



SAFETY DATA SHEET



PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SHAKIRA

ACTIVE: PROPYZAMIDE 400G/L SC

REGISTRATION HOLDER: HARVEST CROP SOLUTIONS (PTY) LTD.

DISTRIBUTOR: HARVEST CHEMICALS (PTY) LTD.

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1. CHEMICAL PRODUCT

Common Name: Propyzamide 400g/ℓ SC

Chemical name: 3,5-dichloro-N-(1,1-dimethylpropynyl) benzamide (IUPAC)

CAS No: 23950-58-5 Formula: $C_{12}H_{11}C1_2NO$ Activity: herbicide

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components MaterialCAS No.Content (g/ ℓ)Propyzamide23950-58-5400.0 g/ ℓ minInert ingredientsUp to 1 ℓ

3. HAZARDS IDENTIFICATION

Potential Acute Health Effects:

There is evidence of a possible carcinogenic effect. Possible mild eye irritation.

Potential Chronic Health Effects:

There is no evidence of adverse effects on reproduction, fertility, teratogenicity or mutagenicity. It is not a neurotoxin, respiratory toxin or a cholinesterase inhibitor.

4. FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact: In case of contact, rinse the skin with plenty of soap and water and remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything mouth to mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Note to Physician: There is no known antidote. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flammability of the Product: Not flammable under normal use conditions.

Flash points: Closed Cup: 141°C (285.8°F). (Setaflash)

Flammable Limits: LFL: Not flammable under normal use conditions.

UFL: Not flammable under normal use conditions.

Products of Combustion: These are carbon oxides (CO₂, CO), hydrogen chloride, nitrogen oxides.

Fire Hazards in Presence of Various Substances: Inflammable; container may be flammable. Smoke may contain products that are toxic or irritating.

Explosion Hazards in Presence of Various Substances: Not explosive.

Fire Fighting Media and Instructions: Use dry chemical powder, CO₂, fine water spray, fog or foam.

Do not use water jet.

Special Remarks on Fire Hazards: When heated to decomposition it emits toxic fumes of hydrogen chloride, and nitrogen oxides.

Fire Fighting Equipment: Wear personal protective clothing and a self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Equipment: Wear appropriate personal protective clothing (boots, overall, gloves, face mask). **Small Spill:** Absorb the spilled product with sand, soil or sawdust. Use appropriate tools to put the spilled liquid in a labelled waste disposal container.

Large Spill: Dyke the area to prevent the spillage spread. Stop leak if without risk. Prevent entry into sewers, drains, water courses, basements or confined areas. Absorb the spilled product with sand, soil or sawdust. Use appropriate tools to put the spilled liquid in a labelled waste disposal container. Dispose of a hazardous waste.

7. HANDLING AND STORAGE

Precautions: Store away from heat. Wear suitable protective clothing when handling the concentrate.

In case of insufficient ventilation, wear suitable respiratory equipment. Keep away from incompatibles such as oxidising agents, reducing agents, metals, acids, alkalis.

Storage: Keep the product in the original labelled container tightly closed. Store in a cool, well-ventilated area away from sunlight and moisture. Do not store with food, feedstuffs, fertiliser and seeds.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Wear eye protection and where eye contact with liquid is possible, wear chemical goggles. Wear full personal protective clothing (overall, boots, chemical gloves). If dust is present use an approved/certified respirator or equivalent. Suggested protective clothing might not be sufficient, consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 2 (9mg/m³) [Canada] TWA: 2 (mg/m³) from ACGIH (TLV) [United States]

TWA: 2 (mg/m³) from NIOSH [United States]

TWA: 2 (mg/m³) from OSHA (PEL) [United States] TWA: 2 (mg/m³) [France]

TWA:2 (mg/m³) [Belgium] TWA: 2 (mg/m³)

[Switzerland] TWA: 2 (mg/m³) [United Kingdom (UK)] 3 consult local authorities for acceptable exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance: White liquid.

Specific gravity: 1.120 g/cm³ at 25°C

Behaviour in water: Soluble

PH: 4-6

10. STABILITY AND REACTIVITY

Stability: The product is stable under normal storage and use conditions.

Conditions of Instability: Avoid strong acids and alkalis.

Incompatibility with various substances: Reactive with oxidizing agents, reducing agents, metals, acids, alkalis.

Corrosivity: Non-corrosive.

Polymerization: Will not occur if stored at temperatures below 25°C. However it will occur at higher temperatures above 40°C.

11. TOXICOLOGICAL INFORMATION

Routes of Entry: Prolonged exposure to skin is unlikely to result in absorption.

Eye contact, inhalation and ingestion.

Oral LD50: 5620-8350 mg/kg (a.i.)

Dermal L D₅₀: 3160mg/kg (a.i)

Inhalation: L D_{50:} >5.0mg/L

Skin irritation: Non-irritant and may cause slight skin irritation.

Eye irritation: May cause slight eye irritation.

Carcinogenicity: Propyzamide is a possible carcinogen.

Propyzamide is not a reproductive, developmental, teratogenic, mutagenic or neuro-toxin.

12. ECOLOGICAL AND ECOTOXICOLOGICAL INFORMATION

Soil: Propyzamide is stable in soil that is high in clay and organic matter. It is slightly mobile in soil.

Water: Propyzamide is not likely to contaminate ground water.

Degradation: The DT₅₀ is approximately 30 days in soil and water (range 18-85).

Birds and Bees: Propyzamide is practically non-toxic to birds and bees.

Aquatic Organisms: Propyzamide is toxic to fish and aquatic organisms and highly toxic to aquatic plants.

Bioconcentration: Propyzamide has a low potential to bioconcentrate.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Do not contaminate any water body, drains or sewerage.

Empty containers must be triple rinsed and offered for recycling or disposal in an approved site.

Waste must be disposed of in accordance with national and local environmental control regulations.

14. TRANSPORT INFORMATION

Road and Rail Classification: Not classified as dangerous goods.

Air and Sea Transport Classification: Dangerous goods in accordance with International Maritime

Dangerous Goods (IMDG) and International Air Transport Association (IATA)

UN No.: 3082

Class: 9

Packing Group: III

Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S., (Propyzamide) Marine

Pollutant.

15. REGULATORY INFORMATION

Hazard Symbol: N – Dangerous for the environment.

Risk Phrases: R40 – Limited evidence of carcinogenic effect.

R50/53 – Toxic to aquatic organisms, may cause a long term effect.

Safety Phrases: S35 – The material and container must be disposed of in a safe way.

S36/37 – Wear suitable protective clothing and gloves.

S57 – Use appropriate containment to avoid environmental contamination.

16. OTHER INFORMATION

This Material Safety Data Sheet contains important environmental, health and toxicology information for your employees, and anyone who will use, transport, store, dispose of or handle this product. Please note: we believe that the information and recommendations contained herein are accurate as of the date hereof. The information provided herein applies only to the specific product designated and may not be valid where said product is used in combination with any other material or in any process. It is the user's responsibility to determine the suitability of the information for their purposes. No warranty of fitness for any particular purpose, warranty of merchantability, or any other warranty, expressed or implied, is made concerning the information provided.