



Material Safety Data Sheet

Clipper™ Herbicide

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABELING (attached to and accompanying the product container). This MSDS 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.

Use, storage and disposal of pesticide products is regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling. All necessary and appropriate precautionary, use, and storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Clipper™ Herbicide
VC NUMBER(S): 1420
PRODUCT CODE: Not Established
SYNONYM(S): None
EPA REGISTRATION NUMBER: 59639-EUP-12

PRODUCT DESCRIPTION: Herbicide

MANUFACTURER/DISTRIBUTOR
VALENT U.S.A. CORPORATION
P.O. Box 8025
1600 Riviera Avenue, Suite 200
Walnut Creek, CA 94596-8025

EMERGENCY TELEPHONE NUMBERS
HEALTH EMERGENCY OR SPILL (24 hr):
(800) 892-0099
TRANSPORTATION (24 hr.): CHEMTREC
(800) 424-9300 or (202) 483-7616

PRODUCT INFORMATION
PROFESSIONAL PRODUCTS: (800) 898-2536

The current MSDS is available through our website or by calling the product information numbers listed above. (www.valent.com)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

- CAUTION**
- Harmful if inhaled or absorbed through skin.
 - Avoid breathing dust or spray mist.
 - Avoid contact with eyes, skin and clothing
 - Keep out of reach of children.

POTENTIAL HEALTH EFFECTS

Acute Toxicity (Primary Routes of Exposure): None known

Acute Eye Contact: Based on an evaluation of the ingredients and/or similar products, this product may cause brief and/or minor eye irritation. The expected adverse health effects resulting from an exposure may include redness and possible swelling.

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REVISION NUMBER: 2

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Acute Skin Contact: Based on an evaluation of the ingredients and/or similar products, this product may cause brief and/or minor skin irritation. The expected adverse health effects resulting from an exposure may include redness and possibly some minor swelling. This product may be slightly toxic when absorbed through the skin. This product is not expected to cause allergic skin reactions.

Acute Ingestion: Based on an evaluation of the ingredients and/or similar products, this product may be minimally toxic when ingested.

Acute Inhalation: Based on an evaluation of the ingredients and/or similar products, this product is expected to be slightly toxic when inhaled. Exposure to high concentrations of dust may result in respiratory irritation. Signs and symptoms may include, but not be limited to, nasal discharge, sore throat, coughing and difficulty in breathing.

Chronic Toxicity (including cancer): Repeated exposures to Flumioxazin Technical in animals have produced anemia and other blood formation changes, organ weight changes and changes in blood chemistry. Flumioxazin Technical did not produce cancer in life-time feeding studies in laboratory animals.

Developmental Toxicity (birth defects): Birth defects were produced in the offspring of female rats exposed to Flumioxazin Technical. No effects were observed in rabbits.

Reproductive Toxicity: Reproductive effects were observed in rats exposed to Flumioxazin Technical.

Signs and Symptoms of Systemic Effects: No signs or symptoms occurred in animals exposed to high oral or dermal doses of Flumioxazin Technical. Exposure to very high concentrations of Flumioxazin Technical in the air resulted in breathing difficulties, decreased activity and some changes in the tissues of the respiratory system.

Potentially Aggravated Medical Conditions: Individuals with anemia or preexisting diseases of the blood may have increased susceptibility to the toxicity of excessive exposures.

For complete discussion of the toxicology data from which this evaluation was made, refer to Section 11. For Ecotox/Environmental Information, refer to Section 12. For Regulatory Information, refer to Section 15.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight/ Percent	Purpose
Flumioxazin (2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione)	103361-09-7	45 - 55	Active Ingredient
Kaolin clay	1332-58-7	11 - 21	Carrier
Others (including particulates not otherwise classified)	No CAS#	24 - 40	-

Other ingredients, which are maintained as trade secrets, are any substances other than an active ingredient contained in this product. Some of these may be hazardous, but their identities are withheld because they are considered trade secrets. The hazards associated with the other ingredients are addressed in this document. Specific information on other ingredients for the management of exposures, spills, or safety assessments can be obtained by a treating physician or nurse by calling (800) 892-0099 at any time.

4. FIRST AID MEASURES

EMERGENCY NUMBER (800) 892-0099

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact **1-800-892-0099** for emergency medical treatment information.

EYE CONTACT:

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

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.

INGESTION:

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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.

INHALATION:

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, if possible. Call a poison control center or doctor for further treatment advice.

NOTES TO PHYSICIAN:

None

5. FIRE FIGHTING MEASURES

FLASH POINT:	Not applicable
AUTOIGNITION:	No data available
EXTINGUISHING MEDIA:	Water fog, carbon dioxide, foam, dry chemical
FLAMMABLE LIMITS IN AIR - LOWER (%):	Not applicable
FLAMMABLE LIMITS IN AIR - UPPER (%):	Not applicable

NFPA RATING:

Health:	1
Flammability:	1
Reactivity:	0
Special:	None

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using professional judgement. Values were not available in the guidelines or published evaluations prepared by the National Fire Protection Association, NFPA.

FIRE FIGHTING INSTRUCTIONS: Products of combustion from fires involving this material may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse.

HAZARDOUS COMBUSTION PRODUCTS: Normal combustion forms carbon dioxide, water vapor and may produce: oxides of nitrogen, Combustion may produce toxic gases of: Nitrogen compounds and Fluorine compounds. Incomplete combustion can produce carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES

Emergency Telephone: (800) 892-0099
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6. ACCIDENTAL RELEASE MEASURES

VALENT EMERGENCY PHONE NUMBER: (800) 892-0099

CHEMTREC EMERGENCY PHONE NUMBER: (800) 424-9300

OBSERVE PRECAUTIONS IN SECTION 8: PERSONAL PROTECTION

Stop the source of the spill if safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water. For additional spill response information refer to the North American Emergency Response Guidebook.

UN/NA NUMBER: Not applicable

EMERGENCY RESPONSE GUIDEBOOK NO.: Not applicable

FOR SPILLS ON LAND:

CONTAINMENT: Reduce airborne dust. Avoid runoff into storm sewers or other bodies of water.

CLEANUP: Clean up spill immediately. Vacuum or sweep up material and place in a chemical waste container. Wash area with soap and water. Pick up wash liquid with additional absorbent and place in a chemical waste container.

FOR SPILLS IN WATER:

CONTAINMENT: This material will disperse or dissolve in water. Stop the source of the release. Contain and isolate to prevent further release into soil, surface water and ground water.

CLEANUP: Clean up spill immediately. Absorb spill with inert material. Remove contaminated water for treatment or disposal.

7. HANDLING AND STORAGE

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

HANDLING:

Keep pesticide in original container. Do not store or transport near food or feed. Do not contaminate food or feed. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Store in a cool, dry place, out of direct sunlight.

STORAGE:**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

EYES & FACE: Do not get this material in your eyes. Eye contact can be avoided by wearing protective eyewear.

RESPIRATORY PROTECTION: Use this material only in well ventilated areas. Unless ventilation is adequate to keep airborne concentrations below recommended exposure standards, approved respiratory protection should be worn.

This material may be a respiratory irritant and, unless ventilation is adequate, the use of approved respiratory protection is recommended. Use this material only in well ventilated areas.

SKIN & HAND PROTECTION: Avoid contact with skin or clothing. Skin contact should be minimized by wearing protective clothing including gloves.

EXPOSURE LIMITS

Emergency Telephone: (800) 892-0099
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Chemical Name	ACGIH Exposure Limits	OSHA Exposure Limits	Manufacturer's Exposure Limits
Flumioxazin (2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione)	None	None	None
Kaolin clay	2 mg/m ³ TWA (respirable fraction)	15 mg/m ³ TWA 5 mg/m ³ TWA	None
Others (including particulates not otherwise classified)	None	None	None

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM:	Granule
COLOR:	Light brown
ODOR:	Slight
FLASH POINT:	Not applicable
MELTING POINT:	Not applicable
BULK DENSITY:	0.49 g/cc (30.8 lb./cu. ft.)
pH:	5.4 @ 25°C (1% suspension)
CORROSION CHARACTERISTICS:	Not corrosive to containers.
SOLUBILITY:	Dispersible in water

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:	This material is considered chemically and thermally stable.
INCOMPATIBILITY:	May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
OXIDATION/REDUCTION PROPERTIES:	Not an oxidizing or reducing agent.
EXPLODABILITY:	Not expected to be explosive.
HAZARDOUS DECOMPOSITION PRODUCTS:	No data available

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Oral Toxicity LD ₅₀ (rats)	> 5,000 mg/kg	EPA Tox Category	IV
Dermal Toxicity LD ₅₀ (rabbits)	> 2,000 mg/kg	EPA Tox Category	III
Inhalation Toxicity LC ₅₀ (rats)	0.969 mg/l	EPA Tox Category	III
Eye Irritation (rabbits)	Brief and/or minor irritation	EPA Tox Category	III
Skin Irritation (rabbits)	Brief and/or minor irritation	EPA Tox Category	IV
Skin Sensitization (guinea pigs)	Non-sensitizer	EPA Tox Category	Not applicable

CARCINOGEN CLASSIFICATION

TOXICITY OF FLUMIOXAZIN TECHNICAL

SUBCHRONIC: Compound related effects of Flumioxazin Technical noted in rats following subchronic exposures at high dose levels were hematotoxicity including anemia, and increases in liver, spleen, heart, kidney and thyroid weights. In dogs, the effects produced at high dose levels included a slight prolongation in activated partial thromboplastin time, increased cholesterol and phospholipid, elevated alkaline phosphatase, increased liver weights and histological changes in the liver. The lowest no-observable-effect-level (NOEL) in subchronic studies was 30 ppm in the three-month toxicity study in rats.

CHRONIC/CARCINOGENICITY: In a one year dog feeding study, Flumioxazin Technical produced treatment-related changes in blood chemistry and increased liver weights at 100 and 1000 mg/kg/day. Minimal treatment-related histological changes were noted in the livers of animals in the 1000 mg/kg/day group. Based on these data the NOEL is 10 mg/kg/day. Dietary administration of Flumioxazin Technical for 18 months produced liver changes in mice of the 3000 and 7000 ppm groups. There was no evidence of any treatment-related oncogenic effect. The NOEL for this study is 300 ppm. Dietary administration of Flumioxazin Technical for 24 months produced anemia and chronic nephropathy in rats of the 500 and 1000 ppm groups. The anemia lasted throughout the treatment period, however, it was not progressive nor aplastic in nature. No evidence of an oncogenic effect was observed. The NOEL for this study is 50 ppm.

DEVELOPMENTAL TOXICITY: Flumioxazin Technical produces developmental toxicity in rats in the absence of maternal toxicity at doses of 30 mg/kg/day by the oral route and 300 mg/kg/day by the dermal route. The developmental effects noted consisted primarily of decreased number of live fetuses and fetal weights, cardiovascular abnormalities, wavy ribs and decreased number of ossified sacrococcygeal vertebral bodies. The developmental NOEL in the rat oral and dermal developmental toxicity studies were 10 and 100 mg/kg/day, respectively. The response in rabbits was very different from that in rats. No developmental toxicity was noted in rabbits at doses up to 3000 mg/kg/day, a dose well above the maternal NOEL of 1000 mg/kg/day.

REPRODUCTION: Reproductive toxicity was observed in F1 males, P1 females and F1 females at 300 ppm Flumioxazin Technical, the highest dose tested and a dose that also produced signs of systemic toxicity. Toxicity was also observed in the F1 and F2 offspring at doses of 200 ppm and greater.

MUTAGENICITY: Flumioxazin Technical was not mutagenic in most *in vitro* assays: gene mutation and a chromosome aberration assay in the absence of metabolic activation. In three *in vivo* assays, chromosome aberration, unscheduled DNA synthesis and micronucleus assay, Flumioxazin Technical was not mutagenic. The only positive response was observed in the *in vitro* chromosome aberration assay in the presence of metabolic activation. Overall, Flumioxazin Technical does not present a genetic hazard.

For a summary of the potential for adverse health effects from exposure to this product, refer to Section 2. For information regarding regulations pertaining to this product, refer to Section 15.

12. ECOLOGICAL INFORMATION

AVIAN TOXICITY:

Based upon EPA designation, Flumioxazin Technical is practically non-toxic to avian species. The following results were obtained from studies with Flumioxazin Technical:

Oral LD₅₀ bobwhite quail: greater than 2250 mg/kg
Dietary LC₅₀ bobwhite quail: greater than 5620 ppm
Dietary LC₅₀ mallard duck: greater than 5620 ppm.

No reproductive effects were observed in bobwhite quail exposed to 500 ppm Flumioxazin Technical in the diet. In mallard ducks, a slight, but not statistically significant reduction in hatchlings and 14-day old survivors was observed. Based on a possible, slight effect on egg production at 500 ppm, the NOEL for this study was 250 ppm.

AQUATIC ORGANISM TOXICITY: Based upon EPA designation, Flumioxazin Technical is slightly to moderately toxic to freshwater fish; moderately toxic to freshwater invertebrates; moderately toxic to estuarine/marine fish and moderately to highly toxic estuarine/marine invertebrates, based on the following tests:

96-hour LC₅₀ rainbow trout: 2.3 mg/L
 96-hour LC₅₀ bluegill sunfish: greater than 21 mg/L
 48-hour LC₅₀ Daphnia magna: 5.5 mg/L
 96-hour LC₅₀ sheepshead minnow: greater than 4.7 mg/L
 96-hour (shell deposition) EC₅₀ eastern oyster: 2.8 mg/L
 96-hour LC₅₀ mysid shrimp: 0.23 mg/L
 Fish early life-stage (rainbow trout): MATC >7.7 µg/L, <16 µg/L
 Chronic toxicity (mysid shrimp): MATC >15 µg/L, <27 µg/L
 Chronic toxicity (Daphnia magna): MATC >52 µg/L, <99 µg/L.

Flumioxazin Technical is practically non-toxic to bees. The acute contact LC₅₀ in bees was greater than 105 µg/bee.

13. DISPOSAL CONSIDERATIONS

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.

DISPOSAL METHODS: Check government regulations and local authorities for approved disposal of this material. Dispose in accordance with applicable laws and regulations.

14. TRANSPORT INFORMATION

UN/NA NUMBER:	Not applicable
DOT (ground) SHIPPING NAME:	Herbicide, solid, non-regulated
TECHNICAL NAME (hazardous material):	Not applicable
HAZARD CLASS:	Not applicable
PACKING GROUP:	Not applicable
DOT REPORTABLE QUANTITY (RQ):	None
REMARKS:	None
EXEMPTION REQUIREMENT:	None
EMERGENCY RESPONSE GUIDEBOOK NO.:	Not applicable
MARINE POLLUTANT:	Not applicable

15. REGULATORY INFORMATION

PESTICIDE REGULATIONS: All pesticides are governed under FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

U.S. FEDERAL REGULATIONS:

Ingredients in this product are reviewed against an inclusive list of federal regulations. Therefore, the user should consult appropriate authorities. The federal regulations reviewed include: Clean Water Act, SARA, CERCLA, RCRA, DOT and OSHA. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

SARA (311, 312):

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Immediate Health: Yes
 Chronic Health: Yes
 Fire: No
 Sudden Pressure: No
 Reactivity: No

STATE REGULATIONS:

Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities. The state regulations reviewed include: California Proposition 65, California Directors List of Hazardous Substances, Massachusetts Right to Know, Michigan Critical Materials List, New Jersey Right to Know, Pennsylvania Right to Know, Rhode Island Right to Know and the Minnesota Hazardous Substance list. For Washington State Right to Know, see Section 8 for Exposure Limit information. For Louisiana Right to Know refer to SARA information listed under U.S. Regulations above. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

Flumioxazin (2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione)

California Proposition 65 Not Listed
 NJ Right To Know Listed

Kaolin clay

MA Right To Know Listed
 PA Right To Know Listed
 RI Right To Know Listed
 MN Hazardous Substance Listed

For information regarding potential adverse health effects from exposure to this product, refer to Sections 2 and 11.

16. OTHER INFORMATION

REASON FOR ISSUE: Add EUP registration number
MSDS NO.: 0381
EPA REGISTRATION NUMBER: 59639-EUP-12
REVISION NUMBER: 2
REVISION DATE: 03/04/2009
SUPERCEDES DATE: None
RESPONSIBLE PERSON(S): Valent U.S.A. Corporation, Corporate EH&S, (925) 256-2803

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The information in this MSDS is based on data available to us as of the revision date given herein, and believed to be correct. Contact Valent U.S.A. Corporaton to confirm if you have the most current MSDS.

Judgements as to the suitability of information herein for the individual's own use or purposes are necessarily the

individual's own responsibility. Although reasonable care has been taken in the preparation of such information, Valent extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the individual's purposes or the consequences of its use.

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Emergency Telephone: (800) 892-0099
REVISION NUMBER: 2

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SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS: RedEagle International LLC
5143 S. Lakeland Drive, Suite 4
Lakeland, FL 33813

EMERGENCY TELEPHONE NUMBERS:
(800) 424-9300 (CHEMTREC, transportation and spills)
(800) 222-1222 American Association of Poison Control Centers

PRODUCT NAME: Flumioxazin 51% WDG - NonCrop
CHEMICAL NAME: 2-[7-fluoro-3,4-dihydro-3-oxo-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione

PRODUCT USE: Herbicide
PRODUCT CODE: EPA Reg. No. 85678-35

SECTION 2 - HAZARDS IDENTIFICATION SUMMARY

As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200

Light brown granule with slight odor

HEALTH HAZARDS: WARNING Suspected of damaging fertility of the unborn child. Reproductive toxicity Category 2. Harmful if swallowed, inhaled, or absorbed through the skin. Causes moderate eye irritation.

PHYSICAL HAZARDS: Thermal decomposition may release toxic and/or hazardous gases.

ENVIRONMENTAL HAZARDS: Toxic to aquatic invertebrates and non-target plants.



SECTION 3 – COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS No.
Flumioxazin	51	103361-09-7
Kaolin clay	12-17	1332-58-7
Sodium lauryl sulfate	1-4	151-21-3
Others	30-35	n/a

SECTION 4 - FIRST AID MEASURES

First Aid responders should use protective equipment in Section 8 if there is a potential for exposure to product.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF ON SKIN OR CLOTHING: 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 SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by poison control center or doctor. Do not give any liquid to a person. Do not give anything by mouth to an unconscious person.

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 a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: None

Have a product container or label with you when calling a poison control center or doctor, or going for treatment.

SECTION 5 - FIRE FIGHTING MEASURES

NFPA (National Fire Protection Association) HAZARD RATINGS

HEALTH	FLAMMABILITY	REACTIVITY
1	1	0

4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal

FLASHPOINT: Not applicable

EXTINGUISHING MEDIA: Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

FIRE AND EXPLOSION HAZARD: Can release irritating and toxic gases due to thermal decomposition or combustion.

FIRE FIGHTING INSTRUCTIONS: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Dike and collect water used to fight fire to prevent environmental damage due to run off. Minimize use of water to prevent environmental contamination.

FIRE FIGHTING EQUIPMENT: Full firefighting turn-out gear (Bunker gear) including self-contained breathing apparatus with full face piece.

SECTION 6 - ACCIDENTAL RELEASE MEASURES
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IN CASE OF SPILLS: Clean up spills immediately. Reduce airborne dust and avoid breathing dust. Wear appropriate safety equipment. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Consult Section 8 of this document for additional precautions.

SMALL SPILL: Vacuum or sweep up material and place in a container for reuse or disposal.

LARGE SPILL: Avoid creating dust cloud. Vacuum or sweep up material and place in a container for reuse or disposal. Pick up wash liquid with additional absorbent for disposal. After removal, flush contaminated area thoroughly with water.

CAUTION: Minimize use of water to prevent runoff into municipal sewers or other open bodies of water and minimize environmental contamination. Contact your State Pesticide or Environmental Control Agency, or nearest EPA Regional Office for guidance on disposal.

SECTION 7 - HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

HANDLING: Use only in a well-ventilated area. Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling concentrate. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing if pesticide gets inside clothing. Then wash thoroughly and put on clean clothing. Remove PPE after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Do not reuse container.

STORAGE: Keep pesticide in original container. Keep container tightly closed when not in use. Store in a locked storage area. Avoid cross contamination with other pesticides or fertilizers during handling and storage. Store in a cool, dry place. Do not contaminate water, feed, or food by storage and disposal. Do not store diluted spray.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS:

COMPONENT	OSHA	ACIGH
Flumioxazin	None	None
Kaolin clay	15 mg/m ³ TWA 5 mg/m ³ TWA	2 mg/m ³ TWA*
Sodium lauryl sulfate	None	None
Other	None	None

* Respirable fraction

ENGINEERING CONTROLS: Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION: Protective eyewear

SKIN PROTECTION: Long-sleeved shirt and long pants, shoes plus socks, chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.

RESPIRATOR: Normally not required. If handling in an enclosed environment where dusts or mists may exceed acceptable levels, wear NIOSH approved air-purifying respirator approved for pesticides.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light brown granule
Odor:	Slight
Melting Point:	No information available
Boiling Point:	No information available
Flash Point:	
Evaporation Rate:	No information available
Flammability:	No information available
Flammability Limits:	No information available
Vapor Pressure:	No information available
Vapor Density:	No information available
Density:	30.8 lb. cubic foot
Solubility:	Dispersible in water
Partition Coefficient:	No information available
Auto-Ignition Temperature:	No information available
Decomposition Temperature:	No information available
Viscosity:	Not applicable

* Listed density is an approximate value and does not necessarily represent that of a specific batch.

SECTION 10 - STABILITY AND REACTIVITY

PRODUCT REACTIVITY:	No information available
CHEMICAL STABILITY:	Stable under normal use and storage conditions.
HAZARDOUS REACTION/POLYMERIZATION:	Product will not undergo polymerization.
CONDITIONS TO AVOID:	Avoid heat of open flame and high temperatures. Keep containers sealed.
INCOMPATIBLE MATERIALS:	Oxidizing materials. Strong acids or bases.
HAZARDOUS DECOMPOSITION PRODUCTS:	May produce gases such as nitrogen compounds, fluorine compounds, or oxides of carbon and nitrogen.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:		EPA TOX CATEGORY
Oral LD ₅₀ (rat):	> 5,000 mg/kg	IV
Dermal LD ₅₀ (rabbit):	> 2,000 mg/kg	III
Inhalation LC ₅₀ (rat):	> 0.97 mg/l	III
Eye irritation:	Minimal – brief/minor	III
Skin irritation:	Minimal – brief/minor	IV
Sensitization (guinea pig):	Not a contact sensitizer	na
CARCINOGEN STATUS:		
OSHA:	Not listed	
NTP:	Not listed	
IARC:	Not listed	

TOXICITY OF FLUMIOXAZIN TECHNICAL:

SUBCHRONIC: Effects from Flumioxazin Technical noted in rats following subchronic exposures at high dose levels were hematotoxicity including anemia, and increases in liver, spleen, heart, kidney and thyroid weights. Effects in dogs at high dose levels included a slight prolongation in activated partial thromboplastin time, increased cholesterol and phospholipid, elevated alkaline phosphatase, increased liver weights and histological changes in the liver. The lowest no-observable-effect-level (NOEL) in subchronic studies was 30 ppm in the three-month toxicity study in rats.

CHRONIC/CARCINOGENICITY: In a one year dog feeding study, Flumioxazin Technical produced treatment-related changes in blood chemistry and increased liver weights at 100 and 1,000 mg/kg/day. Minimal treatment-related histological changes were noted in the livers of animals in the 1,000 mg/kg/day group. Based on these data the lowest no-observable-effect-level (NOEL) is 10 mg/kg/day. Dietary administration of Flumioxazin Technical over 18 months produced liver changes in mice of the 3,000 and 7,000 ppm groups. There was no evidence of any treatment-related oncogenic effect. The lowest no-observable-effect-level (NOEL) for this study is 300 ppm. Dietary administration of Flumioxazin Technical for 24 months produced anemia and chronic nephropathy in rats of the 500 and 1,000 ppm groups. The anemia lasted through the treatment period, however, it was not progressive nor aplastic in nature. No evidence of an oncogenic effect was observed. The lowest no-observable-effect-level (NOEL) for this study is 50 ppm.

DEVELOPMENTAL TOXICITY: Flumioxazin Technical produces developmental toxicity in rats in the absence of maternal toxicity at doses of 30 mg/kg/day by the oral route and 300 mg/kg/day by the dermal route. The developmental effects noted consisted primarily of decreased number of live fetuses and fetal weights, cardiovascular abnormalities, wavy ribs and decreased number of ossified sacrococcygeal vertebral bodies. The developmental lowest no-observable-effect-level (NOEL) in the rat oral and dermal developmental toxicity studies were 10 and 100 mg/kg/day, respectively. The response in rabbits was different from that in rats. No developmental toxicity was noted in rabbits at doses up to 3,000 mg/kg/day, a dose well above the maternal NOEL of 1,000 mg/kg/day. Mechanistic studies indicate that the effects seen in the rat are highly unlikely to occur in the human and that flumioxazin would not be a developmental toxicant in the human.

REPRODUCTION: Reproductive toxicity was observed in F1 males, P1 females and F1 females at 300 ppm Flumioxazin Technical, the highest dose tested and a dose that also produced signs of systemic toxicity. Toxicity was also observed in the F1 and F2 offspring at doses of 200 ppm and greater.

MUTAGENICITY: Flumioxazin Technical was not mutagenic in most *in vitro* assays: gene mutation and a chromosome aberration assay in the absence of metabolic activation. In three *in vivo* assays, chromosome aberration, unscheduled DNA synthesis and micronucleus assay, Flumioxazin Technical was not mutagenic. The only positive response was observed in the *in vitro* chromosome aberration

assay in the presence of metabolic activation. Overall, Flumioxazin Technical does not present a genetic hazard.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: 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 apply where runoff might occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when cleaning equipment or disposing of equipment wash waters or rinsate.

FATE: Degrades rapidly in soil and water. Leaching potential is low.

FISH TOXICITY: (technical)

96 hour LC₅₀, Rainbow trout – 2.3 mg/l

96 hour LC₅₀, Bluegill - > 21 mg/l

48 hour EC₅₀, Daphnia – > 6 mg/l

96 hour LC₅₀, Sheepshead Minnow - > 4.7 mg/l

96 hour LC₅₀, Mysid Shrimp – 0.23 mg./l

AVIAN TOXICITY: (technical)

Oral LD₅₀, Bobwhite quail - > 2,250 mg/kg

Dietary LC₅₀, Bobwhite quail - > 5,620 ppm

Dietary LC₅₀, Mallard duck - > 2,250 ppm

BEE TOXICITY: Contact LC₅₀ - > 105 ug/bee

SECTION 13 - DISPOSAL CONSIDERATIONS

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

PESTICIDE DISPOSAL: Excess pesticide spray, mixture, or rinsate resulting from the use of this product can be disposed of onsite according to label instructions or at an approved waste disposal facility.

Improper disposal is a violation of Federal Law.

CONTAINER DISPOSAL:

Non-refillable container: Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ 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. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. Refer to the product label for additional and complete Container Handling instructions.

SECTION 14 - TRANSPORT INFORMATION

DOT SHIPPING DESCRIPTION: Not regulated for domestic ground transport by US DOT.

ICAO/IATA: UN 3077 Environmentally Hazardous Substance, Solid, n.o.s. (Flumioxazin), 9, III, Marine Pollutant

NOTE: Single or inner packaging of less than 5 Kg net excepted from Dangerous Goods regulations – see UN Special Provision 375

IMDG: UN 3077 Environmentally Hazardous Substance, Solid, n.o.s. (Flumioxazin), 9, III, Marine Pollutant

EMS NO: F-A, S-F

SECTION 15 - REGULATORY INFORMATION

CERCLA REPORTABLE QUANTITY: None
EPA FIFRA SIGNAL WORD: CAUTION
OSHA: Reproductive Toxicity – Category II.
SARA TITLE III
311/312 HAZARD CATEGORY: Immediate health (acute), Delayed health (chronic)
313 TOXIC CHEMICALS: None
CALIFORNIA PROP 65: WARNING: Not listed.
TSCA: Exempted - solely for FIFRA regulated use.
RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing this product or derived from the product should be classified as a hazardous waste.

Kaolin clay is listed or present on TSCA, on the Right to Know list in MA, NJ, PA, RI, and on the MN Hazardous Substance lists.

SECTION 16 - OTHER INFORMATION

NFPA (National Fire Protection Association) HAZARD RATINGS

HEALTH	FLAMMABILITY	REACTIVITY
1	1	0

4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal

DISCLAIMER AND LIMITATION OF LIABILITY: The information presented herein is based on available data from reliable sources and is correct to the best of our knowledge. It does not relate to the use of such materials in combination with any other material or process. RedEagle International LLC makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. RedEagle International LLC disclaims all liability for reliance on such information. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions.

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. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. This data sheet is not a guarantee of safety. Users are responsible for insuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.

It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

PondKlear Aquatic Herbicide

Version 1.0

SDS Number: 000000035713

Revision Date: 2018.01.04

SECTION 1. IDENTIFICATION

Product name : PondKlear Aquatic Herbicide
Product code : 000000035713

Manufacturer or supplier's details

Company : Arch Chemicals, Inc.
1200 Bluegrass Lakes Parkway
Alpharetta, GA
30004
United States of America (USA)

E-mail address : sds@lonza.com
Emergency telephone number : In case of emergency call CHEMTREC US: 1-800-424-9300,
CHEMTREC WORLD-WIDE: +1-703-527-3887.

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Reproductive toxicity : Category 2

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H361 Suspected of damaging fertility or the unborn child.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
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 in accordance with local regulation.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

PondKlear Aquatic Herbicide

Version 1.0

SDS Number: 000000035713

Revision Date: 2018.01.04

Chemical nature : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (%)
2-[7-Fluoro-3-oxo-4-(prop-2-yn-1-yl)-3,4-dihydro-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione	103361-09-7	43.00 - 47.00
Propane-1,2-diol	57-55-6	5.00 - 7.00

SECTION 4. FIRST AID MEASURES

- If inhaled : Move to fresh air.
If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : Wash with water and soap as a precaution.
If on clothes, remove clothes.
In the case of skin irritation or allergic reactions see a physician.
- In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Do not induce vomiting without medical advice.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : No information available.
- Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Dry chemical
Carbon dioxide (CO₂)
Foam
Water spray
- Specific hazards during firefighting : Heating or fire can release toxic gas.
- Further information : Use water spray to cool unopened containers.
- Special protective equipment for firefighters : 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 proce- : Use personal protective equipment.

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Environmental precautions

- Air : Not applicable
- Water : If the product contaminates rivers and lakes or drains inform respective authorities.
Do not flush into surface water or sanitary sewer system.
- Soil : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid contact with skin, eyes and clothing.
Avoid inhalation of vapour or mist.
- Conditions for safe storage : Keep tightly closed in a dry and cool place.
- Materials to avoid : Refer to Section 10, "Incompatible Materials."

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Propane-1,2-diol	57-55-6	TWA (Aerosols)	10 mg/m ³	WEEL
		TWA (Aerosols)	10 mg/m ³	CAD ON OEL
		TWA (Vapor and aerosol.)	50 ppm 155 mg/m ³	CAD ON OEL

Hazardous components without workplace control parameters

Components	CAS-No.
1,2-Benzisothiazol-3(2H)-one	2634-33-5

Appropriate engineering controls

- Engineering measures** : Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection

- Remarks : Wear protective gloves.

- Eye protection : Safety glasses

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Skin and body protection	: Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: off-white, milky
Odour	: sharp
Odour Threshold	: no data available
pH	: 6.38, 1% solution
Melting point/freezing point	: no data available
Boiling point/boiling range	: no data available
Flash point	: > 212 °F
Evaporation rate	: no data available
Flammability (solid, gas)	: no data available
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: no data available
Relative vapour density	: no data available
Relative density	: 1.157
Water solubility	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Decomposition temperature	: no data available
Viscosity, dynamic	: no data available
Viscosity, kinematic	: no data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No decomposition if stored and applied as directed.
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Chemical stability	:	Stable under recommended storage conditions.
Possibility of hazardous reactions	:	Stable under recommended storage conditions. No hazards to be specially mentioned.
Conditions to avoid	:	Heat
Incompatible materials	:	Strong oxidizing agents Strong acids and strong bases
Hazardous decomposition products	:	Nitrogen oxides (NOx) Carbon oxides Other hazardous decomposition products may be formed.

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Acute oral toxicity (LD50)	:	> 5,000 mg/kg Species: Rat (female)
Acute inhalation toxicity (LC50)	:	> 2.10 mg/l Species: Rat Exposure time: 4 h
Acute dermal toxicity (LD50)	:	> 5,000 mg/kg Species: Rat

Carcinogenicity

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

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

no data available

Persistence and degradability

no data available

Bioaccumulative potential

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Components:

Propane-1,2-diol

Partition coefficient: n-octanol/water

: log Pow: -0.92

log Pow: -1.07 (20.5 °C)

pH: 6.2 - 6.4

Method: Tested according to Directive 92/69/EEC.

Mobility in soil

no data available

Other adverse effects

Ozone-Depletion Potential

: Regulation: US. EPA Clean Air Act (CAA) Section 602 Ozone-Depleting Substances (40 CFR 82, Subpt. A, App A & B)
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information

: Very toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues

: If this product becomes a waste, it will be a nonhazardous waste. As a nonhazardous liquid waste, it should be disposed of in accordance with local, state and federal regulations.

SECTION 14. TRANSPORT INFORMATION

IATA

UN number

: 3082

Proper shipping name

: Environmentally hazardous substance, liquid, n.o.s. (Flumioxazin)

Transport hazard class

: 9

Packing group

: III

Labels

: 9MI

Environmental hazards

: yes

IMDG

UN number

: 3082

Proper shipping name

: Environmentally hazardous substance, liquid, n.o.s. (Flumioxazin)

Transport hazard class

: 9

Packing group

: III

Labels

: 9

EmS Number 1

: F-A

EmS Number 2

: S-F

Environmental hazards

: Marine pollutant: yes

PondKlear Aquatic Herbicide

Version 1.0

SDS Number: 000000035713

Revision Date: 2018.01.04

ADR

UN number : 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S.
(Flumioxazin)
Transport hazard class : 9
Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9
Environmental hazards : yes

RID

UN number : 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S.
(Flumioxazin)
Transport hazard class : 9
Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9
Environmental hazards : yes

DOT

UN number : 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(Flumioxazin)
Transport hazard class : 9
Packing group : III
Labels : 9
**Emergency Response Guidebook
Number** : 171
Environmental hazards : yes

TDG

UN number : 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S.
(Flumioxazin)
Transport hazard class : 9
Packing group : III
Labels : 9
Environmental hazards : yes

Special precautions for user : none

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable

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SECTION 15. REGULATORY INFORMATION

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals.

Signal word	:	CAUTION!
Hazard statements	:	Harmful if inhaled. Harmful if absorbed through skin. Causes moderate eye irritation.
EPA No.	:	8959-61

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards

See above: SECTION 2. Hazard Identification-GHS Classification

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489):

Components	CAS-No.	Concentration
Propane-1,2-diol	57-55-6	5 - 7 %

Clean Water Act

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

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This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations**Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Components	CAS-No.
2-[7-Fluoro-3-oxo-4-(prop-2-yn-1-yl)-3,4-dihydro-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione	103361-09-7
Water	7732-18-5
Propane-1,2-diol	57-55-6

New Jersey Right To Know

Components	CAS-No.
2-[7-Fluoro-3-oxo-4-(prop-2-yn-1-yl)-3,4-dihydro-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione	103361-09-7
Water	7732-18-5
Propane-1,2-diol	57-55-6

New York City Hazardous Substances

No components listed on the New York City Hazardous Substances List

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

Arch is a wholly-owned subsidiary of Lonza and continues to operate as Arch Chemicals, Inc.

Revision Date : 2018.01.04

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.

