



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

October 30, 2020

Nina S. Rao
Product Registration Manager
US Federal Registrations
BASF Corporation
26 Davis Drive,
Research Triangle Park, NC 27709

Subject: PRIA Label Amendment – Addition of Vangro canola
Product Name: Raptor Herbicide Technical
EPA Registration Number: 241-378
Application Date: November 10, 2017
Decision Number: 536551

Dear Ms. Rao:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable under FIFRA section 3(c)(5) with the following conditions:

1. BASF must submit and/or cite all data required for registration/reregistration/ registration review of this product when the Agency requires all registrants of similar products to submit such data.
2. This approval does not affect any conditions that were previously imposed on this registration. BASF will continue to be subjected to all existing conditions on your registration and any deadlines connected with them.
3. The use on Vangro canola will automatically **expire on October 30, 2025**, unless the Agency amends this condition otherwise.
4. BASF must develop and follow an Herbicide Resistance Management Plan (HRM) as described in Appendix A.
5. BASF must submit annual reports to the Agency by January 15th of each year beginning in 2022 as outlined in Appendix A Section D, “Reporting Component”, until the Agency amends this condition otherwise.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months

from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Aswathy Balan by phone at 703-347-0510, or via email at balan.aswathy@epa.gov.

Sincerely,



Jordan Page, Product Manager 24 (Acting)
Fungicide and Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

Enclosures:

Appendix A – Herbicide Resistance Management Plan

Approved Label

APPENDIX A

Herbicide Resistance Management Plan and Reporting Requirements for Imazamox Use on Vangro canola

BASF Corporation (BASF) must comply with the following:

A. Educational Component

1. Develop and implement an education program for users of this product that identifies appropriate best management practices (BMPs) to avoid and control weed resistance and convey to users the importance of following BMPs.

The following are examples of BMPs:

Crop selection and cultural practices

- Understand the biology of the weeds present.
- Use a diversified approach towards weed management focused on preventing weed-seed production and reducing the number of weed seeds in the soil seed-bank.
- Emphasize cultural practices that suppress weeds by using crop competitiveness.
- Plant into weed-free fields, keep fields as weed-free as possible, and note areas where weeds were a problem in prior seasons.
- Incorporate additional weed-control practices whenever possible, such as mechanical cultivation, biological management practices, crop rotation, and weed-free crop seeds, as part of an integrated weed-control program.
- Do not allow weed escapes to produce seeds, roots, or tubers.
- Manage weed seed at harvest and post-harvest to prevent a buildup of the weed seed-bank.
- Prevent field-to-field and within-field movement of weed seed or vegetative propagules.
- Thoroughly clean plant residues from equipment before leaving fields.
- Prevent an influx of weeds into the field by managing field borders.
- Fields should be scouted before application to ensure herbicide and application rates will be appropriate for the weed species and weed sizes present.
- Fields should be scouted after application to confirm herbicide effectiveness and to detect weed escapes.
- If resistance is suspected, treat weed escapes with a different mechanism-of-action herbicide or use non-chemical methods to remove weed escapes.

Herbicide selection

- Use a broad spectrum soil-applied herbicide with a mechanism of action that differs from this product as a foundation in a weed control program.

- A broad-spectrum weed-control program should consider all of the weeds present in the field. Weeds should be identified through scouting and field history.
 - Difficult-to-control weeds may require sequential applications of herbicides with alternative mechanisms of action.
 - Fields with difficult-to-control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action.
 - Apply full rates of this herbicide for the most difficult to control weeds in the field. Applications should be made when weeds are at the correct size to minimize weed escapes.
 - Do not use more than two applications of this herbicide or any herbicide with the same mechanism of action within a single growing season unless mixed with another mechanism of action herbicide with overlapping spectrum for the difficult to control weeds.
 - Report any incidence of non-performance of this product against a particular weed species to BASF or its representatives.
2. Include at least one written communication to users of this product each year regarding herbicide-resistance management.
 3. Provide a copy of the education materials to EPA upon request.

B. Field Detection and Remediation Components

1. If any user informs BASF or its representatives of a lack of herbicide efficacy in a weed species listed on product labeling, then BASF or its representatives must make an effort to evaluate the field for suspected resistance to this product by applying the criteria below, as set forth in Norsworthy, et al., “Reducing the Risks of Herbicide Resistance: Best Management Practices and Recommendations” Weed Science 2012 Special Issue: 31-62;

Criteria for Determining Suspected Herbicide Resistance

- 1) *Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; and/or*
 - 2) *A spreading patch of non-controlled plants of a particular weed species; and/or*
 - 3) *Surviving plants mixed with controlled individuals of the same species.*
2. If one or more of the above criteria are met, then:
 - a. Provide the user with specific information and recommendations to control and contain suspect weeds, including re-treatment and/or other non-chemical controls, as appropriate. If requested by the user, BASF will become actively involved in implementation of weed control measures.
 - b. Request, at the time of the initial determination that one or more of the above criteria are met and prior to any application of alternative control practices, that the user provide

access to the relevant field(s) to collect specimens of the suspect weeds (potted specimens or seeds) for potential further evaluation in the greenhouse or laboratory, and to collect such specimens if possible (or, alternatively, request that the user provide such specimens to BASF at BASF's expense).

- c. Conduct greenhouse or laboratory studies to confirm resistance as soon as practicable following sample collection, if technically feasible.
 - d. To the extent possible, contact or visit the user in an appropriate timeframe after implementation of the additional weed control measures in order to evaluate success of such measures.
 - e. If the additional weed control measures were not successful in controlling the suspected resistant weeds, then:
 - i. Work with the user to determine the reason(s) why the additional control measures were unsuccessful;
 - ii. Offer to provide technical expertise on how to control and contain the suspected-resistant weeds, including re-treatment and/or other non-chemical controls, as appropriate; and
 - iii. Report annually the inability to control the suspected-resistant weeds to relevant stakeholders.
3. Keep records of all field evaluations for suspected resistance for a minimum of three years and provide a copy to EPA upon request.

C. Evaluation Component

1. Conduct annual surveys to determine whether users have encountered any perceived issues with non-performance or lack of efficacy of this product, and if so, how users have responded. This survey must be based on a statistically representative sample of users. The sample size and geographical resolution should be adequate to allow analysis of responses within regions, between regions, and across the United States.
2. Analyze the survey results each year, and modify the following for the upcoming growing season, as appropriate:
 - a. Efforts aimed at achieving compliance with BMPs;
 - b. Responses to incidents of suspected weed resistance and confirmed weed resistance;
 - c. The education program. At the initiative of either EPA or BASF, both parties shall consult about possible modifications to the education program.

D. Reporting Component

1. Submit reports to EPA by January 15th of each year, beginning in 2022, with information on:
 - a. Annual sales of this product by state;
 - b. Annual sales of canola seed containing imazamox-resistant trait by state;
 - c. The current education program. The first report shall include the current education program and its associated materials. Subsequent annual reports shall include updates of any aspect of the education program and associated materials that have materially changed since submission of the previous annual report;
 - d. Summary of efforts aimed at achieving compliance with the BMPs;
 - e. Investigation and remediation of cases on suspected-resistant weeds. Summary of determinations as to whether any reported lack of herbicide efficacy was due to suspected resistance, any follow-up actions taken, and if available, the final outcome (e.g., evaluation of success of additional weed control measures) regarding each case of suspected resistance. The annual report shall list the cases by county and state;
 - f. Summary of the status of any laboratory and greenhouse testing performed by or at the direction of BASF, in response to cases of suspected resistance, performed in the previous year. Data pertaining to such testing need not be included in the annual reports, but such data must be made available to EPA upon request; and
 - g. The annual survey, including whether users are implementing herbicide resistance BMPs, and a summary of BASF's annual review and any modifications based on the survey results.
2. Following submission of the annual report, BASF shall meet with EPA at EPA's request in order to evaluate and consider the information contained in the report.



We create chemistry

Raptor[®] herbicide Technical

For Formulating Purposes Only

Active Ingredient:

Imazamox: (2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1-Himidazol-2-yl]-5-(methoxymethyl)-3-pyridinocarboxylic acid)

Other Ingredients: 97.4%
Total: 2.6%
..... 100.0%

EPA Reg. No.: 241-378

EPA Est. No.:

KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION. Causes eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Avoid breathing dust. Remove contaminated clothing and wash before reuse.

FIRST AID	
If in eyes	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> 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.
If inhaled	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by a poison control center or doctor. DO NOT give anything by mouth to an unconscious person.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact BASF Corporation for emergency medical treatment information: 1-800-832-HELP (4357)	

Physical and Chemical Hazards

DO NOT mix or store this product or solutions of this product in unlined steel containers.

Environmental Hazards

DO NOT discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. **DO NOT** discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Directions For Use

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Only for formulation into an herbicide for the following uses: 1) alfalfa, chicory, CLEARFIELD[®] canola, CLEARFIELD rice, CLEARFIELD sunflowers, CLEARFIELD wheat, clover grown for seed, edible legumes, Vangro[™] canola and soybeans. 2) uses for which U.S. EPA has accepted the required data or citations of data that the formulator has submitted in support of registration; and 3) uses for experimental purposes that are in compliance with U.S. EPA requirements. Consult BASF Corporation before using this product for formulating purposes. Each formulator is responsible for obtaining EPA registration for their end-use product(s).

Storage and Disposal

DO NOT contaminate water, food or feed by storage or disposal. **Pesticide Storage:** Store in original container in a well-ventilated area separately from fertilizer, feed and foodstuffs. Avoid cross-contamination with other pesticides. Spillage or leakage should be contained, carefully swept up, and collected for disposal. **Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling: (Supersack) Nonrefillable Container: DO NOT reuse or refill this container. Completely empty bag into application equipment; then dispose of empty bag in a sanitary landfill or by incineration, or by other procedures approved by state and local authorities. **Drum/Liner: Nonrefillable Container. DO NOT** reuse or refill this container. Completely empty removable liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment; then dispose of empty liner in a sanitary landfill or by incineration, or by other procedures approved by state and local authorities. **Drum: Refillable Container.** Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. If drum is contaminated and cannot be reused, triple rinse the container before final disposal. Triple rinsing is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. **Triple rinse as follows:** To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Dispose of rinsate in compliance with state and local regulations for pesticide products. When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. **DO NOT** reuse the container for any other purpose. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transport. **DO NOT** transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with state and local regulations.

In Case of Emergency

In case of large scale spillage in the U.S., regarding this product, call: CHEMTREC 1-800-424-9300
BASF Corporation 1-800-832-HELP (4357)
In case of medical emergency regarding this product, call: 1) Your local doctor for immediate treatment. 2) Your local poison control center (hospital). 3) BASF Corporation 1-800-832-HELP. **Steps to be taken in case material is released or spilled:** Dike and contain spill with inert material (sand, earth, etc.) and transfer liquid and solid material to separate labeled containers for disposal. Remove contaminated clothing and wash affected skin areas with water. Wash clothing before reuse. Keep spill out of all sewers and open bodies of water.

Conditions of Sale and Warranty

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions For Use. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF THE PRODUCT, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.** BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF.

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