-octanol/water	Not determined		

SECTION 10. Stability and reactivity

10.1 Reactivity

The product is stable under normal use and storage conditions.

10.2 Chemical stability

The product is stable under normal use and storage conditions.

10.3 Possibility of hazardous reactions

There are no dangerous reactions.

10.4 Conditions to avoid

Avoid contamination with other products.

10.5 Incompatible materials

May not form flammable gases on contact with elemental metals, nitrites, inorganic sulphides, strong reducing agents.

10.6 Hazardous decomposition products

Does not decompose when used as intended.

SECTION 11. Toxicological information

11.1 Information on toxicological effects

●Oral ATE (LD50): 0.0 mg/kg ●Dermal ATE (LD50): 0.0 mg/kg ●Inhalation ATE (LC50): 0.0 mg/L/4h ●Acute toxicity: Not applicable
●Corrosion/irritation: Not applicable ●Serious eye damage/irritation: Slightly irritating ●Respiratory/skin sensitization: Slightly irritating
●Germinal mutagenicity: Not applicable ●Carcinogenicity: Not applicable
●Reproductive toxicity: Not applicable ●STOT (single exposure): Not applicable ●STOT (repeated exposure): Not applicable

SECTION 12. Ecological information

12.1 Toxicity

Product presents no particular risk to the environment. Use in accordance with good practices to avoid environmental contamination.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulation potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Indication according to REACH Annex XIII (text as included in SDS).

12.6 Other adverse effects

No harmful effects.

SECTION 13. Disposal Instructions

13.1 Waste treatment methods

It is recommended to avoid or minimize waste generation. Do not dispose of significant quantities of residual waste via sewer. Disposal of this product, solutions, and by-products must always comply with legal environmental requirements and local regulations. Depending on the extent and nature of the contamination, the product may be used in agriculture or must be disposed of via an approved treatment center.

SECTION 14. Information relating to transport

Transport of dangerous goods according to ADR, RID, ADN, IMDG, ICAO/IATA:

14.1 UN number

No assigned UN number (road/rail/inland waterway/sea/air).

14.2 Proper Shipping Name (UN)

Not applicable.

14.3 Transport hazard class(es)

Not applicable.

14.4 Packaging group

No.

14.5 Environmental hazards

No.

14.6 Special precautions for the user

No data available.

14.7 Transport in bulk according to MARPOL/IBC Code

Not intended for bulk transport.

SECTION 15. Regulations

15.1 Specific safety, health and environmental regulations/legislation

15.1.1 EU regulations

Does not contain any substances subject to restrictions in REACH Annex XVII.

15.1.2 National regulations No additional information available.

15.2 Chemical safety assessment The chemical safety assessment for this mixture has not been carried out by the supplier (REACH Annex XIV).

SECTION 16. Other information

16.1 Changes

Version: 1.0 In accordance with REACH Annex II as amended by Regulation (EU) 2015/830.

16.2 Abbreviations and acronyms

(DNA, ADR, CAS, CLP, EC, EN, EUH, GHS, IATA, IMDG, MARPOL 73/78, PBT, REACH, RID, RRN, vPvB) as in the original SDS.

16.3 Relevant P-phrases and/or H-phrases

- P101 – If medical advice is needed: have product container/label at hand.
- P102 – Keep out of reach of children.

16.4 Training advice

Personnel handling this product must be informed of the recommended precautions and have access to this information.

16.5 Additional information

The information in this SDS has been prepared in good faith based on the best of our knowledge at the time of publication and does not imply any acceptance of legal liability by PLANTIPOWER B.V. The user remains responsible for complying with laws and regulations regarding product safety, health, hygiene, and occupational safety.

SHIELD