



X-CELERATE

THE ALL AROUND AGRICULTURAL ADDITIVE AND YOUR PARTNER AGAINST
HERBICIDE RESISTANCE.

NON-IONIC SURFACTANT

MULTI-FUNCTIONAL

THE AGRICULTURE ADDITIVE

ENVIRONMENTALLY
FRIENDLY

EXTENDED MIX RATIO

WHAT IS X-CELERATE?

X-CELERATE is a uniquely blended surfactant or wetting agent. Like all Royal products, **X-CELERATE** is designed and manufactured using superior quality materials. Proper design and care in manufacturing help with solubility, texture and effectiveness. In addition to the highly concentrated surfactant formula **X-CELERATE** utilizes a top tie non-foaming additive package. This non-foaming characteristic aids in high-pressure spray systems and refill or top off situations.



WHAT IS A SURFACTANT OR WETTING AGENT?

Wetting agents or surfactants can include a wide range of ingredients, designed to help break the surface tension of a liquid. Surface tension occurs on a molecular level, it is this occurrence that allows water to fall in drops. It is the surface tension that provides this shape. In various applications and environments...product effectiveness is improved by breaking or eliminating this surface tension.

WHY X-CELERATE WITH HERBICIDES?

There is a multi-billion dollar battle taking place in the growing fields of this country. The increasing tolerance to herbicides that is occurring in countless weed biotypes is becoming more costly to our farmers every season. **X-CELERATE's** ability to improve the effectiveness of the herbicide, means fewer applications are needed, chemical usage is reduced and less time and fuel are spent fighting various weed types.



UNIQUELY FORMULATED SURFACTANT

X-CELERATE is a uniquely formulated surfactant. **X-CELERATE** is a non-foaming wetting agent that drastically reduces surface tension of water and chemicals. **X-CELERATE** is a uniquely designed product for today's spraying systems. The non-foaming formulation reduces foam in the chemicals that **X-CELERATE** is combined with eliminating in most cases the need for an additional defoamer to be added. By breaking surface tension, the bead of water/chemical is forced to break down, sheet, and penetrate quickly. This allows for a more potent application with less runoff and evaporation resulting in a more efficient treatment that lowers the cost of application.

MULTI-FUNCTIONAL

There are many other areas which can benefit tremendously from its performance. **X-CELERATE** can be mixed with water and sprayed on dirt areas to reduce dust. It can be applied to asphalt directly during road destruction to prevent the asphalt from sticking to the teeth on the equipment. On golf courses, in addition to improving chemical/fertilizer applications, **X-CELERATE** can be applied directly to water puddles on the course. This will break the surface tension allowing the water to be absorbed quicker into the ground. **X-CELERATE** is a superior wetting agent that serves many functions, such as a penetrant, a dispersant, and a rinse aid.

THE AGRICULTURE ADDITIVE

X-CELERATE eliminates potential headaches for farmers. It allows products such as pesticides that are naturally water resistant to bond and stay mixed thoroughly. Another challenge is application of chemicals on waxy leaf plants. Chemicals alone will not penetrate these type plants. **X-CELERATE** allows the surface tension to break and the chemical applied to penetrate much more efficiently. Contact kill products, when mixed with **X-CELERATE**, have a stronger, longer lasting kill. Chemicals or irrigation water mixed with **X-CELERATE** are far more effective. **X-CELERATE** can even be applied with the use of crop dusters. **X-CELERATE** actually benefits spraying equipment by reducing salt and mineral deposits on spray nozzles; thus, helping to keep nozzles clean, clear, and spraying properly.

** **X-CELERATE** has proven to remarkably improve the effectiveness of herbicides in the battle against herbicide tolerant weeds. PIGWEED, MARE'S TAIL, WATER HEMP, KOCHIA WEED, GIANT RAGWEED, JOHNSON GRASS and other nutrient robbing weeds are at the source of a multi-billion dollar battle... **X-CELERATE** is your partner in this fight. Effective results at an impressive 1:800 ratio!*

ENVIRONMENTALLY FRIENDLY

X-CELERATE is a non-toxic biodegradable surfactant that is designed to be used on deciduous trees, edible crops, vegetation, and grasses. It contains a pH level in the range of 9-11.5. Due to **X-CELERATE** being non-corrosive, it is safe on the applicator and the application equipment. **X-CELERATE** is non-ionic.

This means that it is not affected by the chemical bond between two oppositely charged ions. This is vital when dealing with certain chemicals where if their positive or negative charge changes, a chemical becomes ineffective. **X-CELERATE'S** neutral charge ensures that chemicals and water will work in tandem to provide uniform application.

AGRICULTURAL

LANDSCAPING

CONSTRUCTION

EXCAVATION

QUARRIES / AGGREGATE

GOLF COURSES

METAL WORKING PLANTS

VINYARDS

Using Guidelines for X-CELERATE

When mixing with other products, X-CELERATE should be the last ingredient to be added to the final solution.

*Average recommendations for mix. (Some ratios may vary depending on product mixed) *

	100 Gallon Final Mixture	Ratio
Agriculture		
Fertilizing	1/2-2 pints	1:1600 to 1:400
Herbicides or Pesticides	1-3 pints	1:800 to 1:400
Golf Courses		
Injection Method	32 oz. per acre	
Hose	1-2 oz. per acre	
Spray Tank	1-2 oz. per 1,000 sq. ft.	
	1-2 pints per acre	
Nurseries		
Injection Method	1 oz. per 1,000 sq. ft.	
Spray Tank	1-2 pints	1:1600 to 1:400
Road Compaction/Dust Control	1-2 pints	1:800 to 1:400
Other Applications	1-3 pints	1:800 to 1:270

SPECIFICATIONS

SPECIFIC GRAVITY
pH (Typical)
Biodegradable
Color and Odor

(H2O=1):1.01
(conc.): 9 - 11.5
Yes
Clear, Green Liquid - No Odor

