

# Safety Data Sheet

## ZIDUA

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(30525751/SDS\_CPA\_US/EN)

### 1. Product and Company Identification

Company

BASF CORPORATION  
100 Campus Drive  
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300  
BASF HOTLINE: 1-800-832-HELP

Substance number: 000000275308  
Synonyms: pyroxasulfone

### 2. Hazards Identification

Emergency overview

CAUTION:  
KEEP OUT OF REACH OF CHILDREN.  
HARMFUL IF SWALLOWED.  
HARMFUL IF ABSORBED THROUGH SKIN.  
Avoid contact with the skin, eyes and clothing.  
Wash thoroughly after handling.

See Product Label for additional precautionary statements.

State of matter: solid  
Colour: light brown  
Odour: characteristic

Potential health effects**Primary routes of exposure:**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

**Acute toxicity:**

Slightly toxic after single ingestion. Slightly toxic after short-term skin contact. Relatively nontoxic after short-term inhalation.

**Irritation / corrosion:**

May cause slight irritation to the skin. May cause moderate but temporary irritation to the eyes.

**Sensitization:**

Skin sensitizing effects were not observed in animal studies.

Potential environmental effects

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**Aquatic toxicity:**

Acutely toxic for fish. Acutely toxic for aquatic invertebrates. Very toxic (acute effect) to aquatic plants.

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### 3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
447399-55-5	85.0 %	Pyroxasulfone
	15.0 %	Proprietary ingredients

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### 4. First-Aid Measures

**General advice:**

Avoid contact with the skin, eyes and clothing. Remove contaminated clothing. If difficulties occur: Obtain medical attention. Show container, label and/or safety data sheet to physician.

**If inhaled:**

Keep patient calm, remove to fresh air, seek medical attention.

**If on skin:**

After contact with skin, wash immediately with plenty of water and soap. If irritation develops, seek medical attention.

**If in eyes:**

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

**If swallowed:**

Rinse mouth immediately and then drink plenty of water, seek medical attention.

Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

**Note to physician**

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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### 5. Fire-Fighting Measures

Flash point: not applicable  
Self-ignition temperature: No data available.

**Suitable extinguishing media:**

water spray, foam, dry powder

**Unsuitable extinguishing media for safety reasons:**

water jet, carbon dioxide

**Hazards during fire-fighting:**

carbon monoxide, carbon dioxide, nitrogen oxides  
The substances/groups of substances mentioned can be released in case of fire.

**Protective equipment for fire-fighting:**

Wear self-contained breathing apparatus and chemical-protective clothing.

**Further information:**

Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

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### 6. Accidental release measures

**Personal precautions:**

Take appropriate protective measures. Clear area. Ensure adequate ventilation.

Avoid dust formation. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

**Environmental precautions:**

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

**Cleanup:**

Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

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### 7. Handling and Storage

**Handling**

**General advice:**

RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Ensure adequate ventilation. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect contents from the effects of light. Protect against heat. Protect from air. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Avoid aerosol formation. Avoid dust formation. Provide means for controlling leaks and spills. Do not return residues to the storage containers. Follow label warnings even after container is emptied. The substance/product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment.

**Protection against fire and explosion:**

The relevant fire protection measures should be noted. Avoid extreme heat. Keep away from oxidizable substances. Electrical equipment should conform to national electric code. Ground all transfer equipment properly to prevent electrostatic discharge.

**Avoid dust formation. Dust can form an explosive mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.**

**Storage**

**General advice:**

Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed.

**Storage incompatibility:**

General advice: Segregate from foods and animal feeds.

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### 8. Exposure Controls and Personal Protection

**Users of a pesticidal product should refer to the product label for personal protective equipment requirements.**

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### Advice on system design:

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

### Personal protective equipment

#### RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

#### Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

#### Hand protection:

Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

#### Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

#### Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

#### General safety and hygiene measures:

Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Store work clothing separately. Keep separated from food stuffs and feed stocks.

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## 9. Physical and Chemical Properties

Form:	solid, granules	
Odour:	characteristic	
Colour:	light brown	
pH value:	9.5	
Melting point:	130.7 °C	
Bulk density:	1.60 g/cm <sup>3</sup>	
Vapour density:		not determined
Partitioning coefficient n-octanol/water (log Pow):		not applicable
Viscosity, dynamic:		not applicable
Particle size:	D50 3.3 µm D90 6.4 µm	
Solubility in water:		dispersible

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## 10. Stability and Reactivity

### Conditions to avoid:

Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme temperatures. Avoid prolonged exposure to extreme heat. Avoid contamination. Avoid electro-static discharge. Avoid prolonged storage. This product may form an explosive mixture if: 1. the dust is suspended in the atmosphere as a dust cloud AND 2. the concentration of the dust is above the lower explosion limit (LEL) AND 3. the limiting oxygen concentration (LOC) is exceeded.

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**Substances to avoid:**

strong acids, strong bases, strong oxidizing agents

**Hazardous reactions:**

The product is chemically stable.

Hazardous polymerization will not occur. No hazardous reactions if stored and handled as prescribed/indicated.

**Decomposition products:**

No hazardous decomposition products if stored and handled as prescribed/indicated., Prolonged thermal loading can result in products of degradation being given off.

**Thermal decomposition:**

Possible thermal decomposition products:

carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide

Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released. To avoid thermal decomposition, do not overheat.

**Corrosion to metals:**

No data available.

**Oxidizing properties:**

Not an oxidizer.

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## 11. Toxicological information

**Acute toxicity****Oral:**

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg

**Inhalation:**

Type of value: LC50

Species: rat

Value: > 5.8 mg/l

Exposure time: 4 h

**Dermal:**

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg

**Irritation / corrosion****Skin:**

Species: rabbit

Result: mildly irritating

**Eye:**

Species: rabbit

Result: moderately irritating

**Sensitization:**

Species: guinea pig

Result: sensitizing

**Genetic toxicity**

*Information on: Pyroxasulfone*

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*Results from a number of mutagenicity studies with microorganisms, mammalian cell culture and mammals are available. Taking into account all of the information, there is no indication that the substance is mutagenic.*

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### **Carcinogenicity**

*Information on: Pyroxasulfone*  
*When given in high doses, the substance was carcinogenic in animal studies. Based on its mechanism of action, a carcinogenic potential is not expected after exposure to low doses.*

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### **Reproductive toxicity**

*Information on: Pyroxasulfone*  
*The results of animal studies gave no indication of a fertility impairing effect.*

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### **Other Information:**

Misuse can be harmful to health.

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## **12. Ecological Information**

### **Fish**

*Information on: Pyroxasulfone*  
*Acute:*  
*Oncorhynchus mykiss/LC50 (96 h): > 2.2 mg/l*

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### **Aquatic invertebrates**

*Information on: Pyroxasulfone*  
*Acute:*  
*daphnia/EC50 (48 h): > 4.4 mg/l*

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### **Aquatic plants**

*Information on: Pyroxasulfone*  
*Toxicity to aquatic plants:*  
*algae/EC50 (72 h): 0.00079 mg/l*

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### **Non-Mammals**

*Information on: Pyroxasulfone*  
*Other terrestrial non-mammals:*  
*bobwhite quail/LD50: > 2,250 mg/kg*

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### **Soil living organisms**

*Information on: Pyroxasulfone*  
*Toxicity to soil dwelling organisms:*  
*Eisenia foetida/LC50 (14 d): > 997 mg/kg*

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### **Other adverse effects:**

Do not discharge product into the environment without control.

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### 13. Disposal considerations

**Waste disposal of substance:**

Pesticide wastes are regulated. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Container disposal:**

Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

**RCRA:**

The waste codes are manufacturer's recommendations based on the designated use of the product. Other use and special waste disposal treatment on customer's location may require different waste-code assignments. This product is not regulated by RCRA.

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### 14. Transport Information

**Land transport**

USDOT

Not classified as a dangerous good under transport regulations

**Sea transport**

IMDG

Hazard class: 9  
Packing group: III  
ID number: UN 3077  
Hazard label: 9, EHSM  
Marine pollutant: YES  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(contains PYROXASULFONE)

**Air transport**

IATA/ICAO

Hazard class: 9  
Packing group: III  
ID number: UN 3077  
Hazard label: 9, EHSM  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(contains PYROXASULFONE)

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### 15. Regulatory Information

**Federal Regulations****Registration status:**

Chemical	TSCA, US	blocked / not listed
Crop Protection	TSCA, US	released / exempt

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EPCRA 311/312 (Hazard categories):

Acute; Chronic

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### 16. Other Information

**Refer to product label for EPA registration number.**

Recommended use: crop protection product herbicide

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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**MSDS Prepared by:**

BASF NA Product Regulations

msds@basf.com

MSDS Prepared on: 2012/03/20

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