



# Instinct

Optinvte"technology

#### NITROGEN STABILISER

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#### Virgin Material Substances and Mixtures

Wigin Related substates and mitures: Wigin Related substates and mitures: (JAS: 54742-94-5); Sodium Chinele (JAS: 1929-82-4); Hydrocarbons, C10-C13, aromalics, -(1%, naphthalene (JAS: 54742-94-5); Sodium Chinele (JAS: 1927-14-5); Physiotherist and (JAS: 7644-38-2); 1; 2-& Bensionhauet-Sayl-ne (JAS: 528-35); Alapi polypoiscie (JAS: 5517-55); Physiotherist Saude (JAS: 11644-1); Oleis and (JAS: 174-01); Sodium Hydraude (JAS: 23243-55); Sorbian monstearce (JAS: 1334-16); Progriese 19/out (JAS: 57-55-6); Sorbia acid (JAS: 11644-1); Oleis and (JAS: 174-01); Sodium Hydraude (JAS: 23243-55)

#### Polymers other than nutrient polymers:

Polyures due (AS) MA); Styrene acrylic polymer (CAS: N/A); Alkoxylated phosphate ester (68130-47-2); Polyurea shell (CAS: N/A); Styrene acrylic polymer (CAS: N/A); Alkoxylated phosphate ester (68130-47-2); Polybutene (CAS: 9003-29-6); Polydimethylsiloxane (CAS: 63148-62-9); Polyoxyethylene monoslearate (9004-99-3). Silica + dimethylsiloxane (CAS: 67762-90-7): Xanthan oum (CAS: 11138-66-2)

Use to minimise the loss of nitrogen fertiliser compositions in the soil by inhibiting the nitrification process.

READ THE LABEL AND BOOKLET BEFORE USING PROTECT FROM FROST SHAKE BOTTLE WELL BEFORE USE

Information on salety and environment: Product classified under the Reputation EC n°1272/2008 and GHS. Please refer to the corresponding labelling on the packaping.

#### SAFFTY PRECAUTIONS

#### Operator protection:

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES, AND FACE PROTECTION (FACESHIELD) when handling the concentrate and contaminated surfaces.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves. WASH HANDS / EXPOSED SKIN before eating and drinking / smoking / after work. WHEN USING DO NOT EAT. DRINK OR SMOKE.

#### Environmental protection:

DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container

#### Storage and disposal

KEEP OUT OF BEACH OF CHILDREN KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS. KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place. THIS MATERIAL AND ITS CONTAINER must be disposed of in a safe way

Instructions for use: Read all directions carefully before applying. Failure to follow label instructions may RESULT IN CROP DAMAGE

#### Authorisation Holder: Corteva Agriscience UK Limited

Unit H4 Building H. Melbourn Science Park. Cambridge Road, Melbourn Cambridgeshire, SG8 6HB. United Kinadom For Technical Enquiries Call: +44 (0)800 6898899 or email: ukhotline@corteva.com 24 Hour Emergency Telephone N +353 818 663 627

National Poisons Information Service: 111



2410

## MANDATORY REQUIREMENT: THIS AREA MUST BE BLANK (for 2D Data Matrix, Lot Nr., Manufacturing Date ...)

## Instinct

Contains Decyl alcohol ethoxylated phosphated potassium salt Polyoxyethylene octyl ether phosphate potassium salt: 1.2-Benzisothiazol-3-one



UFI: AN2D-30TW-H00C-TUHU

# DANGER

May cause an allergic skin reaction • Causes serious eve damage . Toxic to aquatic life with long lasting effects . Avoid breathing mist / vapours / spray • Wear protective gloves / protective clothing / eve protection / face protection. • IF ON SKIN: Wash with plenty of water. • IF IN EYES: Binse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE / doctor. • Dispose of contents / container to a licensed hazardous-waste disposal contractor or collection site except for triple rinsed empty clean containers which can be disposed of as non-hazardous waste. . Contains isocvanates. May produce an allergic reaction. . To avoid risks to human health and the environment, comply with the instructions for use.

## **DIRECTIONS FOR USE**

## **GENERAL INFORMATION**

Instinct is a nitrification inhibitor for use with nitrogen based fertilisers. When used as directed Instinct will reduce the loss of nitrogen from the soil by leaching and de-nitrification. Instinct is not a substitute for fertilizer, , however, may allow decrease nitrogen rate.

Instinct can be applied to soils used to grow crops listed on this label at any stage of their growth but with consideration for specific use recommendations of the mixing fertilizer if applied as such.

The concentration of pure nitrapyrin in the product is 300 g/L (equivalent to 25.08 % w/w). The maximum recommended rate is 1.7 L/ha of the product for single application and in that case 42.64 % w/w of nitrapyrin would be added. Nitrapyrin rate/ha is constant and does not depend on nitrogen (ammonium) rate.

Сгор	Max individual dose	Max No. of applications	Interval between applications
Potato, Maize, Winter Wheat, Winter Barley, Winter Oats, Spring barley, Spring Wheat, Spring Oats, Winter Oil Seed Rape, Spring Oil Seed Rape, Rye, Triticale, Beetroots, Celeriacs/Tumip Celery, Horseradishes, Swedes/, Turnips, Sugar Beet, Broccoli, Head Cabbage, Cauliflower, Brussels Sprouts, Onion, Bulb And Onion, Green onion, Garlic, Shallots, Head Lettuce, Leaf Lettuce, Mustard Greens And Spinach, Escaroles/ Endive, Red Mustards, Purslane, Chard/Beet Leaves, Baby Leaf Crops, Chervil roots and leaves, Chives, Parsley, Sage, Rosemary, Thyme, Basil, Laure/Bay Leaves, Tarragon, Celery, Cardoon, Florence Fennel, Rhubarb, Sunflower, Grape, Grassland, Amenity grassland or land intended for these crops.	1.71/ha	2	125 days

Instinct may be applied before or after the application of ammonium nitrate or urea based fertilisers. Instinct may also be impregnated on granular fertilizers such as urea or ammonium nitrate. It may also be applied to land where manure or slurry has been, or is going to be, applied. Instinct may also be mixed with liquid fertilizer, slurry or digestate.

Instinct should be incorporated into the soil mechanically, or by rainfall or irrigation. For optimum performance 12mm of rain or irrigation is required within 10 days of application.

## RESTRICTIONS

Do not apply more than a total of 2 applications at 1.7 L/ha (total 3.4 L) of Instinct per hectare per year, with 125 days between applications. Reapplication after less than 18 weeks is not allowed.

#### RATE OF APPLICATION Liquid Fertilizers

Apply Instinct at a rate of 1.7 L/ha calculated to specific single rate of liquid nitrogen fertilizers expressed in L or kg/ha which will be applied to specific crop. Do not apply more than a total of 2 applications per year, with a 125-day interval between applications. Re-application after less than 18 weeks is not allowed.



Non-printed area on page 2 ONLY (on the back of 2D code area printed on the front page) Instinct, containing the nitrification inhibitor nitrapyrin, can be added to liquid fertilizers if at least 50 % of the total nitrogen content of the fertilizer consists of the nitrogen forms ammonium nitrogen or urea nitrogen. Minimum and maximum nitrapyrin content is 21.32 and 42.64 as a percentage by mass of the total nitrogen present as ammoniacal nitrogen and urea nitrogen.

Add the required amount of Instinct to the fertilizer, continuously agitating as the product is added to the fertilizer. This will ensure a uniform mixing of Instinct and fertilizer and ensure a stable emulsion of Instinct in liquid fertilizer is formed.

#### Water

Instinct should be applied via a conventional sprayer in 100-300 L of water at a rate of 1.7 L/ha. Add half the required volume of water to the spray tank and begin agitation, pour the required amount of Instinct into the partially filled spray tank. Continue agitation while topping up the tank and during spraying and transport operations.

#### Impregnation

Apply Instinct at a maximum rate of 1.7 L/ha calculated to specific single rate of granular fertilizer expressed in kg/ha which will be applied to specific crop.

Instinct may also be impregnated on granular fertilizers such as urea or ammonium nitrate. It may also be applied to land where manure or slurry has been, or is going to be, applied.

The addition of a dye could be required, if foreseen in country specific legislations.

#### Slurry, digestate from biogas production

Apply Instinct at a maximum rate of 1.7 L/ha calculated to the specific single rate of slurry or digestate expressed in m<sup>3</sup>/ha which will be applied to specific crop.

Pour safely the required amount of Instinct into slurry spreader.

#### Use in air-scrubbers.

Instinct may also be used to stabilize water pH in air scrubbers (trickle bed reactors) that clean air coming out from animal buildings. Rate and frequency of Instinct application in air scrubbers depends on the construction specifics of the device. Contact the air scrubber producer or Corteva Agriscience for further instructions. Water contaminated with Instinct and ammonium from the air should be disposed into slurry tank on farm and later on applied on the field.

#### COMPATIBILITY

Instinct is compatible with a range of crop protection products. For details on compatibilities contact your distributor or Corteva technical hotline on +44 (0) 800 689 8899 or ukhotline@corteva.com

#### Sprayer Clean-Out Instructions

To avoid injury to desirable plants, thoroughly clean equipment used to apply this product before re-use or using it to apply other chemicals.

- Immediately after spraying, completely drain the sprayer tank. Any contamination on the outside of the spraying equipment should be removed by washing with clean water.
- 2. First rinse:
  - Spray the inside of tank with clean water and fill the sprayer with at least one tenth of the spray tank volume.
  - Agitate and circulate for 15 minutes, and flush through booms and hoses.
  - Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles.
  - Drain tank completely.
- 3. Second rinse:
  - · Fill the tank with clean water.
  - Add a commercial tank cleaning agent as per manufacturer's recommendations while filling the tank with clean water.

- Agitate and then flush the boom and hoses with the cleaning solution. Top up with water making sure the tank is
  completely full. Allow to stand for 15 minutes with agitation. Flush the solution out of the spray tank through the
  spray booms. Remove end caps or open ball valves on the ends of each boom section, and flush solution through
  the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles.
- If possible, let the solution stand in the sprayer tank and booms for an extended period of time, overnight if possible.
- · After flushing the boom and hoses, drain tank completely.
- · Remove nozzles and screens and clean separately with a cleaning agent.
- 4. Third rinse:
  - Rinse the tank with clean water and flush through the boom and hoses using at least one tenth of the spray tank volume.
  - Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles.
  - · Drain tank completely.

Do not use chlorine bleach with ammonia containing products. Mixing ammonia with chlorine bleach will release a gas with a musty odour which may cause eye, nose, throat and lung irritation. Do not clean equipment in an enclosed area.

#### Storage recommendations:

Store in dry, normal warehouse conditions above freezing (0-25°C) conditions. For further recommendations, See Section 7 of material safety data sheet.

## TRADEMARK ACKNOWLEDGEMENTS

Instinct is a trademark of Corteva Agriscience and its affiliated companies. All other brand names are trademarks of other manufacturers for which proprietary rights may exist.

## CORTEVA AGRISCIENCE CONDITIONS OF SUPPLY

All goods supplied by us are of high grade and we believe them to be suitable but, as we cannot exercise control over their storage, handling, mixing or use, or the weather conditions before, during or after application which may affect the performance of the goods, all conditions and warranties, statutory or otherwise, as to the quality or fitness for any purpose of our goods are excluded. No responsibility will be accepted by us or re-sellers for any failure in performance, damage or injury whatsoever arising from their storage, handling, application or use. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in the use of such goods.

For further information please contact Corteva Agriscience.



To access the Safety Data Sheet for this product scan the QR code or use the weblink below:

https://www.corteva.co.uk//content/dam/dpagco/corteva/eu/ie/en/files/sds/INSTINCT-SDS.pdf

Alternatively contact your supplier

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Optinvte<sup>™</sup>technology

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Virgin Raterial substates and microse: Virgin Raterial substates and microse: (AS: S14724-94-5); Sodium Chindrei (AS: 129-82-4); Hydrocarbons, C10-C13, aromalics, <1% naphthalene (AS: S14724-94-5); Sodium Chindrei (AS: 17471-46); Phosphoric acid (AS: 7564-38-2); 1: 2-Benstolinaci-3(2)/and (AS: 352-353; Allir polyphorise) (AS: 85157-357; Physindinethylicanet (AS: 85148-22); Sorbitan monstearate (AS: 13341-46); Progriese glycol (AS: 57-55-6); Sorbic acid (AS: 110-44-1); Oteic acid (AS: 1724-97); Sodium Shrindrice (AS: 82343-55)

Polymers other than nutrient polymers: Polymers shell (AS: NA): Synene acrylic polymer (CAS: NA): Alkoxylated phosphate ester (66130-47-2); Polymutene (CAS: 2002-26): Folydineryloitoane (CAS: 65146-62-9): Polyoxyelliylene monostearate (9004-99-3), Silica + dimethylsilozane (CAS: 67762-90-7); Xanthan gum (CAS: 11138-66-2)

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provide an equal or higher standard of protection. WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves.

WASH HANDS / EXPOSED SKIN before eating and drinking / smoking / after work. WHEN USING DO NOT EAT. DRINK OR SMOKE

#### Environmental protection:

DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container

#### Storage and disposal:

KEEP OUT OF REACH OF CHILDREN KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place THIS MATERIAL AND ITS CONTAINER must be disposed of in a safe way

Instructions for use: RFAD ALL DIRECTIONS CAREFULLY BEFORE APPLYING. FAILURE TO FOLLOW LABEL INSTRUCTIONS MAY

#### Authorisation Holder: Corteva Apriscience UK Limited

Unit H4 Building H. Melbourn Science Park Cambridge Road, Melbourn Cambridgeshire, SG8 6HB. United Kinadom For Technical Enquiries Call: +44 (0)800 6898899 or email: ukhotline@corteva.com

24 Hour Emergency Telephone Number +353 818 663 627

National Poisons Information Service: 111



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#### Instinct

Contains Decvl alcohol, ethoxylated, phosphated, potassium salt: Polyoxyethylene octyl ether phosphate potassium salt: 1.2-Benzisothiazol-3-one

## LIFI: AN2D-30TW-HOOC-TUHU



DANGER

May cause an allergic skin reaction • Causes serious eye damage • Toxic to aquatic life with long lasting effects • Avoid breathing mist / vapours / spray • Wear protective gloves / protective clothing / eve protection / face protection. • IF ON SKIN: Wash with plenty of water. . IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE / doctor. • Dispose of contents / container to a licensed hazardous-waste disposal contractor or collection site except for triple rinsed empty clean containers which can be disposed of as non-hazardous waste. . Contains isocyanates. May produce an allergic reaction. . To avoid risks to human health and the environment, comply with the instructions for use.