

# SAFETY DATA SHEET

## QUALI-PRO PRODOXABEN 3.7 SC

### 1. IDENTIFICATION

Product name: **QUALI-PRO PRODOXABEN 3.7 SC**  
 Product type: Herbicide  
 EPA Registration No.: 53883-325  
 Chemical name of active ingredient(s): **Prodiamine:** N<sup>3</sup>,N<sup>3</sup>-dipropyl-6-(trifluoromethyl)-1,3-benzenediamine  
**Isoxaben:** N-[3-(1-ethyl-1-methylpropyl)-5-isoxazolyl]-2,6-dimethoxybenzamide and isomers

Manufacturer/Registrant: Control Solutions, Inc.  
 5903 Genoa-Red Bluff  
 Pasadena, TX 77507

For fire, spill, and/or leak emergencies, contact Chemtrec: Phone: 1-800-424-9300  
 For medical emergencies and health and safety inquiries, contact Safety Call: Phone: 1-866-897-8050  
 Poison Control Center Phone: 1-800-222-1222

### 2. HAZARDS IDENTIFICATIONS

#### OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

#### Acute Toxicity:

	Acute oral	Acute dermal	Acute inhalation	Eye irritation	Skin irritation	Skin Sensitization
<b>Category</b>	NC	NC	Category 4	NC	NC	NC

NC: Not classified

**SIGNAL WORD:** WARNING

#### HAZARD STATEMENTS:

- Harmful if inhaled
- Suspected of causing cancer (Category 2)

#### PICTOGRAMS:



#### PRECAUTIONARY STATEMENTS:

- Avoid breathing vapors and spray. Use only outdoors or in a well-ventilated area. If inhaled: Remove victim to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
- Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing, eye and face protection. If exposed or concerned: get medical advice. Store locked up.

Contact Safety Call<sup>®</sup> International for emergency medical treatment at (866) 897-8050.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS NO.	%	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA (Carcinogen)
Prodiamine	29091-21-2	23.3	NE	NE	NE	NA
Isoxaben	82558-50-7	15.5	NE	NE	NE	NA
Propylene glycol	57-55-6	5.0	NE	NE	10 mg/m <sup>3</sup> (TWA)*	NA

NE=Not established; NA=Not applicable.

\*Recommended by AIHA (American Industrial Hygiene Association)

### 4. FIRST AID MEASURES

FIRST AID	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continuing rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall<sup>®</sup> at (866) 897-8050 for emergency medical treatment information.</p>	

### 5. FIRE FIGHTING MEASURES

**FLASH POINT:** Not applicable

**FLAMMABLE LIMITS:** Not applicable

**EXTINGUISHING MEDIA:** Water spray, CO<sub>2</sub>, foam, dry powder.

**FIRE & EXPLOSION HAZARDS:** Pesticide fires have potential to emit hazardous gases such as carbon monoxide, carbon dioxide, hydrogen fluoride, hydrogen chloride, nitrogen oxides, and sulfur oxides. If product is heated above decomposition temperature, toxic vapours will be released.

**FIRE-FIGHTING PROCEDURES:** Isolate fire area and evacuate downwind. DO NOT breathe gases, smoke or vapors generated. Wear self-contained breathing apparatus and full-protective clothing.

**HAZARDOUS DECOMPOSITION PRODUCTS:** May release irritating and toxic gases due to thermal decomposition.

### 6. ACCIDENTAL RELEASE MEASURES

**ACTION TO TAKE FOR SPILLS/LEAKS:** Take appropriate protective measures. Wear positive pressure self-contained breathing apparatus. Clear area. Dike spillage. Do not touch or walk through spilled material. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Take up with sand or other non-combustible

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absorbent material and place into containers for later disposal. Prevent entry into waterways, sewers, basements or confined areas.

### 7. HANDLING AND STORAGE

**PRECAUTIONS TO BE TAKEN IN HANDLING:** Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Carefully open containers and after partial use close container tightly. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

**PRECAUTIONS TO BE TAKEN IN STORAGE:** Store in original container in dry area. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. If spilled during storage or handling, absorb with sand or other inert material and dispose of absorbent in accordance with the Pesticide Disposal instructions listed below.

**STORAGE TEMPERATURE (MIN/MAX):** Normal ambient temperatures.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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

**HAND PROTECTION:** Chemical-resistant gloves.

**SKIN PROTECTION:** Long-sleeve shirt, long pants, shoes plus socks.

**EYE PROTECTION:** Protective eyewear or chemical safety glasses with side shields or chemical goggles when working in non-ventilated spaces.

**RESPIRATOR REQUIREMENTS:** Not usually required. If handling without sufficient ventilation, wear a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C0 or a NIOSH approved respirator with any N, R, P or HE class filter.

**VENTILATION:** Whenever possible, adequate ventilation should be used to minimize the need for personal protective equipment.

**ADDITIONAL PROTECTIVE MEASURES:**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**USER SAFETY RECOMMENDATIONS:**

**Users Should:**

- 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.
- After handling this product immediately remove PPE, wash yourself thoroughly and change into clean clothing.

**EXPOSURE GUIDELINES:** Refer to Section 3.

**ENGINEERING CONTROLS:** Refer to product label.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Yellow, opaque liquid

**ODOR:** Mild

**pH:** 7.08 (1% solution in water)

**FLASH POINT:** Not applicable

**DENSITY:** 1.138 g/cm<sup>3</sup> (9.50 lbs./gal) @24°C

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### 10. STABILITY AND REACTIVITY

**STABILITY:** Stable under normal conditions.

**CONDITIONS TO AVOID:** Strong oxidizing agents. Avoid excessive heat.

**HAZARDOUS DECOMPOSITION PRODUCTS:** May release irritating and toxic gases due to thermal decomposition.

**HAZARDOUS POLYMERIZATION:** Will not occur.

### 11. TOXICOLOGICAL INFORMATION

#### ACUTE TOXICITY/IRRITATION STUDIES:

Acute Oral LD<sub>50</sub> (Rat): > 5,000 mg/kg

Acute Dermal LD<sub>50</sub> (Rat): > 5,050 mg/kg

Acute Inhalation LC<sub>50</sub> (Rat): > 2.19 mg/L/4 hr.

Eye Irritation (Rabbit): Mildly irritating

Skin Irritation (Rabbit): Non-irritating

Dermal Sensitization (Guinea pig): Not a skin sensitizer

#### REPRODUCTIVE/DEVELOPMENT EFFECTS:

Prodiamine: Fetal toxicity at high dose levels (rats); development and maternal toxicity observed at 1,000 mg/kg/day.

Isoxaben: No developmental or maternal toxicity was observed in either species at doses up to the limit dose of 1000 mg/kg/day. Isoxaben has been shown to interfere with reproduction in animal studies.

#### CHRONIC/SUBCHRONIC TOXICITY STUDIES:

Prodiamine: Liver (alteration and enlargement) and thyroid effects (hormone imbalances) at high dose levels (rats); decreased body weight gains.

Isoxaben: No toxicity was observed in subchronic oral or dermal studies. The liver and kidney were target organs in chronic studies. Significant liver toxicity was seen in mice but was limited to adaptive (non-adverse) changes in rats and dogs.

#### CARCINOGENICITY:

Prodiamine: Benign thyroid tumors (rat). None observed (mouse). EPA classified prodiamine as Group C – Possible human carcinogen (1991).

Isoxaben: An increase in non-malignant liver tumors was observed with isoxaben in one of two species tested. EPA classified Isoxaben as "Suggestive Evidence of Carcinogenic Potential (2005)".

#### MUTAGENICITY:

Prodiamine: No mutagenic activity in general.

Isoxaben: In-vitro and animal genetic toxicity studies were negative.

#### TARGET ORGANS:

Prodiamine: Liver and thyroid

Isoxaben: Liver and kidney

### 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL HAZARDS:** This product has low solubility in water. At the limit of solubility, this product is not toxic to fish. However, at concentrations substantially above the level of water solubility, it may be toxic to fish. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Do not contaminate water when disposing of equipment wash water.

#### ECO-ACUTE TOXICITY:

Prodiamine:

Rainbow Trout 96-hour LC<sub>50</sub>: 0.83 ppm

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Bluegill Sunfish 96-hour LC<sub>50</sub>: 0.55 ppm  
*Daphnia magna* 48-hour LC<sub>50</sub>: 0.66 ppm  
Bobwhite quail 8-day Dietary LC<sub>50</sub>: >10,000 ppm  
Mallard duck 8-day Dietary LC<sub>50</sub>: >10,000 ppm  
Bees LC<sub>50</sub>/EC<sub>50</sub>: >100 ug/bee

### Isoxaben:

Rainbow trout and Bluegill sunfish LC<sub>50</sub>: > 1.1 mg/l  
*Daphnia magna* 48-hour LC<sub>50</sub>: > 1.3 mg/L  
Bobwhite quail LD<sub>50</sub>: > 2,000 mg/kg  
Mallard duck and Bobwhite quail dietary 5-day LC<sub>50</sub>: > 5,000 mg/kg (dietary)  
Algae (*Selenastrum capricornutum*) EC<sub>50</sub> 14-day: > 1.4 mg/L  
Bees No significant hazard to bees under field conditions LD<sub>50</sub> >100 µg/bee  
Worms NOEC 14-day: > 500 mg/kg dry soil

### ENVIRONMENTAL FATE:

Prodiamine: Does not bioaccumulate. Persistent in soil. Stable in water. Immobile in soil. Sinks in water (after 24 hours).

Isoxaben: Bioconcentration potential is low (BCF < 100 or Log P<sub>ow</sub><3). The photolysis half-life in water is 6 days and is 248 days in soil. Under aerobic soil conditions the half-life is 4.3-10.6 months.

## 13. DISPOSAL CONSIDERATIONS

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. Dispose of excess or waste pesticide by use according to label directions, or contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

## 14. TRANSPORT INFORMATION

### Ground Domestic (DOT):

Not regulated.

**Vessel (IMDG):** UN3082, Environmentally Hazardous substances, liquid, n.o.s. (Prodiamine), 9, PGIII, Marine Pollutant

**Air (IATA):** UN3082, Environmentally Hazardous substances, liquid, n.o.s. (Prodiamine), 9, PGIII

## 15. REGULATORY INFORMATION

### FIFRA INFORMATION:

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 for safety data sheet, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

**CAUTION** May be harmful if swallowed, absorbed through skin, or inhaled. Avoid breathing vapor. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

### SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.  
Section 311/312: Acute health hazard (immediate)  
Chronic health hazard (delayed)  
Section 313: Not applicable

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**CA PROPOSITION 65:** Not applicable

**CERCLA RQ:** Not applicable

**RCRA CLASSIFICATION:** Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

**TSCA STATUS:** The ingredients of this product are listed on the TSCA inventory or are exempt.

### 16. OTHER INFORMATION

HAZARD RATINGS	NFPA	HMIS	
HEALTH:	1	1	0 MINIMAL
FLAMMABILITY:	1	1	1 SLIGHT
REACTIVITY:	0	0	2 MODERATE
			3 HIGH
			4 SEVERE

**MSDS DATE:** 3-22-2013.

The information and recommendations contained herein are based upon data believed to be correct. However, no warranty of any kind, expressed or implied, is made with respect to the information contained herein.