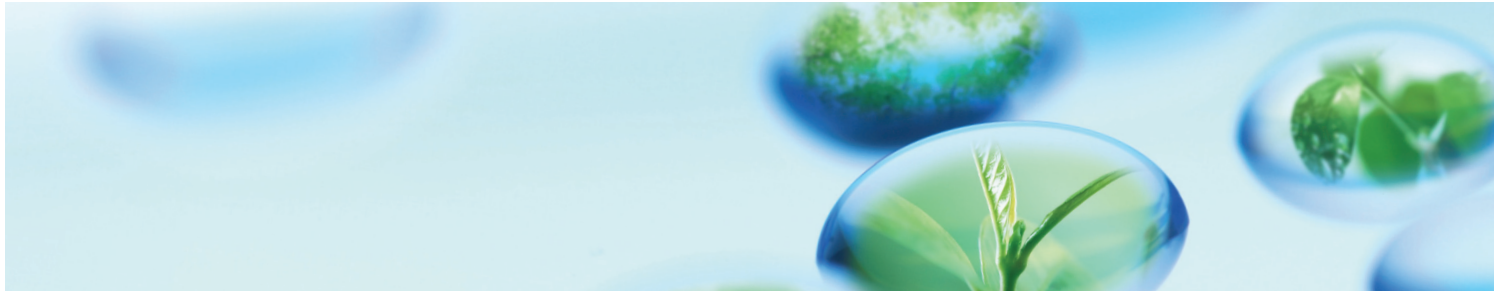


# ENHANCE™



## *New nonionic spray adjuvant technology from Norac Concepts Inc.*

### What is ENHANCE?

ENHANCE is a completely new brand of nonionic adjuvant, the first of its kind in Canada. This novel technology is the first adjuvant to meet and exceed new government standards. It is designed to ensure top performance in the field. ENHANCE is based on 'Ethoxylated Triglyceride' technology derived from soybean oil which enables ENHANCE to be used at rates significantly lower than Methylated Seed Oils (MSO's), Crop Oil Concentrates (COC's), or Petroleum based surfactants. ENHANCE is based on compliance with the Canadian Environmental Protection Agency (CEPA), pertaining to the removal of the nonyl phenols or nonyl phenol ethoxylates, or a reduction of these to a level of less than 1% w/w from Canadian pesticides.

This unique class of chemistry enables ENHANCE to provide excellent crop safety. ENHANCE incorporates several ingredients that assist in spreading, wetting and penetrating the leaf surface which provides for excellent field performance. ENHANCE can be used at rates similar to currently registered nonionic 90% nonylphenoxy polyethoxy ethanol (NPE's) based surfactants. ENHANCE contains no NPE's and has a very good toxicological profile.

### How does ENHANCE work?

Unlike any other registered agricultural surfactant, ENHANCE is multifunctional in how it works.

- ENHANCE works by several modes of action.
- ENHANCE reduces the surface tension of water droplets causing them to flatten or spread on the leaf surface. This allows more surface area for the chemical to come in contact with the leaf.
- ENHANCE wets the surface area allowing the crop protection product to spread across the leaf surface.
- ENHANCE also reduces the contact angle of the spray solution allowing for the droplets to become flatter, thereby improving the spreading and penetrative properties of the spray solution.
- ENHANCE's very unique chemistry enables it to also act as a penetrator ensuring uptake of crop protection products.

These multifaceted features allow ENHANCE more spreading, wetting and penetrative properties to ensure the effectiveness of many crop protection products on a wide range of crops.

### Key Features & Benefits to Using ENHANCE

- ENHANCE will provide the improved performance of an oil based surfactant, with the crop safety of a nonionic. ENHANCE is nonionic, so it has no ionizable polar end groups. ENHANCE is both hydrophilic (water loving) and lipophilic (oil loving) in nature.
- ENHANCE provides excellent crop safety and tolerance, allowing it to be used on a wide range of crops and with a wide range of products with no adverse effects.
- ENHANCE contains no NPE's, petroleum distillates or paraffin based ingredients so it has an improved safety profile and the production of ENHANCE is not dependent upon petroleum based ingredients. ENHANCE meets or exceeds the requirements set out by the Canadian Environmental Protection Act.



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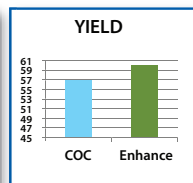
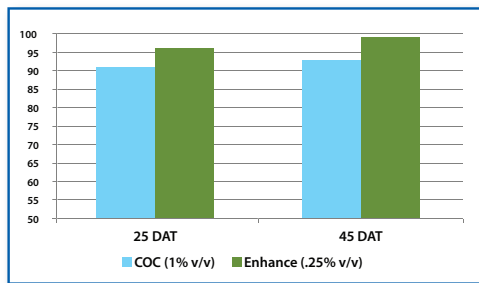


- Excellent performance at rates similar to the 90% nonionic surfactants in the market today, and at rates ¼ to ½ of those required by MSO's, COC's, or petroleum based surfactants.
- Since ENHANCE is used at lower rates, this means users have less handling and shipping and decreases the number of containers reducing overall container disposal costs.
- It also provides a more convenient product for the grower in having to handle less volume to get the same performance.
- ENHANCE has an excellent safety profile having low acute toxicity to users and the environment. It is readily biodegradable and is formulated from low risk ingredients meaning ENHANCE is very safe to the environment and users.
- Soybean Oil, Canola Oil and Sunflower Oil are used in the manufacture of the ethoxylated triglyceride component of ENHANCE. This supports Canadian farmers since the crop they grow may be used in the production of ENHANCE.
- Field studies and those from the laboratory have shown improved compatibility of tank-mixtures with many products. This benefits growers using ENHANCE since it reduces down-time that could occur with clogged nozzles and allows for good spray patterns. ENHANCE has been tested under various cold and hard water conditions.

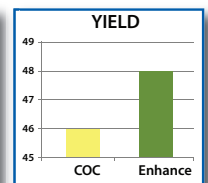
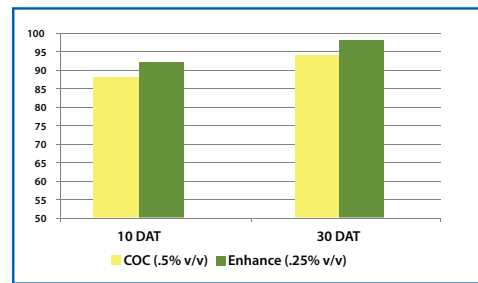
## Research

In our field trials the ENHANCE formulation showed excellent performance at significantly lower rates than COCs. This new adjuvant shows excellent crop tolerance, a key factor in choosing a spray adjuvant by farmers. (DAT = Days After treatment. Yield in bushels per acre. Surfactant + herbicides.)

### % Control Wild Oats in Wheat



### % Control Green Foxtail in Soybean



ENHANCE provides excellent economic returns for the user by providing improved efficacy.

## Technical Information

- Colour & Appearance: Gold or light yellow liquid
- Specific Gravity: 0.97 at 20°C
- Odour: Similar to a Fatty Acid, a slight sweet odour
- Storage: Store between 5°C & 40°C in a cool, dry, well-ventilated area
- Solubility (water): Dispersible
- pH: 6 to 7
- TDG classification: Not regulated
- Rates of Use: Refer to product label
- Packaging: Cases 2 x 10 Litre and 4 x 4 Litre
- Other sizes available upon request

