



MATERIAL SAFETY DATA SHEET

Revision Date: Jan 19, 2018

Version: 1801

1. IDENTIFICATION

Product Name: N-Force™ Soybean Inoculant

Chemical Description: Bacterial Inoculant

Trade Name: N-Force™

Distributed By: **Olympus Seed Treatment Formulators Inc.**
16545 Southpark Drive
Westfield, IN 46074
Tel: 317-867-2238

For Chemical Emergencies, Call: INFOTRAC 24 HOURS A DAY AT:
1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDOUS COMPONENTS

There are no components in this product at concentrations which require notification per OSHA Hazard Communications Standard 29 CFR 1910.1200. However, this Material Safety Data Sheet (MSDS) contains valuable information critical to the safe handling and proper use of this product. This MSDS should be maintained and available for employees and other users of this product.

Additive: Protein Complex and Bradyrhizobium japonicum

3. PHYSICAL CHARACTERISTICS

Appearance: Dark Brown Liquid

Odor: Mild

Boiling Point: > 212° F

Water Solubility: Complete

Specific Gravity: 1.003

Percent Volatile: None

pH: 6.0 – 7.0

Melting Point / Freezing Point: 28° F

Flash Point: N/A

Evaporation Rate: Not Determined

Flammability (Solid/Gas): Not Determined

Upper Flammability Limits: Not Determined

Lower Flammability Limits: Not Determined

Vapor Pressure: Not Determined

Vapor Density: Not Determined

Solubility in Other Solvents:	Not Determined
Partition Coefficient:	Not Determined
Auto-Ignition Temperature:	Not Determined
Decomposition Temperature:	Not Determined
Kinematic Viscosity:	Not Determined
Oxidizing Properties:	Not Determined
Unusual Hazards:	None known

4. HEALTH AND FIRST AID DATA

Threshold Limit Value: N/A

POTENTIAL EFFECTS OF OVEREXPOSURE: Slightly Alkaline

General Advice: Provide this MSDS sheet to medical personnel for treatment

Eyes: Mild eye irritant. Exposure may cause irritation and reddening of the eye.
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritations persist seek further medical advice

Skin: Mildly irritating to skin. Exposure to skin or mucous membranes may produce defatting, absorption of skin oils, smarting, redness, or contact dermatitis.
Wash off immediately with plenty of water. Take off contaminated clothing. Wash contaminated clothing before reuse.

Inhalation: Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician / poison center if individual's condition declines or if symptoms persist.

Ingestion: Do not induce vomiting. Rinse mouth. Seek further medical attention if you feel unwell.

5. REACTIVITY DATA AND FIRE-FIGHTING MEASURES

Stability: Stable under normal operating conditions.

Conditions to Avoid: Contact with strong acids

Incompatibility with Other Materials: Strong acids.

Suitable Extinguishing Media: Use extinguishing measures appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media: Not Determined

Specific Fire Fighting Hazards: Product is not flammable

Protective Fire Fighting Equipment: As in any fire, wear self-contained breathing apparatus pressure-demand, MISHA/NIOSH (approved or equivalent) and full protective gear

6. SPECIAL PROTECTION INFORMATION

Protective Equipment: Standard precautionary procedures when mixing with chemicals, including eye protection, are recommended. It is strongly recommended contact lenses not be worn when working with chemicals because they may increase the severity of an eye injury.

Respiratory Protection: None

Work/Hygienic Practices: Wash thoroughly after handling.

Storage Conditions: Keep container tightly closed in a dry, cool and well-ventilated location.

Handling and Storage Precautions: Freezes at approximately 28° F. Keep from freezing.

Incompatible Materials: Some seed-applied chemicals, including fungicides, may be harmful to the bacteria in this product. See product label on the use of fungicides or other chemical in conjunction with seed treatment.

7. SPILL CONTROL AND DISPOSAL PROCEDURES

Waste Disposal: Wash with large amounts of water.

Personal Precautions: Use personal protective equipment as required

Environment Precautions: See section 10 for additional Ecological information

Method for Containment: Prevent further leakage or spillage if safe to do so

Methods for Clean-Up: Keep in suitable, closed container for disposal.

8. TOXICOLOGY DATA

Acute Oral Toxicity: LD50 (rat) = >5 ml/kg
Acute Dermal Toxicity: LD50 (rabbit) = >200 ml/kg
Eye Toxicity: >5 ml/35 ml water
NOT A SKIN IRRITANT
NOT AN EYE IRRITANT

9. REGULATORY AND SHIPPING INFORMATION

DOT Shipping Name:	NONE
Hazard Class:	NONE
Label Requirements:	NONE
Packaging Group:	NONE
UN/NA Number:	NONE
Reportable Quantity:	NONE
DOT:	Not Registered
IATA:	Not Registered
IMDG:	Not Registered
International Inventories:	None
US Federal Regulations:	Not Determined
SARA 313:	Not Determined
US State Regulations:	Not Determined
US State Right to Know Regulations:	Not Determined

10. ECOLOGICAL INFORMATION

Ecotoxicity:	This product contains nonpathogenic, biodegradable Rhizobacterial strain(s) that occur naturally in soil
Component Information:	Mixture
Persistence / Degradability:	Not Determined
Bioaccumulation:	Not Determined
Mobility:	Not Determined
Other Adverse Effects:	Not Determined

11. DISCLAIMER

The information provided in the Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release. This information relates to only the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text. Olympus Seed Treatment Formulators Inc. extends no warranties, makes no representations and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purpose or for the consequences of its use.

END OF MATERIAL SAFETY DATA SHEET