

## TALINOR

Date: 6/27/2017  
Replaces: 11/18/2016

### 1. PRODUCT IDENTIFICATION

Product identifier on label: **TALINOR**  
Product No.: A19278A  
Use: Herbicide  
Manufacturer: Syngenta Crop Protection, LLC  
Post Office Box 18300  
Greensboro NC 27419  
Manufacturer Phone: 1-800-334-9481

**Emergency Phone: 1-800-888-8372**

### 2. HAZARDS IDENTIFICATION

Classifications: Oral: Category 4  
Skin Sensitizer: Category 1B  
Carcinogenicity: Category 2  
Aspiration Hazard: Category 1  
Reproductive Toxicity: Category 1B

Signal Word (OSHA): Danger

Hazard Statements: Harmful if swallowed  
May be fatal if swallowed and enters airways  
May cause an allergic skin reaction  
Suspected of causing cancer  
May damage fertility or the unborn child

Hazard Symbols:



Precautionary Statements: Avoid breathing mist, vapors, spray.  
Contaminated work clothing must not be allowed out of the workplace.  
Wear protective gloves, protective clothing, eye protection.  
If skin irritation or rash occurs: Get medical advice.  
If on skin: Wash with plenty of soap and water.  
See Section 4 First Aid Measures.  
Wash contaminated clothing before reuse.  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Wash hands and face thoroughly after handling.

## TALINOR

Date: 6/27/2017  
Replaces: 11/18/2016

Do not eat, drink or smoke when using this product.  
If swallowed: Immediately call a poison center, doctor or Syngenta. Rinse mouth.  
If exposed or concerned: Get medical advice/attention.  
Do NOT induce vomiting.  
Store locked up.  
Dispose of contents and container in accordance with local regulations.

Other Hazard Statements: None

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common Name	CAS Number	Concentration
Naphthalene	Naphthalene	91-20-3	<1%
Acetophenone	Acetophenone	98-86-2	< 35%
Cloquintocet-Mexyl	Cloquintocet-Mexyl	99607-70-2	<1%
Petroleum Solvent	Petroleum Solvent	Trade Secret	Trade Secret
Other ingredients	Other ingredients	Trade Secret	>36.43%
bromoxynil-octanoate	Bromoxynil Octanoate	1689-99-2	23.16%
Bicyclo[3.2.1]oct-3-en-2-one, 4-hydroxy-3-[[2-[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)-3-pyridinyl]carbonyl]-	Bicyclopyrone	352010-68-5	3.41%

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

## 4. FIRST AID MEASURES

Have the product container, label or Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

**Ingestion:** If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Eye Contact:** If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

**Skin Contact:** If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

**Inhalation:** If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

Most important symptoms/effects:

Allergic skin reaction

Indication of immediate medical attention and special treatment needed:

There is no specific antidote if this product is ingested.

Treat symptomatically.

Persons suffering a temporary allergic reaction may respond to treatment with antihistamines or steroid creams and/or systemic steroids.

## TALINOR

Date: 6/27/2017  
 Replaces: 11/18/2016

Contains petroleum distillate - vomiting may cause aspiration pneumonia.

### 5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific Hazards:

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Special protective equipment and precautions for firefighters:

Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

Follow exposure controls/personal protection outlined in Section 8.

Methods and materials for containment and cleaning up:

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

### 7. HANDLING AND STORAGE

Precautions for safe handling:

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Conditions for safe storage, including any incompatibilities:

Store locked up.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.**

**FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.**

Occupational Exposure Limits:

Chemical Name	OSHA PEL	ACGIH TLV	Other	Source
Naphthalene	10 ppm TWA	10 ppm TWA (skin)	10 ppm TWA	NIOSH
Acetophenone	Not Established	10 ppm TWA	Not Established	Not Applicable
Cloquintocet-Mexyl	Not Established	Not Established	5 mg/m <sup>3</sup> TWA	Syngenta
Petroleum Solvent	Not Established	Not Established	50 mg/m <sup>3</sup> TWA	Manufacturer
Other ingredients	Not Established	Not Established	Not Established	Not Applicable

## TALINOR

Date: 6/27/2017  
 Replaces: 11/18/2016

Bromoxynil Octanoate	Not Established	Not Established	Not Established	Not Applicable
Bicyclopyrone	Not Established	Not Established	2 mg/m3 TWA	Syngenta

Appropriate engineering controls:

Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:

**Ingestion:**

Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

**Eye Contact:**

Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**Skin Contact:**

Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber or Viton), coveralls, socks and chemical-resistant footwear.

**Inhalation:**

A combination particulate/organic vapor respirator should be used until effective engineering controls are installed to comply with occupational exposure limits, or until exposure limits are established. Use a NIOSH certified respirator with an organic vapor (OV) cartridge or canister with any R, P or HE filter.

Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid

Odor: Not determined

Odor Threshold: Not Available

pH: Not Available

Melting point/freezing point: Not Applicable

Initial boiling point and boiling range: Not Available

Flash Point (Test Method): 198°F

Flammable Limits (% in Air): Not Available

Flammability: Not Available

Vapor Pressure: Bicyclopyrone 3.75 x 10<sup>(-8)</sup> mmHg @ 68°F (20°C)  
 Bromoxynil Octanoate Not Available

Vapor Density: Not Available

Relative Density: 1.1 g/ml

Solubility (ies): Bicyclopyrone Not soluble  
 Bromoxynil Octanoate Insoluble

Partition coefficient: n-octanol/water: Not Available

Autoignition Temperature: 770°F

Decomposition Temperature: Not Available

**TALINOR**

Date: 6/27/2017

Replaces: 11/18/2016

Viscosity: Not Available

Other: None

**10. STABILITY AND REACTIVITY**

Reactivity: Not reactive.

Chemical stability: Stable under normal use and storage conditions.

Possibility of hazardous reactions: Will not occur.

Conditions to Avoid: Not known.

Incompatible materials: None known.

Hazardous Decomposition Products: None known.

**11. TOXICOLOGICAL INFORMATION**Health effects information

Likely routes of exposure: Dermal, Inhalation

Symptoms of exposure: Rash, redness or itching

Delayed, immediate and chronic effects of exposure: Developmental toxicity, Possible carcinogenicity, Allergic skin reaction

Numerical measures of toxicity (acute toxicity/irritation studies (finished product))

Ingestion:	Oral (LD50 Rat) :	1030 mg/kg body weight
Dermal:	Dermal (LD50 Rat) :	> 5000 mg/kg body weight
Inhalation:	Inhalation (LC50 Rat) :	> 5.11 mg/l
Eye Contact:	Mild Irritant	
Skin Contact:	Slightly Irritating	
Skin Sensitization:	A skin sensitizer.	

Reproductive/Developmental Effects

Bicyclopyrone: Animal testing did not show any effects on fertility. Some evidence of adverse effects on development, based on animal experiments.

Bromoxynil Octanoate: Teratogenicity: Possible risk of harm to the unborn child.

Chronic/Subchronic Toxicity Studies

Bicyclopyrone: No significant adverse effects were reported.

Bromoxynil Octanoate: Not Available

Carcinogenicity

Bicyclopyrone: Limited evidence of carcinogenicity in animal studies. There is no evidence that these findings are relevant to humans.

Bromoxynil Octanoate: Not Available

## TALINOR

Date: 6/27/2017

Replaces: 11/18/2016

Chemical Name NTP/IARC/OSHA Carcinogen

Naphthalene See "Toxicity", Sec. 11

Acetophenone No

Cloquintocet-Mexyl No

Petroleum Solvent No

Other ingredients No

bromoxynil-octanoate No

Bicyclo[3.2.1]oct-3-en-2-one, 4-hydroxy-3-[[2-  
[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)-  
3-pyridinyl]carbonyl]- No

### Other Toxicity Information

None

### Toxicity of Other Components

#### Acetophenone

Exposure causes severe eye and skin irritation. Prolonged contact may cause defatting of the skin and dermatitis or burns. Inhalation of high concentrations may cause central nervous system effects characterized by headache, dizziness, unconsciousness and coma. May cause irritation of the respiratory tract with burning, pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. Ingestion may cause gastrointestinal irritation with nausea, vomiting and diarrhea.

#### Cloquintocet-Mexyl

Causes mild eye and skin irritation. Toxic if inhaled or swallowed. May cause sensitization by skin contact.

#### Naphthalene

Exposure to naphthalene can cause cataracts, liver damage, kidney failure, respiratory failure, hematuria, anemia, damage to red blood cells, leukocytosis, or coma.

#### Carcinogen Status:

NTP: Anticipated Carcinogen

IARC: Group 2B Possible Human Carcinogen

#### Other ingredients

Not Established

#### Petroleum Solvent

Inhalation of vapors at high concentrations can cause central nervous system effects (dizziness, headache), irritation to eyes or respiratory tract.

### Target Organs

#### Active Ingredients

Bicyclopyrone: Heart

Bromoxynil Octanoate: Not Available

#### Inert Ingredients

Acetophenone: CNS, skin, eye

Cloquintocet-Mexyl: Eye, skin, lung, digestive tract

Naphthalene: Eye, liver, kidney, respiratory tract, blood, CNS

Other ingredients: Not Established

Petroleum Solvent: Respiratory tract, stomach, liver, thyroid, urinary bladder, CNS, skin

## TALINOR

Date: 6/27/2017

Replaces: 11/18/2016

### 12. ECOLOGICAL INFORMATION

#### Eco-Acute Toxicity

##### Bromoxynil Octanoate:

Fish (Bluegill Sunfish) 96-hour LC50 0.029 mg/l

Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 0.046 mg/l

Algae 72-hour EC50 0.12 mg/l

##### Bicyclopyrone:

Fish (Rainbow Trout) 96-hour LC50 > 100 mg/l

Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 > 100 mg/l

Green Algae 96-hour EbC50 2.3 mg/l

#### Environmental Fate

##### Bicyclopyrone:

The following information is for the active ingredient, NOA449280.  
Not readily biodegradable. Not persistent in soil. Very high mobility in soil.

##### Bromoxynil Octanoate:

The information presented here is for the A.I. Bromoxynil Octanoate.

Bioaccumulation: Bluegill Sunfish. Bioconcentration factor (BCF): 230.

The value mentioned relates to the combination of bromoxynil phenol and the active ingredient bromoxynil octanoate.

Biodegradability: < 37% Exposure time: 28 d Not readily biodegradable

### 13. DISPOSAL CONSIDERATIONS

#### Disposal:

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

### 14. TRANSPORT INFORMATION

#### DOT Classification

Ground Transport - NAFTA

Individual container with < 1,400 usg

Not regulated

Individual containers > 1,400 usg

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Acetophenone), RQ

Hazard Class: Class 9

Identification Number: UN 3082

Packing Group: PG III

#### Comments

Water Transport - International

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Acetophenone) Marine Pollutant

Hazard Class: Class 9

Identification Number: UN 3082

Packing Group: PG III

Air Transport

## TALINOR

Date: 6/27/2017

Replaces: 11/18/2016

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Acetophenone)  
 Hazard Class: Class 9  
 Identification Number: UN 3082  
 Packing Group: PG III

### 15. REGULATORY INFORMATION

**Pesticide Registration:**

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. Following is the hazard information as required on the pesticide label:

Caution: Harmful if swallowed. Causes moderate eye injury. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

**EPA Registration Number(s):**

100-1570

**EPCRA SARA Title III Classification:**

Section 311/312 Hazard Classes: Acute Health Hazard  
 Chronic Health Hazard

Section 313 Toxic Chemicals: Bromoxynil Octanoate 23.16% (CAS No. 1689-99-2)  
 Naphthalene <1% (CAS No. 91-20-3)  
 Acetophenone < 35% (CAS No. 98-86-2)

**CERCLA/SARA 304 Reportable Quantity (RQ):**

RQ of Acetophenone = 5000 lbs

**RCRA Hazardous Waste Classification (40 CFR 261):**

Not Applicable

**TSCA Status:**

Exempt from TSCA, subject to FIFRA

### 16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 3  
 Flammability: 1  
 Instability: 0

HMIS Hazard Ratings

Health: 3  
 Flammability: 1  
 Physical Hazard: 0

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme
*	Chronic

Syngenta Hazard Category: D,S

For non-emergency questions about this product call:

1-800-334-9481



## TALINOR

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Replaces: 11/18/2016

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Revision Date: 6/27/2017 Replaces: 11/18/2016  
Section(s) Revised: 15

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