



## NUFARM AGRICULTURE INC.

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**SUPPLIED BY:**

Nufarm Agriculture Inc.  
5507 1<sup>st</sup> Street, SE  
Calgary, AB T2H 1H9

Phone Number: (403)-253-8471

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**MANUFACTURED BY:**

Norac Concepts Inc.  
PO Box 31097  
Guelph, ON N1H 8K1

Phone Number: (519) 821-3633

Fax Number: (519) 821-2083

**PRODUCT:****Nufarm Enhance****PCP NUMBER:**

29952

**DATE PREPARED:**

February 24, 2011

**PREPARER:**

Nufarm Agriculture Inc.; Regulatory Affairs & Research Department

**CHEMICAL FAMILY/USE:**

Spray Adjuvant

**FORMULA:**

NA

**CHEMICAL SYNONYMS:**

triglyceride ethoxylate

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	Wt. %	CAS NO.
Non hazardous ingredients	100	Mixture

### 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** May cause irritation to the eyes, skin and respiratory system.

**EFFECTS OF ACUTE EXPOSURE:**

**INGESTION:** May cause gastrointestinal tract irritation and irritation to the throat.

**SKIN CONTACT:** May cause mild to moderate skin irritation.

**INHALATION:** Mists and vapours may cause irritation to the respiratory tract.

**EYE CONTACT:** May cause mild eye irritation.

**MEDICAL CONDITIONS AGGRAVATED:** None known.

**SUBCHRONIC (TARGET ORGAN) EFFECTS:** None known.

**CHRONIC EFFECTS/CARCINOGENICITY:** The ingredients in this product are not classified as carcinogenic by the ACGIH, IARC, OSHA and the NTP.

**REPRODUCTIVE TOXICITY:** No information is available and no adverse reproductive effects are anticipated.

**DEVELOPMENTAL TOXICITY:** No information is available and no adverse teratogenic effects are anticipated.

**GENOTOXICITY:** No information is available and no adverse mutagenic effects are anticipated.

**PRINCIPLE ROUTES OF EXPOSURE:** Eye contact. Skin absorption. Inhalation. Oral.

**TOXICOLOGICALLY SYNERGISTIC MATERIALS:** None known.

**OTHER:** None known.



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### 4. FIRST AID MEASURES

**IF SWALLOWED:** Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

### 5. FIRE FIGHTING MEASURES

**FLASH POINT:** .....>93°C (PM closed cup).

**CONDITIONS OF FLAMMABILITY:** .....NA.

**FLAMMABLE LIMITS IN AIR - Upper (%):** .....NAp.

**FLAMMABLE LIMITS IN AIR - Lower (%):** .....NAp.

**AUTOIGNITION TEMPERATURE:** .....NA.

**SENSITIVITY TO MECHANICAL IMPACT (Y/N):** .....NA.

**SENSITIVITY TO STATIC DISCHARGE:** .....NA.

**EXTINGUISHING MEDIA:** Water fog, carbon dioxide, dry chemical.

**SPECIAL FIREFIGHTING PROCEDURES:** Firefighters should wear self-contained breathing apparatus and full protective clothing when fighting chemical fires. Minimize and contain water runoff.

### 6. ACCIDENTAL RELEASE MEASURES

**ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Wear personal protective equipment. For release to land, stop any further release and spread of contamination and absorb spilled material with a suitable absorbent. Wash hard surfaces with detergent and water, then absorb with suitable absorbent. For release to water, stop any further release and utilize damming and/or water diversion to minimize the spread of contamination. Collect the spilled material, any contaminated soil, water and absorbent, then place in a waste container for proper disposal. Notify applicable government authority if release is reportable or could adversely affect the environment.

### 7. HANDLING AND STORAGE

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Use only with adequate ventilation and avoid contact with eyes, skin and clothing. Wear appropriate personal protective equipment. Wash thoroughly after use. If clothing becomes contaminated, wash thoroughly before re-use. Store in a cool, dry well-ventilated area. Keep away from heat, sparks and flame. Keep containers closed. Keep out of reach of children and pets. Store between 5°C and 40°C.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**EXPOSURE LIMITS:**



## NUFARM AGRICULTURE INC.

Hazardous Ingredients	TWA*	ACGIH TLV®	STEL	Units
NA.	N/E	N/E	N/E	NAp

\*8-hour TWA unless otherwise noted.

**ENGINEERING CONTROLS:** Provide local exhaust or ventilation.

**RESPIRATORY PROTECTION EQUIPMENT:** If misting conditions exist, use NIOSH/MSHA-approved respirator for organic vapours.

**PROTECTIVE GLOVES:** Chemical-resistant gloves and protective clothing should be impervious under conditions of use.

**EYE AND FACE PROTECTION:** Chemical safety goggles when there is potential for eye contact.

**OTHER PROTECTIVE EQUIPMENT:** None required.

**VENTILATION:** Use only in well ventilated area.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Note:** Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

<b>BOILING POINT:</b> .....	N/E.
<b>VAPOR PRESSURE:</b> .....	N/E.
<b>VAPOR DENSITY (air = 1):</b> .....	N/E.
<b>FREEZING POINT:</b> .....	N/E.
<b>MELTING POINT:</b> .....	N/E.
<b>PHYSICAL STATE:</b> .....	Liquid.
<b>ODOUR:</b> .....	Fatty acid odour.
<b>COLOUR:</b> .....	Clear yellow liquid.
<b>ODOR THRESHOLD (ppm):</b> .....	N/E.
<b>EVAPORATION RATE (butyl acetate = 1):</b> .....	N/E.
<b>SPECIFIC GRAVITY (water = 1):</b> .....	0.97
<b>DENSITY @ 25°C:</b> .....	N/E.
<b>pH:</b> .....	6 to 7
<b>SOLUBILITY IN WATER (20°C):</b> .....	Product is emulsifiable in water.
<b>COEFFICIENT OF WATER/OIL DISTRIBUTION:</b> .....	N/E.

### 10. STABILITY AND REACTIVITY

**STABILITY:** Stable.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS:** Thermal decomposition may produce carbon oxides and possibly irritating gases.

**INCOMPATIBILITY (MATERIALS TO AVOID):** Strong oxidizing agents, such as Hydrogen peroxide, Bromine and Chromic acid..

**CONDITIONS TO AVOID:** Prolonged storage at temperatures above 40°C.

### 11. TOXICOLOGICAL INFORMATION

**ACUTE ORAL LD<sub>50</sub> (mg/kg):** .....

NA.

**ACUTE DERMAL LD<sub>50</sub> (mg/kg):** .....

NA.

**ACUTE INHALATION LC<sub>50</sub> (mg/l):** .....

NA.

**OTHER:** See Section 3.



## NUFARM AGRICULTURE INC.

### 12. ECOLOGICAL INFORMATION

#### ECOTOXICOLOGICAL INFORMATION:

Not determined.

Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds, or rivers.

**CHEMICAL FATE INFORMATION:** Not known.

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose of waste material at an approved (hazardous) waste treatment / disposal facility in accordance with applicable local, provincial and federal regulations. Do not dispose of waste with normal garbage or to sewer systems.

### 14. TRANSPORT INFORMATION

**CANADIAN TDG DESCRIPTION (Road & Rail):** Not regulated for transport by road/rail in Canada. Contact manufacturer for updates to transport information.

### 15. REGULATORY INFORMATION

**WHMIS HAZARD CLASS:** Exempt. (This product is regulated under the Pest Control Products Act - WHMIS exempt.)

#### HAZARD RATING SYSTEMS:

**HMIS:** N/E.

**National Fire Protection Association (NFPA®) Hazard Ratings:** N/E

### 16. OTHER INFORMATION

#### REVISIONS:

The following has been revised since the last issue of this MSDS: New.

#### ADDITIONAL INFORMATION:

Abbreviations used throughout the MSDS are:

- NA = Not available
- NAp = Not applicable
- N/E = None Established.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

Company references utilized in preparation of the MSDS.

\*\*\*END OF MSDS\*\*\*