MATERIAL SAFETY DATA SHEET

Emergency Phone: Chemtrec 800-424-9300 Effective Date: Nov. 10, 2014

Replaces MSDS of May 31, 2012

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Willowood Pronamide 50WSP

CHEMICAL NAME: Propyzamide (Pronamide) (3,5-dichloro-N-[1,1-dimethyl-2-propynyl]-

benzamide)

CHEMICAL FAMILY: A benzamide herbicide in powder form.

EPA REGISTRATION NUMBER: 87290-3

COMPANY IDENTIFICATION:

Willowood, LLC 1600 NW Garden Valley Blvd. #120

Roseburg, OR 97471 Tel: 877-679-9963

2. COMPOSITION, INFORMATION OF INGREDIENTS

Components

CHEMICAL NAME	CAS NUMBER	EINCS#	%
Pronamide	23950-58-5	245-951-4	>51
Clay	1332-58-7	296-473-6	>39
Surfactant	N/A	N/A	>6
Ethylene Glycol	107-21-1	203-473-3	2
Water	7732-18-5	231-791-2	1

3. HAZARD IDENTIFICATION SUMMARY

EMERGENCY OVERVIEW: <u>CAUTION</u>. This product is an irritant and an environmentally hazardous material. It may cause eye and skin irritation. Propyzamide (Pronamide) is only slightly toxic to fish and moderately to many aquatic organisms. Avoid inhalation of mists or dusts.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: May cause upper respiratory irritation, dermatitis to the skin and sensitive eyes.

CARCINOGENICITY: Pronamide, Kaolin Clay, and Crystalline Silica are known to cause cancer to the States of California and New Jersey. Pronamide is listed as a probable carcinogen by the EPA. Crystalline Silica may cause cancer and Pronamide has caused cancer in animal studies.

4. FIRST AID MEASURES

GENERAL: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Pesticides Information Center (NPIC) at 1-800-

858-7378 seven days a week, 6:30 am to 4:30 pm Pacific Time or your poison control center at 1-800-222-1222.

INHALATION: Move the exposed person to fresh air, free of risk of further exposure. If the person is not breathing, call 911 or an ambulance, then apply rescue breathing and seek medical attention as soon as possible.

EYE CONTACT: Flush with clean lukewarm water raising upper and lower eyelids at low pressure for 15 minutes. Remove contact lenses, if present, after the first 5 minutes and continue to rinse the eyes. Seek medical attention of no relief.

SKIN CONTACT: Rinse skin immediately with clean water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Remove contaminated clothing.

INGESTION: Call a poison control center or doctor immediately for treatment advice. DO NOT INDUCE VOMITING UNLESS TOLD TO DO SO BY A POISON CONTROL CENTER OR MEDICAL DOCTOR. Lower the head when the exposed person is vomiting to minimize entry into throat and lungs

5. FIRE-FIGHTING MEASURES

Flash point: 320 °F. (160 °C.)

Flammable Limits (LFL-UFL): N/A

Fire and Explosion Hazards: May release irritating and toxic gasses due to thermal decomposition.

Means of Extinction: Use foam, dry chemical, carbon dioxide or water spray.

Fire Fighting Instructions: Evacuate area and fight fire upwind a safe distance. Dike and collect water used to fight fire to prevent environmental damage due to runoff. Foam or dry chemical extinguishing systems are preferred to prevent environmental damage due to runoff.

Firefighting Equipment: Self-contained breathing apparatus with full face piece and full bunker gear.

Hazardous Combustion Products: Hydrogen chloride, carbon oxides, and nitrogen oxides.

NFPA Ratings: Health – 1; Flammability – 1; Reactivity – 0

6. ACCIDENTAL RELEASE MEASURES

Clean up spills immediately observing the precautions in Section 8 of this MSDS. Isolate the hazard area and keep unnecessary and unprotected personnel from entering. Prevent material from contaminating soil or from entering sewage and drainage systems and bodies of water. Sweep up spill and place in separate suitable containers for recovery or disposal. Contaminated soils may need to be removed and disposed.

7. HANDLING AND STORAGE

Avoid contact with skin, eyes and clothing. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Wash thoroughly with soap and water before eating, drinking, chewing gum, or using tobacco.

Keep from freezing, store above $32^{\circ}F$ ($0^{\circ}C$). Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, water, food, and feed. Do not remove package from container except for immediate use and keep out of the reach of children, preferably in a locked storage area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

Protective Clothing: Wear chemically resistant gloves (e.g. nitrile, butyl, or neoprene.) Wear a long-sleeved shirt, long pants, shoes, and socks. Wear chemically resistant headgear for overhead exposure. Wear a chemically resistant apron when cleaning equipment, mixing, or loading.

General: Wash thoroughly with soap and water after handling. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Discard clothing and other absorbent materials that have been heavily contaminated with this product; do not reuse them. Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Off-white powder

Odor: None **pH**: 7.0 – 8.0

Bulk Density as Powder: 0.20-0.25 g/cc

Solubility in Water: Dispersible

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Avoid temperatures below 32⁰ F. (0⁰C.) or above 212°F. (100°C.)

CHEMICAL STABILITY: Stable under normal use and storage conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may yield hydrogen chloride

and irritating oxides of carbon and nitrogen.

INCOMPATIBILITY WITH OTHER MATERIALS: None known.

POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL TOXICITY

Oral LD₅₀ (rat): 5,000 mg/kg **ACUTE DERMAL TOXICITY**

Dermal LD₅₀ (rat): > 2,000 mg/kg **ACUTE INHALATION TOXICITY**

Inhalation LC_{50} (rat): > 5 mg/L (4-hour)

EYE IRRITANT

Rabbit – Causes moderate eye irritation.

SKIN IRRITATION

Rabbit - Non-irritating

SENSITIZATION

Guinea Pig – Not a Contact Sensitizer

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

CARCINOGENICITY:

ACGIH: Not listed IARC: Not listed NTP: Not listed OSHA: Not listed

MUTAGENIC DATA: No evidence of mutagenic effects during *in vivo* and *in vitro* assays.

ADDITIONAL DATA: Not known to cause reproductive or birth defects at normal exposure levels.

12. ECOLOGICAL INFORMATION

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff has low toxicity to fish, but can be hazardous to many aquatic organisms. Do not contaminate water when disposing of equipment wash water or rinsate.

13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by disposal.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Non-refillable container, do not reuse or refill this container. Offer for recycling, if available or, dispose of the empty outer bag in the trash as long as WSP is unbroken.

14. TRANSPORT INFORMATION

DOT SHIPPING NAME: Not regulated when shipped by ground in bulk or non-bulk.

IATA (air) Shipping Name: Not regulated when shipped by air

IMO (water) Shipping Name: UN Number 3077, Environmentally Hazardous Substance, solid N.O.S. DG class 9; Packing group III. Marine Pollutant: Yes

15. REGULATORY INFORMATION

FIFRA -

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act. The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide.

SARA Title III – Section 302 Extremely Hazardous Substances

Not Listed

SARA Title III - Section 311/312 Hazard Categories

Immediate, Delayed

SARA Title III - Section 312 Threshold Planning Quantity

N/A

SARA Title III - Section 313 Reportable Ingredients

Pronamide - 50% (CAS #23950-58-5)

CERCLA - Pronamide - 50% (CAS #23950-58-5) RQ: 5000 lbs.

CALIFORNIA PROP 65 STATUS – This product contains Pronamide, Kaolin Clay, and Crystalline Silica, chemicals known to the State of California to cause cancer

NEW JERSEY - This product contains Pronamide, Kaolin Clay, and Crystalline Silica, chemicals known to the State of New Jersey to cause cancer.

RIGHT TO KNOW – Pronamide Kaolin Clay and Crystalline Silica are on the Pennsylvania, New Jersey, California, Massachusetts, Minnesota, and Florida Right to Know lists.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: May cause upper respiratory irritation, dermatitis to the skin and sensitive eyes.

CARCINOGENICITY: Pronamide, Kaolin Clay, and Crystalline Silica are known to cause cancer to the States of California and New Jersey. Crystalline Silica may cause cancer and Pronamide has caused cancer in animal studies.

Willowood Pronamide 50 WSP is a Restricted Use pesticide.

16. OTHER INFORMATION

RISK PHRASES: R10, Flammable; R20, Harmful by inhalation; R21, Harmful in contact with skin; R22, harmful if swallowed; R36, Irritating to eyes; R51, Toxic to aquatic organisms; and R67, Vapors may cause drowsiness and dizziness.

SAFETY PHRASES: S2, keep out of reach of children; S9, Keep container in a well-ventilated place; S23, Do not breathe vapors; S24, Avoid contact with skin; S25, Avoid contact with eye; S36, Wear suitable protective clothing; S37, Wear suitable gloves; S38, In case of insufficient ventilation, wear suitable respiratory equipment; S39, Wear eye/face protection; and S62, If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

REASON FOR ISSUE: Updated transportation information.

APPROVAL DATE: 11/10/2014

PREPARED BY: Jack Firkins

ABBREVIATIONS

ACGIH American Conference of Governmental Industrial Hygienists

AICS Australian Inventory of Chemical Substances

CAS# Chemical Abstract Service Number

CERCLA Comprehensive Environmental Response Compensation and Liability Act

^oC Celsius temperature scale

CI China

DSL Canada Domestic Substances List
ECL Korean Existing Chemicals List
EEC European Economic Commission
ENCS Japanese existing Chemical List

EINECS # European Inventory of Existing Chemical Substance Number

EU European Union

FIFRA Federal Insecticide, Fungicide, and Rodenticide Act

(Israel) 2001 proposed list of chemical substances to be regulated under

Israel Hazardous Substances Law and Regulations List of 1993

IARC International Agency for Research on Cancer

MAC Netherlands MAK Germany

MITI Ministry of International Trade and Industry

NA Not Applicable ND Not Determined NE Not Established

NIOSH National Institute of Occupational Safety and Health

NPIC National Pesticide Information Center

NTP National Toxicology Program
OSHA Occupational Safety and Health Act

PICCS Philippines

PPE Personal Protective Equipment

Prop Proprietary

SARA Superfund Amendments and Reauthorization Act
SWISS Giftliste 1 and Inventory of Notified New Substances

TSCA Toxic Substances Control Act

(Taiwan) List of Toxic Chemical Substances regulated under Taiwan Toxic

Chemical Substances Control Act of November 26, 1986

UK United Kingdom

USA United States of America

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