

SAFETY DATA SHEET

EMERGENCY CALL: 1-800-424-9300 (CHEMTREC)



**AURORA
COOPERATIVE**

1. IDENTIFICATION

PRODUCT NAME: Realize™
DESCRIPTION: A liquid plant growth regulator.
EPA Reg. No.: 32938-1-51827

COMPANY IDENTIFICATION:
AURORA COOPERATIVE
2225 Q Street
Aurora, NE 68818

2. HAZARD IDENTIFICATION



WARNING
Harmful if inhaled
May cause an allergic skin reaction

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Common Name</u>	<u>Chemical Name</u>	<u>CAS #</u>	<u>Composition</u>
Cytokinin (as kinetin)	N-(furan-2-ylmethyl)-7H-purin-6-amine	525-79-1	0.009%
Indole-3-butyric acid (IBA)	4-(1H-indol-3-yl)butanoic acid	133-32-4	0.005%
Giberrellic acid (GA ₃)	(3S,3aS,4S,4aS,7S,9aR,9bR,12S)-7,12-dihydroxy-3-methyl-6-methylene-2-oxoperhydro-4a,7-methano-9b,3-propenoazuleno[1,2-b]furan-4-carboxylic acid	77-06-5	0.005%
Hydrochloric acid	--	7647-1-0	<0.1%

4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call CHEMTREC at 1-800-424-9300.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor or poison control center if you feel unwell.

IF ON SKIN: Take off contaminated clothing and wash before reuse. Rinse skin immediately with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.

5. FIREFIGHTING MEASURES

Flash point: N/A (will not flash)

Flammable Limits (LFL-UFL): Not determined

Fire and Explosion Hazards: May thermally decompose in fire releasing irritating and toxic fumes.

Extinguishing Medium: Water spray, water fog, foam, dry chemical or carbon dioxide (CO₂).

Fire Fighting Equipment: Firefighters should be equipped with self-contained positive pressure breathing apparatus and full bunker gear.

Fire Fighting Instructions: Evacuate area of all unnecessary personnel and fight fire from a safe distance upwind. Contain contaminated water / firefighting water; do not allow to enter drains or waterways. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

NFPA Ratings: Health – 2 / Flammability – 1 / Reactivity - 1

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Isolate area and keep unnecessary and unprotected personnel from entering. Wear suitable personal protective clothing and equipment as described in Section 8 of this document.

Small Spills: Absorb using sand, vermiculite or other inert absorbent. Place contained material in appropriate container for disposal.

Large Spills: Dike spillage and recover and retain as much free liquid as possible for reuse. Pick up remainder with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. After removal, thoroughly clean contaminated area with water. Collect wash water for approved disposal.

7. HANDLING AND STORAGE

Handling: Avoid breathing vapor or spray mist. Use only in a well-ventilated area. Wear appropriate personal protective clothing and equipment (see Section 8 below). Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

Storage: Do not contaminate water, food or feed by storage or disposal. Do not store in direct sunlight. Protect from freezing.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

Protective Clothing: Wear long sleeved shirt, long pants, shoes, socks, and chemical resistant gloves made of any waterproof material.

General: Wash clothing and other absorbent materials that have been exposed to this product. Follow the 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Transparent liquid

Odor: Moderate sour

pH: 3.43 @ 25°C

Density: 0.986 g/cm³

Solubility: Soluble

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: None known.

CHEMICAL STABILITY: Stable under all normal use and storage conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen and carbon.

INCOMPATIBILITY WITH OTHER MATERIALS: Do not use with or store near oxidizing agents.

HAZARDOUS REACTIONS: This product is chemically stable and no hazardous reactions should occur if stored and handled as prescribed / indicated.

POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ORAL TOXICITY (rat LD₅₀): > 5,000 mg/kg

DERMAL TOXICITY (rat LD₅₀): > 5,000 mg/kg

INHALATION TOXICITY (rat LC₅₀): > 1.0 mg/L (4-hour)

EYE IRRITATION: Non-irritating

SKIN IRRITATION: Non-irritating

SKIN SENSITIZATION: May be a contact sensitizer.

CARCINOGENICITY:

EPA: Not Listed

ACGIH: Not Listed

IARC: Not Listed

NTP: Not Listed

OSHA: Not Listed

MUTAGENIC TOXICITY: Little evidence of mutagenic effects during *in vivo* and *in vitro* assays.

REPRODUCTIVE TOXICITY: No evidence in animal studies.

12. ECOLOGICAL INFORMATION

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Do not apply where runoff is likely to occur. Do not contaminate water when cleaning equipment or disposing of equipment washwater. Exposed treated seed may be hazardous to birds and other wildlife. Treat only those seeds needed for immediate use and planting. Do not store excess treated seed beyond planning time. Dispose of all excess treated seed and seed packaging by burial away from streams and bodies of water.

The following information is for the active ingredient, gibberellic acid:

AQUATIC TOXICITY

Rainbow Trout (96hr LC₅₀): > 210 ppm

Daphnia (48hr EC₅₀): 488 mg/L

AVIAN TOXICITY

Bobwhite Quail (LD50): > 2,250 mg/kg

13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by 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 DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Refer to the product label for specific container handling instructions.

14. TRANSPORT INFORMATION

US DOT (shipments by land):

Not regulated.

IMDG (shipments by vessel):

Not regulated.

IATA (shipments by air):

Not regulated.

15. REGULATORY INFORMATION

FIFRA –

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. The following is the hazard information as required on the pesticide label:

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if inhaled. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Remove and wash contaminated clothing before reuse.

See inside label booklet for additional Precautionary Statements and Directions for Use including Storage and Disposal instructions.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Do not apply where runoff is likely to occur. Do not contaminate water when cleaning equipment or disposing of equipment washwater. Exposed treated seed may be hazardous to birds and other wildlife. Treat only those seeds needed for immediate use and planting. Do not store excess treated seed beyond planning time. Dispose of all excess treated seed and seed packaging by burial away from streams and bodies of water.

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide. This product is excluded from listing requirements under EPA/TSCA.

SARA Title III – Section 302 Extremely Hazardous Substances

Not listed

SARA Title III – Section 311/312 Hazard Categories

Immediate

SARA Title III – Section 312 Threshold Planning Quantity

N/A

SARA Title III – Section 313 Reportable Ingredients

N/A

CERCLA –

Hydrochloric acid (conc. 37% or greater) (CAS No. 7647-01-0); RQ: 50,000 lbs.

CALIFORNIA PROP 65 STATUS –

This product does not contain any chemicals known to the state of California to cause cancer or reproductive toxicity.

CANADA –

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

16. OTHER INFORMATION

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Acceptance of Terms - By purchase or use of this product, buyer and user accept these conditions of sale and limitations of warranty and liability. If these terms are unacceptable, return the product unopened for a refund.

Warranty Disclaimers – Aurora Cooperative Elevator and seller (collectively “Vendors”) warrant that this product conforms to the chemical description on the label. THIS PRODUCT IS SOLD “AS IS” AND VENDORS MAKE NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIM THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT.

Inherent Risks - The directions for use must be followed carefully. It is impossible to eliminate all risks associated with this product. Crop injury, ineffectiveness, or other unintended consequences may result due to factors beyond the control of Vendors. Buyer and user assume all risks associated with the use or handling of this product.

Limitations of Liability - To the extent consistent with applicable law, buyer or user’s exclusive remedy for any and all claims, losses, injuries, or damages resulting from the use or handling of this product shall be limited to the purchase price paid, or at the election of Vendors, the replacement of this product. Vendors are not liable for any consequential, incidental, or special damages, including lost profits.

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Realize™ is a trademark of Aurora Cooperative.

Aurora® is a registered trademark of Aurora Cooperative.

SDS Version: 1.0

Effective Date: 12/21/2016