



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Biopesticides and Pollution Prevention Division (7511P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

524-638

Date of Issuance:

March 27, 2018

NOTICE OF PESTICIDE:

☒ Registration
☐ Reregistration
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

TORQUE XC SEED
TREATMENT

Name and Address of Registrant (include ZIP Code):

Monsanto Company
800 N. Lindbergh Blvd.
St. Louis, MO 63167 USA

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA Registration Number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA or the Act).

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency (EPA). In order to protect health and the environment, the Administrator, on his or her motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under the Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration or registration review of your product when the EPA requires all registrants of similar products to submit such data.
2. Submit storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) data as these data requirements are not satisfied. A one-year study is required to satisfy these data requirements. You have 18 months from the date of this registration to provide these data to the EPA.

Signature of Approving Official:

Robert McNally
Robert McNally, Director
Biopesticides and Pollution Prevention Division (7511P)
Office of Pesticide Programs

Date:

March 27, 2018

3. Make the following labeling change before you release this product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 524-638."
4. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

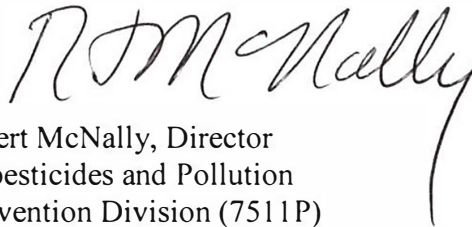
Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the 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 EPA 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 Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statement of Formula (CSF):

- Basic CSF dated 09/12/2016

If you have any questions, please contact Gina Burnett by phone at (703) 605-0513 or via email at burnett.gina@epa.gov.

Sincerely,



Robert McNally, Director
Biopesticides and Pollution
Prevention Division (7511P)
Office of Pesticide Programs

Enclosure

MASTER LABEL FOR EPA REG. No. 524-AGI

Product Brand Name:
Torque® XC Seed Treatment

ACCEPTED

03/27/2018

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No. 524-638

Editorial Notes:

Bracketed text [] is optional text.

ACTIVE INGREDIENT:

LCO SP104: D-Glucose, O-2-deoxy-2-[[[(11Z)-1-oxo-11-octadecen-1-yl]amino]-β-D-glucopyranosyl-(1→4)-O-2-(acetamino)-2-deoxy-β-D-glucopyranosyl-(1→4)-O-2-(acetamino)-2-deoxy-β-D-glucopyranosyl-(1→4)-O-2-(acetamino)-2-deoxy-β-D-glucopyranosyl-(1→4)-2-(acetamino)-2-deoxy-
..... 0.000001%

OTHER INGREDIENTS:..... > 99.999999%
100.000000%

Contains 0.000000083 pounds LCO SP104 per U.S. gallon (0.00001 grams AI/liter)

EPA Reg. No. 524-AGI

EPA Est. No. [Enter appropriate EPA establishment no.]

KEEP OUT OF REACH OF CHILDREN

CAUTION

HOTLINE NUMBER

In case of an emergency involving this product, or for medical assistance,
call collect, day or night, (314) 694-4000.
For product use information call: 1-877-775-8787

FIRST AID

IF IN EYES

- Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
- Remove contact lenses, if present, after the first 5 minutes then continue rinsing eye.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Personal Protective Equipment (PPE)

All mixers, loaders, applicators, and other handlers must wear long-sleeved shirt, long pants, shoes, socks and gloves.

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Environmental Hazards

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

DIRECTIONS FOR USE

Read the entire label before using this product.

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

For use only in commercial seed treatment equipment. Not for use in hopper box, planter box, slurry box, or other on-farm seed treatment applications.

Product Description

[INSERT BRAND NAME] is a liquid formulation for use as a seed treatment that features lipochitooligosaccharide (LCO) technology. The LCO in this product directly stimulates germination of mycorrhizal spores and promotes mycorrhizal symbioses in the root zone. Mycorrhizae are beneficial fungi that colonize plant roots and can form networks in the soil. Plant roots recognize the LCO and other signals produced by the germinating mycorrhizal spores to stimulate specialized symbiotic interactions between roots and mycorrhizae. Mycorrhizal colonization of plant roots increases the functional root volume of the plant providing increased access and uptake of soil nutrients and water. The LCO mode of action supports the growth and yield potential of the crop.

- Stimulates germination of mycorrhizal spores
- Enhances mycorrhizal colonization which increases functional root volume as well as nutrient and water uptake through the roots
- Increases yield potential

Application Information

USE INFORMATION

Apply [INSERT BRAND NAME] as a water-based slurry either alone or with registered seed treatments using standard slurry or mist-type seed treatment application equipment.

[INSERT BRAND NAME] may be used in combination with other registered seed treatment products, including Acceleron® Seed Applied Solutions. Pre-check for compatibility with other seed treatment products.

Dilute with a sufficient amount of water to achieve uniform application to seed. Use high quality, properly cleaned seed.

All seed treated commercially with this product must be adequately dyed with a suitable color to prevent accidental use as food for humans or feed for animals. Use an EPA-approved dye or colorant that imparts an unnatural color to the seed. Any dye or colorant added to treated seed must be cleared for use pursuant to 40 CFR, Part 153.155.

MIXING INSTRUCTIONS

Add 1/2 to 2/3 of the required water to the treatment slurry tank followed by any accompanying seed treatment products and [INSERT BRAND NAME]. The order of product addition is dependent on the

accompanying seed treatment products and application equipment used. Allow each slurry component to disperse completely prior to the next addition until a uniform suspension is obtained. After all slurry components have been added and dispersed completely, add the remaining 1/2 to 1/3 of required water for proper slurry volume and mix until uniform. Maintain adequate agitation until treatment slurry is applied.

APPLICATION RATES

Crop	Product Use Rate (ml/kg seed)	Product Use Rate (fl oz/cwt seed)	Product Use Rate (fl oz/unit seed)	Seed/Unit (Seed/lb*)
Corn	0.33	0.5	0.25	80,000 (1,600)
*Seed weight varies				

SEED LABELING

The user is responsible for ensuring that the treated seed container meets all of the requirements under the Federal Seed Act. The Federal Seed Act requires that the container of seed treated with [INSERT BRAND NAME] must be labeled with the following statements:

- This seed has been treated with LCO SP104.
- Do not use treated seed for food, feed or oil production.

In addition, the US Environmental Protection Agency requires the following statements on the container of seed treated with [INSERT BRAND NAME]:

- Wear long-sleeved shirt, long pants, shoes, socks, and gloves when handling treated seed.
- Store treated seed away from food and feed, and do not allow access by children, pets, or livestock. Do not reuse empty seed containers.
- Surplus treated seed or empty seed containers should be stored or disposed according to local requirements.
- Do not contaminate bodies of water when disposing of excess treated seed or wash waters from planting equipment.

CROP ROTATION

There are no restrictions on crop rotation.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original container away from feed and food. Store in a cool, dry place. Do not store in direct sunlight.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

CONTAINER HANDLING AND DISPOSAL: Non-refillable container (5 gallons (19 liters) or less). Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration, or by other procedures allowed by state and local authorities.

Non-refillable container (greater than 5 gallons (19 liters)). Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other side and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration, or by other procedures allowed by state and local authorities.

Refillable container. Refill this container with pesticide only. Do not use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent 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. Then offer for recycling, if available or puncture and dispose of in a sanitary landfill, by incineration, or by other procedures allowed by state and local authorities.

LIMITS OF LIABILITY AND WARRANTY

Monsanto Company warrants that this product is reasonably fit for the purposes set forth in the DIRECTIONS FOR USE ("Directions") when used in accordance with those Directions under the conditions described therein. This warranty is also subject to the inherent risks, conditions and limitations stated herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE, INFRINGEMENT (ALONE OR IN COMBINATION WITH OTHER REGISTERED SEED TREATMENT PRODUCTS) OR MERCHANTABILITY IS MADE.

Buyer and all users shall promptly notify Monsanto Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

To the extent consistent with applicable law, buyer and all users are responsible for all loss or damage from use or handling of the product which results from conditions beyond the control of Monsanto Company, including, but not limited to, crop injury, ineffectiveness or other unintended consequences that may result because of such factors as weather conditions at planting, environmental conditions during seed storage, presence of other materials, seed of low quality or low vigor or low germination, or the manner of use or application inconsistent with that set forth in the Directions.

Monsanto Company does not warrant any product reformulated or repackaged from this product except in accordance with Monsanto Company's stewardship requirements and with Monsanto's express written permission.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF MONSANTO COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER OF THE PRODUCT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR SPECIAL DAMAGES.

Upon opening and using this product, buyer and all users are deemed to have accepted the terms of this LIMIT OF LIABILITY AND WARRANTY which may not be varied by any verbal or written agreement. If terms are not acceptable, return at once unopened.

EPA Reg. No. 524-AGI

©[year first published] Monsanto Company

Manufactured for and guaranteed by:

Monsanto Company
800 N. Lindbergh Blvd.
St. Louis, MO 63167 USA

EPA Est. [Enter appropriate EPA establishment no.]

NET [Allow blank space for fill in] GAL [Alternative text: L or other appropriate unit of measure]

LOT NO. *[Allow blank space for fill in]*

[Print Plate Number]

Patents that cover Torque XC Seed Treatment can be found at <http://www.monsantotechnology.com>.

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