



## Material Safety Data Sheet Pinoxaden 5% EC

### 1. PRODUCT IDENTIFICATION

Product Name: Pinoxaden 5% EC  
 Common Name: Pinoxaden  
 Chemical Family: Phenylpyrazoline  
 Chemical Formula: C<sub>23</sub>H<sub>32</sub>N<sub>2</sub>O<sub>4</sub>  
 Chemical Name: 8-(2,6-diethyl -*p*-tolyl) -1,2,4,5-tetrahydro -7-oxo -7*H*-pyrazolo [1,2-*d*] [1,4,5] oxadiazepin-9-yl 2,2-dimethylpropionate  
 CAS No.: 243973-20-8  
 Product Use: Herbicide

### 2. COMPANY IDENTIFICATION:

**Exporter:**

CHICO CROP SCIENCE CO., LTD.

Add: Rm 903, Unit C, Tian An International Bldg., Renmin South Rd.,  
 Shenzhen, China.

Tel: 86-755-22969199 Fax: 86-755-25919993

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| <u>Ingredient Name</u> | <u>CAS Registry Number</u> | <u>Typical Wt. w/w</u> |
|------------------------|----------------------------|------------------------|
| Pinoxaden              | 243973-20-8                | 5%                     |
| Inert                  | ---                        | to balance             |

### 4. HAZARDS IDENTIFICATION

**Emergency Overview**

Light yellow transparent liquid.

CAUTION!

KEEP OUT OF REACH OF CHILDREN

MAY CAUSED SKIN SLIGHT IRRITATION

MAY CAUSED EYE SLIGHT IRRITATION

**Potential Health effects**

Dermal contact, ingest and inhalation of the product are the primary routes to induce potential adverse health effects. Inhalation of aerosol during application of the product as part of its end

use is another potential route of entry. Eye and skin irritation may occur from contact with the liquid or spray mixture.

## 5. FIRST AID MEASURES

If swallowed: People who take it by mistake drink plenty of warm water to induce vomiting. Never give anything by mouth to an unconscious person. Should be send to the hospital treatment immediately.

If in eye: Immediately rinse eyes with a large amount of running water. Hold eyelids apart to rinse. Consult a doctor.

If on skin: Wash with plenty of soap and water, including hair and under fingernails. Do not apply any medicating agents except on the advice of a physician. Remove contaminated clothing and decontaminate prior to use.

If Inhaled: Move victim from contaminated area to fresh air. Apply artificial respiration if necessary.

Notes to Physician:

There is no specific antidote, Treat symptomatically.

## 6. FIRE FIGHTING MEASURES

### Fire and explosive Properties

|                           |                |
|---------------------------|----------------|
| Auto-Ignition Temperature | Not applicable |
| Flash Point               | Not available  |

### Extinguishing Media

Water fog, Carbon Dioxide, Dry Chemical, Foam.

### Fire Fighting Instructions

The product is not flammable. If firing, fire fighters and others who may be exposed to products of combustion should wear full firefighting turn out gear and self-contained breathing apparatus. Firefighting equipment should be thoroughly decontaminated after use. Person who may have been exposed to contaminated smoke should be immediately examined by a

physician and checked for symptoms of poisoning. The symptoms should not be mistaken for heat exhaustion or smoke inhalation.

## 7. ACCIDENTAL RELEASE MEASURES

### **In Case of Spill or Leak**

Stop the leak, if possible. Ventilate the space involved. Absorb, sweep up, place in container for disposal. Shut off or remove all ignition sources. Prevent waterway contamination. Construct a dike to prevent spreading. Protect works with water spray. Collect run-off water and transfer to drums or tanks for later disposal.

## 8. HANDLING AND STORAGE

### **Handling**

Harmful if swallowed, inhaled, or absorbed through the skin. Causes eye irritation. Do not breathe gas or allow to get in eyes, on skin, or on clothing. Wash hands, arm and face thoroughly with soap and warm water after use and before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse. Do not contaminate feed or food items. Keep out of reach of children.

### **Storage**

Store in a cool dry and air ventilating warehouse and protected from light. Avoid contacting with food, feed stuff and seed.

## 9. EXPOSURE CONTROLS/PERSONAL PROTECTION

### **Eye/Face Protection**

Goggles and full-face shield should be used when needed to prevent liquid from face and getting into the eyes.

### **Skin Protection**

Avoid skin contact. Use chemical-resistant gloves, and wear long sleeves and trousers to prevent dermal exposure.

### **Respiratory Protection**

Under normal handling conditions no respiratory protection is needed. However, if needed to prevent respiratory irritation, either a respirator approved for dusts and mists, or one approved for pesticides.

## 10. PHYSICAL AND CHEMICAL PROPERTIES

|                                 |   |
|---------------------------------|---|
| Color:                          | Light yellow  |
| Physical state:                 | Liquid  |
| Odor:                           | No obvious odor   |
| pH:                             | 4.0-7.0   |
| Melting point:                  | 120.5–121.6 °C  |
| Boiling point:                  | N/A.  |
| Vapor pressure:                 | $2.0 \times 10^{-4}$ mPa (20 °C); $4.6 \times 10^{-4}$ mPa (25 °C)  |
| Solubility in water:            | In water 200 mg/l (25 °C).  |
| Solubility in organic solvents: | In acetone 250, dichloromethane >500, ethyl acetate 130, hexane 1.0, methanol 260, octanol 140, toluene 130 (all in g/l). |
| Partition coefficient:          | $K_{ow} \log P = 3.2$ (25 °C)   |

## 11. STABILITY AND REACTIVITY

### Stability

Aqueous hydrolysis DT<sub>50</sub> 24.1 d (pH 4), 25.3 d (pH 5), 14.9 d (pH 7), 0.3 d (pH 9) (20 °C).

### Hazardous Polymerization

Does not occur.

### Incompatibility

The product is not compatible with strong oxide agents.

### Hazardous Decomposition Products

Not available.

## 12. TOXICOLOGICAL INFORMATION

|                           |   |
|---------------------------|---|
| <b>Acute Oral:</b>        | Acute oral LD <sub>50</sub> for rats >5000 mg/kg.                                   |
| <b>Acute Dermal:</b>      | Acute percutaneous LD <sub>50</sub> for rats >2000 mg/kg.                           |
| <b>Irritation:</b>        | A.i. is not a skin irritant; irritating to eyes (rabbits).                          |
| <b>Sensitization:</b>     | Not a skin sensitizer (guinea pigs).  |
| <b>Long-term Studies:</b> | Studies showed no evidence of carcinogenicity and mutagenicity to rats and rabbits. |

## 13. ECOLOGICAL INFORMATION

### Ecotoxicological Information

Effects on Birds: Acute oral LD<sub>50</sub> for bobwhite quail >2250 mg/kg b.w. Dietary LC<sub>50</sub> (5d) for bobwhite quail and mallard ducks >5620 mg/kg diet.

Effects on Fish: Acute LC<sub>50</sub> (96 h) for rainbow trout 10.3, fathead minnows 20 mg/l.  
Effects on Daphnia: Acute LC<sub>50</sub> (48 h) 52 mg/l.  
Effects on Algae: LC<sub>50</sub> (72 h, biomass) for *Selenastrum* 16 mg/l; LC<sub>50</sub> (96 h, biomass) for *Anabaena* 5.0 mg/l.  
Effects on Bees: LD<sub>50</sub> (oral) >200 µg/bee; (contact) >100 µg/bee.

## Chemical Fate Information

Animals: Parent pinoxaden is rapidly metabolized, DT<sub>50</sub> <1 d. Excretion is very fast.

Plants: Parent pinoxaden is rapidly degraded, DT<sub>50</sub> <1 d.

Soil/Environment: Degrades quickly, DT<sub>50</sub> <1 d. Pinoxaden and its degradation products are not persistent and do not accumulate in soil. K<sub>oc</sub> 121–852 ml/g (median 323, 9 soils). It does not leach into groundwater.

## 14. DISPOSAL CONSIDERATIONS

### Waste Disposal

Pesticide wastes are acutely hazardous. Do not reuse product containers. Dispose product containers, waste containers, residues according local health and environmental regulations.

## 15. TRANSPORT INFORMATION

UN number: 3082.

Class and subsidiary risk: 9

Packing group: III

## 16. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

## 17. OTHER INFORMATION

The information contained herein relates only to the specific material identified. We believe that such information is accurate and reliable as of the date of this material safety data sheet, but no representation, guarantee or warranty, express or implied, is made as to the reliability or completeness of the information. Urge persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.

Chico Crop Science Co., Ltd.