

MIXING IN MANURE PITS

General Information

Product Information

Instinct II nitrogen stabilizer is a water-based microencapsulated formulation of nitrapyrin that may be used in the application of aqua ammonia, other liquid ammoniacal or urea nitrogen fertilizer compositions such as 28%, 30% or 32% UAN. Instinct II is not a substitute for fertilizer.

Incorporation may occur at any time up to 10 days after application and may be either by mechanical means or by moisture (rainfall or overhead irrigation). For moisture incorporation, a minimum of 0.5 inch of moisture is necessary. If 0.5 inch of moisture does not occur within the 10-day window, incorporate mechanically with light tillage.

Precautions and Restrictions

Instinct II is no more corrosive to standard liquid fertilizer equipment than liquid fertilizer alone or liquid manure alone.

Application Directions

Aerial Application Instinct II may be applied by aircraft in a liquid carrier such as liquid fertilizer or pesticides, or as impregnated on a granular fertilizer. See Spray Drift Management and Aerial Spray Drift Advisory Information to reduce likelihood of drift on other crops or non-target areas.

Ground Application Instinct II may be applied through ground application equipment that may be used in the application of aqua ammonia, other liquid ammoniacal or urea nitrogen fertilizer compositions such as 28%, 30% or 32% UAN

Chemigation Instinct II may be applied through properly equipped chemigation systems at a preplant or preemerge application timing, yet prior to crop emergence in corn. Instinct II may be applied through properly equipped chemigation systems preplant up to 1st detectable joint (Feekes 6 or Zadock 31 growth stage) in wheat. Unless otherwise indicated in specific use directions, the application rates for chemigation are the same as those specified for broadcast applications.

Directions for Chemigation Apply this product only through the following irrigation

systems: center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, hand move, micro sprinkler, or drip. Do not apply this product through any other type of irrigation system. Do not apply through sprinkler systems that deliver a low coefficient of uniformity such as certain water drive units.

Mixing Directions

Liquid Fertilizers

Instinct II may be mixed with liquid fertilizers, such as aqua ammonia, or other liquid ammoniacal or urea nitrogen fertilizers. Instinct II can be added to urea ammonium nitrate liquid fertilizer without a compatibility agent, although when mixing Instinct II with fertilizer plus herbicides or insecticides, a jar test may indicate that a compatibility agent is needed.

There are two methods which may be used to create a stable emulsion with Instinct II plus a compatibility agent in liquid fertilizer:

Premix Method: The compatibility agent and Instinct II may be mixed together in a separate container and then added to the liquid fertilizer. Continuously agitate as the mixture is added to the fertilizer.

Sequential Method: The compatibility agent may be added to the fertilizer and thoroughly agitated. While the agitation continues, the required amount of Instinct II may be added to the tank.

Most phosphate ester types of compatibility agents are suitable for use in these mixtures. Follow the label directions for the compatibility agent to determine rates and any use precautions.

Liquid Manure

Use Instinct II at the rate of 37 to 74 fl oz per acre. Use the 74 fl oz per acre rate for all fall applications with animal manure. To ensure uniform mixing, Instinct II may need to be premixed with a phosphate ester compatibility agent at a ratio of 1 part phosphate ester compatibility agent to 8 parts Instinct II before adding Instinct II to the liquid animal manure.

Granular Ammonium and Urea

Instinct II may be impregnated on urea and most dry ammoniacal fertilizers or fertilizer blends containing ammoniacal fertilizers. Uniform application in the field is necessary to insure optimum results.

Various equipment can be used to impregnate Instinct II onto dry fertilizers,

including vertical and horizontal mixers. Once impregnated, fertilizer may be applied with either spinner, airflow, or other suitable equipment. Apply Instinct II at a rate of 37 fl oz per acre. Use a minimum of 100 lb of dry fertilizer per acre. With lower rates of fertilizer (higher concentrations of Instinct II), the fertilizer may not readily absorb all of the liquid. For a suitable free-flowing mixture, add a drying agent, such as Hi-Sil 233, MP-79, RVM or LVM clay granules, or pelletized limestone to the mixture. Use 1 lb of drying agent per pint of Instinct II unless experience indicates a different amount works well. Do not apply more than 1 lb ai nitrapyrin per acre per year.

Immediately apply bulk fertilizers impregnated with Instinct II. Do not store the impregnated fertilizer. All individual state regulations, including those related to dry bulk blending registration, labeling and application, are the responsibility of the individual and/or company selling mixtures of Instinct II and fertilizer.

Do not mix seed with dry fertilizers impregnated with Instinct II.

Limitations, Restrictions, and Exceptions

Directions for Use

Refer to product label for Instinct II for Precautions and Restrictions, Mixing Directions, and specific use directions on corn.

Calculate the number of acres the manure pit could potentially treat to ensure you are blending the correct amount of Instinct II on a per-acre basis to incorporate into the manure pit. Remember, the slurry remaining in the bottom needs to be included in the calculation for potential acres.

The level of agitation needed for an even distribution of Instinct II is no more than needed to get the manure pit thoroughly mixed for a normal application. Once Instinct II has been added to the manure pit and agitated for application, it is recommended that applications begin as soon as possible. If applications are delayed for more than seven days, re-agitation is recommended to ensure uniformity of Instinct II throughout the manure pit.

Instinct II should be poured from outside of the building into the pump-outs only where allowed. Pour Instinct II into multiple pump-out locations around the building or lagoon to help aid in distributing Instinct II throughout the slurry. Instinct II should not be poured through the slats or flooring inside the building.

If no agitation is taking place, blending Instinct II into the pit/lagoon is not recommended. In this scenario a MeterMATE or InjectMATE pump should be used to inject Instinct II at the time of application.

Instinct II should be applied at a rate of 74 ounces per acre when applied before October 1, and/ or soil temperatures are above 60 degrees Fahrenheit. Instinct II should be applied at a rate of 56 ounces per acre when applied before November 1, and/ or soil temperatures are between 50 and 60 degrees Fahrenheit. Instinct II should be applied at a rate of 37 ounces per acre when applied after November 1, and/ or soil temperatures are below 50 degrees Fahrenheit for spring applications.

Method

[Soil incorporation](#)

Rates

[field rates 0](#)

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Restricted Entry Interval

24 hours

Exception: If the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Timings

[When applied before October 1, and/ or soil temperatures are above 60 degrees Fahrenheit.](#)