



Safety Data Sheet

Vigor™ PGPR Inoculant — Granule

Prepared in the format of GHS / ISO 11014 (16 sections)

Document control	
Product	Vigor™ PGPR Inoculant (granule form)
SDS No.	VIGOR-SDS-2026-01
Version / date	1.0 · July 2026

Regulatory status

This document provides global reference safety information for this product, prepared in the 16-section GHS format for a low-risk biological soil inoculant. Regulatory classification, labelling and emergency-contact requirements may vary by jurisdiction; users and importers are responsible for compliance with applicable local requirements.

1 Identification

Product name	Vigor™ PGPR Inoculant (granule)
Product type	Plant-growth-promoting rhizobacteria (PGPR) soil inoculant / biofertilizer (biological product).
Recommended use	Agricultural soil inoculant for leguminous crops. Use only as directed.
Restrictions on use	For professional agricultural use only.
Supplier	Huasheng Bio Limited · contact@huasheng.bio · huasheng.bio
Emergency telephone	Safety information: contact@huasheng.bio. Business enquiries: +86 132 6005 3339 (business hours; not a 24-hour emergency line). A local 24-hour emergency contact is supplied by the importer in each destination market.

2 Hazard Identification

Based on available data and in-house strain characterization, this product is not classified as hazardous under the GHS. Final classification must be confirmed under the framework in force in the country of import or use (GHS, OSHA HazCom, EU CLP).

- **Signal word / hazard statements:** none assigned (not classified).
- **Precautionary statements:** as with any biological/agricultural product — avoid breathing dust; wash hands after handling; wear gloves and a dust mask; keep out of reach of children; keep away from food, drink and animal feed.
- **Other hazards:** dust may mechanically irritate the eyes and respiratory tract; individuals with compromised immunity should avoid unnecessary exposure. No PBT/vPvB properties known.

3 Composition / Information on Ingredients

This product is a mixture of naturally occurring, non-GMO soil bacteria on a solid carrier.

Component	Concentration	Notes
<i>Bacillus subtilis</i> ; <i>Pseudomonas fluorescens</i> ; <i>Bacillus megaterium</i> ; <i>Azospirillum brasilense</i>	$\geq 2 \times 10^9$ CFU/g total	Non-GMO; not classified as hazardous.
Carrier (mineral-organic granule)	balance	Inert agricultural carrier; no hazardous substances above thresholds.

Note: The four-strain PGPR consortium is naturally isolated and non-GMO. There are no chemical components classified as hazardous at or above the applicable cut-off concentrations.

4 First-Aid Measures

- **Inhalation:** move to fresh air; seek advice if irritation persists.
- **Skin:** wash with soap and water.

- **Eyes:** rinse cautiously with water for several minutes; remove contact lenses if easy; seek attention if irritation persists.
- **Ingestion:** rinse mouth; do not induce vomiting; seek advice if unwell.

5 Fire-Fighting Measures

- **Extinguishing media:** water spray, foam, dry chemical or CO₂, appropriate to the surrounding fire. The product is not flammable under GHS criteria.
- **Specific hazards / protection:** the organic carrier is combustible and will burn if involved in a fire; combustion may produce carbon oxides. Wear self-contained breathing apparatus in an enclosed fire.

6 Accidental Release Measures

- **Personal precautions:** avoid generating and breathing dust; wear gloves, eye protection and a dust mask.
- **Environmental / clean-up:** prevent large quantities entering drains; sweep or vacuum into a labelled container for use or disposal (dampen to limit dust). The organisms are naturally soil-occurring and biodegradable.

7 Handling & Storage

- **Handling:** use in a well-ventilated area; minimise dust; wear gloves and a dust mask; do not eat, drink or smoke while handling; wash hands afterwards.
- **Storage:** store cool, dry and out of direct sunlight; keep containers closed; do not store adjacent to pesticides, fuels, strong oxidizers or strong alkalis. Do not freeze liquid forms.
- **Shelf life:** use before the date on the pack; use opened packs promptly.

8 Exposure Controls / Personal Protection

- **Occupational exposure limits:** none established for the microbial components; apply a general nuisance-dust approach where dust is generated.
- **PPE:** general/local ventilation; dust mask (FFP2 / N95) where dust is likely; impervious gloves; safety glasses or goggles.

9 Physical & Chemical Properties

Property	Value
Appearance / form	Granule
Odour	Slight, earthy
pH	6.5 – 7.5 (10% aqueous suspension)
Solubility in water	Disperses; carrier not fully soluble
Flammability	Not flammable
Explosive / oxidizing properties	None
Bulk density	Not determined

10 Stability & Reactivity

- **Stability:** stable under recommended storage conditions.
- **Conditions / materials to avoid:** prolonged high temperature, direct sunlight, high humidity, freezing of moist material; copper-based fungicides, strong oxidizers, strong alkalis (pH > 9), and chlorinated water (> 2 ppm) reduce microbial viability.
- **Hazardous decomposition products:** none under normal conditions; carbon oxides on combustion.

11 Toxicological Information

- **Acute toxicity:** no acute toxicity expected; the components are non-GMO soil bacteria and are not known human pathogens under normal agricultural use.
- **Irritation / sensitization:** dust may cause mechanical irritation. No skin or respiratory sensitisation data are available for the product.
- **CMR effects:** no data indicating carcinogenic, mutagenic or reproductive effects; components are not listed as carcinogens.

12 Ecological Information

- **Ecotoxicity:** the components are naturally occurring soil bacteria that are part of the native soil microbial community. No formal ecotoxicological studies (e.g. on non-target soil or aquatic organisms) have been conducted on the formulated product; environmental risk assessment remains the responsibility of the registrant in the country of use.
- **Degradability / bioaccumulation:** readily biodegradable carrier; no bioaccumulation potential.

13 Disposal Considerations

- **Product / packaging:** dispose in accordance with local, regional and national regulations; small quantities may be applied to soil per label directions; do not reuse empty containers for food or feed.

14 Transport Information

This product is not classified as a dangerous good for transport.

Framework	Status
UN number	Not applicable (not regulated)
ADR/RID · IMDG · IATA/ICAO	Not classified as dangerous goods
Special precautions	Keep dry; protect from extreme heat and direct sunlight

Note: Although not regulated as dangerous goods for transport, the import of live microbial products and their mineral / organic carrier may require a biosecurity, quarantine or phytosanitary import permit in the destination country. Confirm import requirements prior to shipment.

15 Regulatory Information

- **GMO status:** Non-GMO; naturally isolated strains.

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- **Registration:** China MARA microbial inoculant registration No. 16355 (2026).
 - **Import / destination-market status:** The product must be registered / permitted for import and use in the destination country before sale; classification, permitted claims and labelling are jurisdiction-specific and are the responsibility of the importer / local registrant.

16 Other Information

Issued by Huasheng Bio Limited. Version 1.0 · July 2026. Prepared in the 16-section GHS format for a low-risk biological product, based on in-house strain characterization and current knowledge. This document is intended as a global reference SDS; destination-market requirements should be reviewed by the local importer or regulatory representative before commercial distribution.

Contact

For safety information: contact@huasheng.bio