

## 1. Product Name and Company Information

Product Name: **N-GEAR DUAL ACTION**

Supplier: **Meristem Crop Performance**  
**489 Village Park Drive**  
**Powell, OH 43065**

Customer Service: **618-249-6241**  
 24 Hour Emergency Number:  
**National Capital Poison Center: 800-222-1222**

## 2. Hazards Identification



### Emergency Overview

Color: Blue  
 Physical State: Liquid.  
 Odor: Mild odor

### OSHA Hazard Communication Standard

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### Danger!

#### Potential Health Effects

**Eye Contact:** May cause slight temporary eye irritation. Corneal injury is unlikely. Mist may cause eye irritation.

**Skin Contact:** Prolonged contact is essentially nonirritating to skin. Repeated contact may cause drying, flaking and softening of skin.

**Skin Absorption:** Prolonged skin contact is unlikely to result in absorption of harmful amounts.

**Inhalation:** At room temperature, exposure to vapor is minimal due to low volatility. Mist may cause irritation of upper respiratory tract (nose and throat).

**Ingestion:** Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

**Aspiration hazard:** Based on physical properties, not likely to be an aspiration hazard.

#### Precautionary Statements:

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove any contact lenses, call the 24 Hour Emergency Number.

Store in dry place. Store in a closed container.

## 3. Composition Information

Component	CAS #	Amount
NBPT Solution	94317-64-3	15-40%
Inactive ingredients: Propylene Glycol, 1-methyl-2-pyrrolidone and Copolymer Surfactant		60-85%

## 4. First Aid Measures

### Description of first aid measures

**General advice:** If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air; if not breathing, give artificial respiration, preferably mouth to mouth. Consult a physician.

**Skin Contact:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Remove contaminated clothing and shoes. If irritation persists, seek medical attention.

**Eye Contact:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**Ingestion:** Call a physician or poison control center immediately. Rinse mouth. Do NOT induce vomiting. If vomiting occurs keep head low so that stomach content doesn't get into the lungs. Do not use mouth to mouth.

### Indication of immediate medical attention and special treatment needed

In case of an accident or unwellness, seek medical attention immediately

## 5. Fire Fighting Measures

**Suitable extinguishing media:** Water fog or fine spray, Dry chemical fire extinguishers, Carbon dioxide fire extinguishers, Foam.

**Extinguishing Media to Avoid:** Do not use direct water stream. May spread fire.

**Specific Hazards arising from the substance or mixture:** Avoid inhaling the fumes

### Advice for firefighters

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

**Special Protective Equipment for Firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or a safe distance.

## 6. Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Spilled material may cause a slipping hazard. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Absorb with inert material and dispose of in accordance with applicable regulations (Disposal Section 13)

## 7. Handling and Storage

**General Handling:** Do not eat or drink while working. 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. See section 8 for protective equipment.

## Storage

Store away from direct sunlight or ultraviolet light. Keep container tightly closed when not in use. Store in a dry place. Protect from atmospheric moisture.

Store in the following material(s): Stainless steel. Aluminum. Plaste 3066 lined container. 316 stainless steel.

Opaque HDPE plastic container.

Shelf life: Use within 12.0 Months

## 8. Exposure Controls and Personal Protection

### Personal Protection

**Eye/Face Protection:** Use safety glasses (with side shields). If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

**Skin Protection:** Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

**Hand protection:** Wear appropriate protective gloves to prevent skin exposure. Consistent with general hygienic practice for any material, skin contact should be minimized.

**Respiratory Protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. In misty atmospheres, use an approved particulate respirator. The following should be effective types of airpurifying respirators: Organic vapor cartridge with a particulate prefilter.

**Ingestion:** Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

### Engineering Controls

**Ventilation:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

## 9. Physical and Chemical Properties

### Appearance

Physical State	Liquid.
Color	Blue
Odor	Mild odor
Odor Threshold	Not available
pH	7.0-10.0
Freezing Point	Not available
Flash Point	Closed Cup 102 °C
Evaporation Rate	Not Established
Vapor Pressure	Not Available
Specific Gravity	1.097-1.117@68°F
Solubility in water (by weight)	Partially Soluble
Autoignition Temperature	Not Available
Decomposition Temperature	Not Available
Viscosity	Not available
Liquid Density	Not Available

## 10. Stability and Reactivity

### Reactivity

No dangerous reaction known under conditions of normal use.

### Chemical stability

Stable under recommended storage conditions. See Storage, Section 7

**Possibility of hazardous reactions** Stable under normal conditions

**Conditions to Avoid:** Exposure to elevated temperatures can cause product to decompose. Avoid direct sunlight or ultraviolet sources. Stable under normal conditions.

**Incompatible Materials:** Avoid contact with: Strong acids. Strong bases. Strong oxidizers.

### Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials.

**Decomposition products can include and are not limited to:** Aldehydes. Alcohols. Ethers. Organic Acids.

## 11. Toxicological Information

**Routes of Exposure:** Eye Contact: May cause irritation. Skin contact: Can be absorbed, may cause irritation.

Inhalation: Unknown Ingestion: Unknown

**Exposure Symptoms:** Burning and skin damage. Eye irritation-stinging, tearing, redness, swelling, and blurred vision. Allergic skin reaction some redness and rash.

**Acute and Chronic effects:** Components may be absorbed into the body through the skin. Contact may irritate or burn eyes. Prolonged inhalation may be harmful. Prolonged exposures may cause chronic effects.

### Acute Toxicity

#### Oral

All animals survived being exposed to the test substance. The Acute Oral LD<sub>50</sub> is greater than 5000 mg/kg.

#### Dermal

All animals survived being exposed to the test substance. The Acute Dermal LD<sub>50</sub> is greater than 5000 mg/kg.

#### Eye damage/eye irritation

Minimally Irritating. Irritation cleared after 48 hours. Average irritation score 10.0.

#### Skin corrosion/irritation

N/A

### Carcinogenicity

N/A

## 12. Ecological Information

### Toxicity

Material is practically non-toxic to aquatic organisms on an acute basis.

### Ecological information of the mixture:

#### Aquatic Acute Toxicity

EC50 Algae: N/A

LC50 Crustacea: N/A

LC50 Fish: N/A

#### Persistence and Degradability

Material is readily biodegradable.

#### Bioaccumulative potential

**Ecological information of the mixture:**

Bioaccumulation: No data available

#### Mobility in Soil

**Ecological information of the substance:**

Mobility in Soil: N/A

**Other adverse effects:**

None

Use according to criteria of good industrial practice, avoiding product dispersion in the environment.

**13. Disposal Considerations**

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. If possible recover the product, otherwise dispose of in authorized landfill. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL.

**14. Transport Information**

**DOT Non-Bulk**

Not Regulated

**DOT Bulk**

Not Regulated

**15. Regulatory Information**

**OSHA Hazard Communication Standard**

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**SARA Hazardous Categories**

Immediate (Acute) Health Hazard	No
Delayed (Chronic) Health Hazard	No
Fire Hazard	No
Reactive Hazard	No
Sudden Release of Pressure Hazard	No

**CERCLA Hazardous Substances List (40 CFR 302.4)** Not Listed

**Clean Air Act, SARA 312** No Hazardous Air Pollutants (HAPs)

**SARA 311 Hazardous Substances** Yes

**SARA 302 Extremely Hazardous Substances** No

**US. Toxic Substances Control Act**

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

**16. Other Information**

Hazard Rating System

NFPA	Health	Fire	Reactivity
	0	1	0

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