Specimen Label

Recruit AG FlexPack termite bait must be used in conjunction with a service provided by a pest management professional licensed by the state to apply termite control products.

CORTEVA™
agriscience

Recruit® AG FlexPack®

TERMITE BAIT

A termite bait for use as an above-ground delivery system for elimination of subterranean termite colonies

Active Ingredient: noviflumuron	0.5%
Other Ingredients	99.5%
Total	100.0%

Do not tamper with bait material.

EPA Reg. No. 62719-652

100 grams each.

Keep Out of Reach of Children

Environmental Hazards

This product is highly toxic to aquatic invertebrates and possibly to fish. Do not allow the bait or its noviflumuron contents to be washed into a body of water containing aquatic life, such as a pond or stream. Do not use, handle or tamper with the bait container in a manner inconsistent with this label.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage: Store in original container in a dry storage area.

Pesticide Disposal: Product not disposed of by use according to label directions should be wrapped in paper and placed in a trash can.

Container Handling: Do not break open, cut into or remove protective wrapper from product until ready for use.

Product Information

Recruit® AG FlexPack® termite bait is an above-ground station and delivery system for the Sentricon® System and may be used to eliminate subterranean termite colonies. Recruit AG FlexPack contains an insect growth regulator (IGR) noviflumuron that prevents successful molting and development of subterranean termites. This disruption of development causes a decline of the termite colony to the point where the colony can no longer sustain itself and is eliminated.

Recruit AG FlexPack is used against structurally damaging species of subterranean termites, including *Coptotermes*, *Reticulitermes*, and *Heterotermes* spp. Target sites for use of this product include interior and exterior surfaces of buildings and crawl spaces, fences, utility poles, decking, landscape decorations, trees, or other features that could be damaged by termite feeding and foraging activity.

When used alone as a control system, stations with Recruit AG FlexPack must be inspected on at least a quarterly basis so that bait remains available. Recruit AG FlexPack may also be used as a spot treatment without a specified inspection interval if used in conjunction with the in-ground installation of the Sentricon® System.

If using the station hard cover, access to additional bait matrix at a specific target site may be provided by "stacking" stations with Recruit AG FlexPack one on top of another. Stations may be stacked during the initial installation or during a subsequent inspection if one-third to one-half of the bait matrix has been consumed and active feeding continues. Details of this process are provided in the Installation of Supplemental Stations with Recruit AG FlexPack section of this label. When feeding in the stations has stopped, the stations with Recruit AG FlexPack can be removed. Do not re-use Recruit AG FlexPack.

When Recruit AG FlexPack is used in conjunction with other termite control methods, including soil barrier treatments, an in-ground installation of Sentricon® must also be made. However, applications and treatments with other termite control methods in the areas through which termites must pass to reach an installation of Recruit AG FlexPack will prevent feeding and should be delayed until the entire baiting process is completed.

Food Handling Establishments

Recruit AG FlexPack may be installed in both food and non-food areas of all types of food handling establishments, i.e., food service, food processing, and food manufacturing establishments. This includes restaurants, grocery stores, bakeries, bottling plants, canneries, meat and poultry processing plants, and grain mills.

Inspection of Structures

Thorough inspection of the site to be protected is required to determine if subterranean termites are present and accessible. Treatment sites may include the interior and exterior surfaces of buildings and crawl spaces, fences, utility poles, decking, landscape decorations, trees, and other features that could be damaged by termite foraging and feeding activity.

Recruit AG FlexPack is effective only when applied to areas where termites are active and direct access to the station is possible. Installation of Recruit AG FlexPack does not attract termites. Areas suitable for placement of Recruit AG FlexPack include interior and exterior surfaces where:

- Live termites are visually observed in mud tubes or subsurface galleries;
- Feeding activity is detected using an acoustic emission detector or other detection technology; or
- Termite mud tubes, feeding damage, or emergence holes have recently appeared.

The surface area for installation of Recruit AG FlexPack should be large enough to allow the station to be firmly attached to the structure.

Installation of Recruit AG FlexPack

The flexible station with Recruit AG FlexPack consists of a flexible package containing the bait matrix and two cover options, a hard cover or flexible cover. The cover allows for inspection of the bait station after installation. The flexible cover allows the station to fit in and around corners, over ornate molding and into smaller areas than the hard cover. The hard cover provides additional protection of the flexible station when needed. The hard cover option also allows for stations to be easily stacked and contains breakout points in the mounting surfaces surrounding the access window which may be removed to avoid damaging mud tubes or to provide better contact with the mounting surface.

Termites may abandon a station that allows light, air movement, drying of the matrix, or invasion by ants or other predators. Proper attachment and sealing of the station housing to the structure is critical.

Bait and Surface Preparation

1. Inspect the site to which the station with Recruit AG FlexPack will be attached to determine if the surface is suitable for attachment and best cover option.
2. Once suitable areas for placement are identified, some surface preparation may be necessary before installation of Recruit AG FlexPack. In areas where there are no obvious subsurface mud tubes, feeding damage, or emergence holes, but termite feeding activity is detected, holes approximately 3/8-inch in diameter may be drilled to intercept feeding galleries within the area to be covered by the bait station. Be careful not to scrape off or disturb surface mud tubes during the drilling process
3. Moisten the bait matrix before securing the station in place. To moisten, open the flexible station and add sufficient water or a sugar-containing sports performance drink to thoroughly moisten the bait matrix. Knead the matrix contents until the wetting agent has been fully absorbed. Once the wetting agent is absorbed, expose the bait matrix by creating access points for entry of termites in the flexible station. Regardless of whether installing the flexible station directly on to a target site or into the hard cover placed over a target site, the opened side with access points must be exposed and in contact with the mounting surface where termite activity is present.

Installing the Flexible Station with the Flexible Cover

1. Break the mud tube or if necessary, drill 3/8" hole to intercept feeding galleries.
2. Affix the flexible station to the target site so that it sits over the opening in the mud tube or area of termite activity. Take special care not to crush or block the mud tube from entering the station. Suitable attachment materials include screws, tape, non-volatile adhesives, latex-based caulk, or other appropriate materials. (**Note:** Avoid use of adhesives or caulking materials with volatile solvents that can temporarily repel termites.)
3. Place the flexible cover over the flexible station so that the station is completely covered and affix to site. As when affixing the station, care should be taken to not crush or block the mud tube from entering the station when affixing the cover.

Installing the Flexible Station with the Hard Cover

1. Break the mud tube or if necessary, drill 3/8" hole to intercept feeding galleries.
2. Affix the flexible station to the target site so that it sits over the opening in the mud tube or area of termite activity. Take special care not to crush or block the mud tube from entering the station. Suitable attachment materials include screws, tape, non-volatile adhesives, latex-based caulk, or other appropriate materials. (**Note:** Avoid use of adhesives or caulking materials with volatile solvents that can temporarily repel termites.)
3. Align the back open side of the hard cover so that it fits over the installed flexible station. Ensure the entire flexible station is covered and secure the hard cover to the surface.
   a. Appropriate use of breakout points where surface mud tubes intersect the edges of the hard cover will allow secure attachment without crushing the mud tubes.
   b. Securely attach the hard cover to the structure. Suitable attachment materials include screws, tape, non-volatile adhesives, latex-based caulk, or other appropriate materials. (**Note:** Avoid use of adhesives or caulking materials with volatile solvents that can temporarily repel termites.) Apply adhesive caulking material to the surfaces of the hard cover which contact the mounting surface, but do so only after the final mounting position has been determined and, if necessary, breakout points have been removed. The method of attachment should not interfere with removing the cover to inspect the bait or add a supplementary station.
4. Alternatively, the hard cover may be installed first as in step 3 and the flexible station inserted after installation.
   a. When mounting the hard cover to surfaces containing surface mud tubes, a segment of each tube within the area to be covered should be removed as described in Step 1. This opening provides termites with direct access to the bait when inserted into the cover.

Inspection of Recruit AG FlexPack

To inspect Recruit AG FlexPack, expose the bait matrix. If termites are active in the station and the matrix appears to be at least 1/3 to 1/2 consumed, a new station should be installed or a supplemental station should be added. If the bait matrix is degraded, it should be removed and replaced with a new station.
If the entire contents of the bait station are consumed before replenishment, termites may forage elsewhere. When used alone as a control system, stations with Recruit AG FlexPack must be inspected on at least a quarterly basis. During inspection, check bait stations for secure attachment and proper seal to the mounting surface and reinforce if necessary.

Installation of Supplemental Stations with Recruit AG FlexPack

Stations installed with the Recruit AG FlexPack hard cover can accommodate the addition of a supplemental station by "stacking" a new station on top of an existing one. Stacking allows uninterrupted feeding without disturbing the termites in the original station. Moisture may be added to the supplemental station before installation as described in the Installation of Recruit AG FlexPack section of this label.

- Remove the cover from the existing station. After moistening as noted in Step 2 of Bait Preparation, expose the bait matrix so termites can readily access the bait in the stacked station.
- Affix the new station and cover into place on top of the existing station and hard cover.

Up to two stations (original plus 1) may be stacked at one location. If it is necessary to continue baiting after two stations have been stacked, remove the second station, leaving the original station in place and add the new station on top of it.

Inspect supplemental stations as described in the Inspection of Recruit AG FlexPack section of this label.

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, to the extent permitted by law, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

Warranty Disclaimer

Corteva Agriscience warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT PERMITTED BY LAW, Corteva Agriscience MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Lack of performance or other unintended consequences may result because of such factors as use of the product contrary to the label instructions abnormal conditions (such as excessive rainfall, drought, etc.), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Corteva Agriscience or the seller. To the extent permitted by law, all such risks shall be assumed by the user.

Limitation of Remedies

To the extent permitted by law, the exclusive remedy for losses or damages resulting from the use of this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Corteva Agriscience' election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used.

To the extent permitted by law, Corteva Agriscience shall not be liable for losses or damages resulting from handling or use of this product unless Corteva Agriscience is promptly notified of such loss or damage in writing. To the extent permitted by law, in no case shall Corteva Agriscience be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Corteva Agriscience or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or Limitation of Remedies in any manner.

Produced for
Corteva Agriscience LLC
9330 Zionsville Road
Indianapolis, IN 46268

Label Code: CD02-422-020
Replaced Label: D02-422-001

EPA accepted 06/23/15

Revisions:

1. Related to change of company name, address, and contact information for company 62719 accepted by EPA January 5, 2021, the following changes have been made:
   - Legal Entity Updates.
2. Updated trademarking.

SAFETY DATA SHEET

Recruit® AG FlexPack™

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	05/13/2022	800080005414	Date of first issue: 05/13/2022

Corteva Agriscience™ encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response. Product users and applicators should primarily refer to the product label attached to or accompanying the product container. This Safety Data Sheet adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. IDENTIFICATION

Product name : Recruit® AG FlexPack™

Manufacturer or supplier's details

COMPANY IDENTIFICATION

Manufacturer/importer : CORTEVA AGRISCIENCE LLC
9330 ZIONSVILLE RD
INDIANAPOLIS, IN, 46268-1053
UNITED STATES

Customer Information Number : 800-992-5994

E-mail address : customerinformation@corteva.com

Emergency telephone : INFOTRAC (CONTRACT 84224).

800-992-5994 or 317-337-6009

Recommended use of the chemical and restrictions on use

Recommended use : End use insecticide product

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Reproductive toxicity : Category 2

Effects on or via lactation

GHS label elements

Hazard pictograms :

Signal Word : Warning

Hazard Statements : H361 Suspected of damaging fertility or the unborn child.
H362 May cause harm to breast-fed children.

Precautionary Statements :

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust.
P263 Avoid contact during pregnancy/ while nursing.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Noviflumuron	121451-02-3	0.5
Cellulose	9004-34-6	>= 60 - < 70
Octadecanoic acid, calcium salt	1592-23-0	>= 1 - < 3
Balance	Not Assigned	> 20

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

If inhaled : Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice.

In case of skin contact : Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

In case of eye contact : Flush eyes with plenty of water; remove contact lenses after the first 1-2 minutes then continue flushing for several minutes. Only mechanical effects expected. If effects occur, consult a physician, preferably an ophthalmologist.

If swallowed	:	No emergency medical treatment necessary.
Most important symptoms and effects, both acute and delayed	:	None known.
Protection of first-aiders	:	If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Notes to physician	:	No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Water spray Alcohol-resistant foam
Unsuitable extinguishing media	:	Dry chemical
Specific hazards during fire fighting	:	Exposure to combustion products may be a hazard to health. Applying foam will release significant amounts of hydrogen gas that can be trapped under the foam blanket. Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon oxides
Specific extinguishing methods	:	Do not allow extinguishing medium to contact container contents. Most fire extinguishing media will cause hydrogen evolution, and once the fire is put out, may accumulate in poorly ventilated or confined areas and result in flash fire or explosion if ignited. Remove undamaged containers from fire area if it is safe to do so. Evacuate area. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Avoid dust formation. Avoid breathing dust. Use personal protective equipment. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.
Environmental precautions	:	If the product contaminates rivers and lakes or drains inform respective authorities. Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained. Prevent from entering into soil, ditches, sewers, underwater. See Section 12, Ecological Information.
Methods and materials for containment and cleaning up	:	Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in. Pick up and arrange disposal without creating dust. Recovered material should be stored in a vented container. The vent must prevent the ingress of water as further reaction with spilled materials can take place which could lead to overpressurization of the container. Keep in suitable, closed containers for disposal. Sweep up or vacuum up spillage and collect in suitable container for disposal. See Section 13, Disposal Considerations, for additional information.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	Avoid formation of respirable particles. Do not breathe vapors/dust. Do not smoke. Handle in accordance with good industrial hygiene and safety practice. Avoid exposure - obtain special instructions before use. Smoking, eating and drinking should be prohibited in the application area. Avoid inhalation of vapor or mist. Do not swallow. Avoid contact with skin and eyes. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Take care to prevent spills, waste and minimize release to the environment. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.
Conditions for safe storage	:	Store in a closed container. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Keep in properly labeled containers.
Store in accordance with the particular national regulations.

Materials to avoid : Strong oxidizing agents

Packaging material : Unsuitable material: None known.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Cellulose	9004-34-6	TWA	10 mg/m3	ACGIH
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Total dust)	15 mg/m3	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0
Octadecanoic acid, calcium salt	1592-23-0	TWA (Inhalable particulate matter)	10 mg/m3	ACGIH
		TWA (Respirable particulate matter)	3 mg/m3	ACGIH
Noviflumuron	121451-02-3	TWA	0.1 mg/m3	Dow IHG

Engineering measures : Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations.
Local exhaust ventilation may be necessary for some operations.

Personal protective equipment

Respiratory protection : Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator.

Hand protection

Remarks : Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Polyvinyl chloride

		("PVC" or "vinyl"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.
Eye protection	:	Use safety glasses (with side shields). If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.
Skin and body protection	:	Wear clean, body-covering clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Solid.
Color	:	Tan
Odor	:	Sweet
Odor Threshold	:	No data available
pH	:	6.36 (75.7 °F / 24.3 °C) Concentration: 1 %
Melting point/range	:	No data available.
Freezing point		Not applicable
Boiling point/boiling range	:	Not applicable
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	No data available
Upper explosion limit / Upper flammability limit	:	Not applicable
Lower explosion limit / Lower flammability limit	:	Not applicable
Vapor pressure	:	Not applicable
Relative vapor density	:	Not applicable
Bulk density	:	653.8 g/L (73.6 °F / 23.1 °C)
Solubility(ies) Water solubility	:	No data available

Autoignition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	Not applicable
Explosive properties	:	No
Oxidizing properties	:	No significant increase (>5C) in temperature.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.
Chemical stability	:	No decomposition if stored and applied as directed. Stable under normal conditions.
Possibility of hazardous reactions	:	Stable under recommended storage conditions. No hazards to be specially mentioned. None known.
Conditions to avoid	:	None known.
Incompatible materials	:	None.
Hazardous decomposition products	:	Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Components:

Noviflumuron:

Acute oral toxicity	:	LD50 (Rat, male and female): > 5,000 mg/kg
Acute inhalation toxicity	:	Remarks: No adverse effects are anticipated from single exposure to dust. Based on the available data, respiratory irritation was not observed. LC50 (Rat, male and female): > 5.24 mg/l Exposure time: 4 h Test atmosphere: dust/mist Symptoms: No deaths occurred at this concentration. Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	:	LD50 (Rabbit, male and female): > 5,000 mg/kg

Cellulose:

Acute oral toxicity	:	LD50 (Rat): > 3,160 mg/kg Assessment: The substance or mixture has no acute oral tox-

icity

Octadecanoic acid, calcium salt:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute oral toxicity

Respiratory or skin sensitization

Components:

Noviflumuron:

Remarks : Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

Germ cell mutagenicity

Components:

Noviflumuron:

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

Cellulose:

Germ cell mutagenicity - Assessment : The data presented are for the following material:, Methyl cellulose., In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

Octadecanoic acid, calcium salt:

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative.

Carcinogenicity

Components:

Noviflumuron:

Carcinogenicity - Assessment : Has caused cancer in laboratory animals., Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.

Cellulose:

Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Components:

Noviflumuron:

Reproductive toxicity - Assessment : Suspected human reproductive toxicant, Studies indicating a hazard to babies during the lactation period

In animal studies, has been shown to interfere with reproduction., In animal studies, has been shown to interfere with fertility.
Did not cause birth defects or any other fetal effects in laboratory animals.

Cellulose:

Reproductive toxicity - Assessment : In animal studies, cellulose has been shown to interfere with fertility and reproduction as a result of nutritional deficiencies associated with extremely high dietary concentrations of cellulose.
Did not cause birth defects or any other fetal effects in laboratory animals.

Octadecanoic acid, calcium salt:

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction.
No relevant data found.

STOT-single exposure

Components:

Noviflumuron:

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Cellulose:

Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Octadecanoic acid, calcium salt:

Assessment : Available data are inadequate to determine single exposure specific target organ toxicity.

Repeated dose toxicity

Components:

Noviflumuron:

Remarks : Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Cellulose:

Remarks : Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Octadecanoic acid, calcium salt:

Remarks : Repeated exposures to dusts of this material are not anticipated to result in systemic toxicity or permanent lung injury; however, excessive exposures may cause less severe respiratory effects.

Aspiration toxicity

Components:

Noviflumuron:

Based on physical properties, not likely to be an aspiration hazard.

Cellulose:

Based on physical properties, not likely to be an aspiration hazard.

Octadecanoic acid, calcium salt:

Based on available information, aspiration hazard could not be determined.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Noviflumuron:

Toxicity to fish : Remarks: Material is very highly toxic to aquatic organisms on an acute basis (LC50/EC50 <0.1 mg/L in the most sensitive species).

LC50 (Lepomis macrochirus (Bluegill sunfish)): > 2.0 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: OECD Test Guideline 203 or Equivalent

LC50 (Oncorhynchus mykiss (rainbow trout)): > 2.00 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: OECD Test Guideline 203 or Equivalent

Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0.0003 mg/l Exposure time: 48 h Test Type: flow-through test Method: OECD Test Guideline 202 or Equivalent
Toxicity to algae/aquatic plants	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): > 0.75 mg/l End point: Growth rate inhibition Exposure time: 72 h
M-Factor (Acute aquatic toxicity)	:	100
M-Factor (Chronic aquatic toxicity)	:	100
Toxicity to microorganisms	:	EC50 (activated sludge): > 1.9 mg/l Exposure time: 3 h Method: OECD 209 Test
Toxicity to soil dwelling organisms	:	LC50 (Eisenia fetida (earthworms)): > 10,000 mg/kg Exposure time: 14 d GLP: yes
Toxicity to terrestrial organisms	:	Remarks: Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg)., Material is slightly toxic to birds on a dietary basis (LC50 between 1001 and 5000 ppm). oral LD50 (Colinus virginianus (Bobwhite quail)): > 2,000 mg/kg Exposure time: 14 d GLP: yes dietary LC50 (Colinus virginianus (Bobwhite quail)): 4,100 mg/kg Exposure time: 10 d GLP: yes oral LD50 (Apis mellifera (bees)): > 100 micrograms/bee Exposure time: 48 h contact LD50 (Apis mellifera (bees)): > 100 micrograms/bee Exposure time: 48 h GLP: yes

Cellulose:

Toxicity to fish	:	LC50 (Fish): > 100 mg/l Exposure time: 96 h
Toxicity to algae/aquatic plants	:	EC50 (Algae): > 100 mg/l End point: Growth rate inhibition Exposure time: 96 h
Toxicity to microorganisms	:	LC50 (Bacteria): > 100 mg/l

Octadecanoic acid, calcium salt:

Toxicity to fish	:	Remarks: The LC50 value is above the water solubility. The EC50 value is above the water solubility. LC50 (Oryzias latipes (Japanese medaka)): estimated > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 or Equivalent
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): estimated > 100 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EyC50 (Pseudokirchneriella subcapitata (algae)): estimated > 100 mg/l End point: Cell yield inhibition Exposure time: 72 h Method: OECD Test Guideline 201 ErC50 (Pseudokirchneriella subcapitata (algae)): estimated > 100 mg/l End point: Growth rate Exposure time: 72 h Method: OECD Test Guideline 201

Persistence and degradability

Components:

Noviflumuron:

ThOD	:	1.03 kg/kg
Photodegradation	:	Rate constant: 8.95E-12 cm3/s Method: Estimated.

Cellulose:

Biodegradability	:	Remarks: Biodegradation rate may increase in soil and/or water with acclimation.
ThOD	:	1.18 kg/kg

Octadecanoic acid, calcium salt:

Biodegradability	:	Remarks: Material is expected to be readily biodegradable.
ThOD	:	2.74 kg/kg

Bioaccumulative potential

Components:

Noviflumuron:

Partition coefficient: n-octanol/water	:	log Pow: 4.94 Method: Estimated

Remarks: Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7).

Cellulose:

Partition coefficient: n-octanol/water : Remarks: No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

Octadecanoic acid, calcium salt:

Partition coefficient: n-octanol/water : Remarks: No data available for this product.

Balance:

Partition coefficient: n-octanol/water : Remarks: No relevant data found.

Mobility in soil

Components:

Noviflumuron:

Distribution among environmental compartments : Remarks: Expected to be relatively immobile in soil (Koc > 5000).

Cellulose:

Distribution among environmental compartments : Remarks: No data available.

Octadecanoic acid, calcium salt:

Distribution among environmental compartments : Remarks: No data available.

Balance:

Distribution among environmental compartments : Remarks: No relevant data found.

Other adverse effects

Components:

Noviflumuron:

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Cellulose:

Results of PBT and vPvB assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Octadecanoic acid, calcium salt:

Ozone-Depletion Potential : Regulation: (Update: 05/16/2011)

Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Balance:

Results of PBT and vPvB assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.
If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number	:	UN 3077
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Noviflumuron)
Class	:	9
Packing group	:	III
Labels	:	9

IATA-DGR

UN/ID No.	:	UN 3077
Proper shipping name	:	Environmentally hazardous substance, solid, n.o.s. (Noviflumuron)
Class	:	9
Packing group	:	III
Labels	:	Miscellaneous
Packing instruction (cargo aircraft)	:	956
Packing instruction (passenger aircraft)	:	956

IMDG-Code

UN number	:	UN 3077
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Noviflumuron)
Class	:	9
Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Marine pollutant	:	yes
Remarks	:	Stowage category A

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

Not regulated as a dangerous good

Further information

Marine Pollutants assigned UN number 3077 and 3082 in single or combination packaging containing a net quantity per single or inner packaging of 5L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code, IATA Special provision A197, and ADR/RID special provision 375.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards : Reproductive toxicity

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Pennsylvania Right To Know

Cellulose 9004-34-6

The ingredients of this product are reported in the following inventories:

TSCA : Product contains substance(s) not listed on TSCA inventory.

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

Federal Insecticide, Fungicide and Rodenticide Act
EPA Registration Number : 62719-652

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals.

SECTION 16. OTHER INFORMATION

Information Source and References
This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
Dow IHG	:	Dow Industrial Hygiene Guideline
OSHA P0	:	USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA	:	8-hour, time-weighted average
Dow IHG / TWA	:	Time Weighted Average (TWA):
OSHA P0 / TWA	:	8-hour time weighted average
OSHA Z-1 / TWA	:	8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumu-

lative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 05/13/2022

Product code: GF-3354

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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