MATERIAL SAFETY DATA SHEET

Emergency Phone: CHEMTREC 800-424-9300 Effective Date: August 15, 2011

Replaces MSDS of March 4, 2011

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Willowood Buffer Spreader

COMPANY IDENTIFICATION:

Willowood, LLC

1600 NW Garden Valley Blvd., Suite 120

Roseburg, Oregon 97471 Tel: 877-679-9963

EPA Registration Number: 87290-50003 EPA Establishment Number 9319-CA-1

24/7 Health Emergencies: Call 800-858-7378 (National Pesticide Information Center)

2. COMPOSITION, INFORMATION OF INGREDIENTS:

Components

			Average %
Name	CAS #.	EINECS #	by Weight
Isopropyl alcohol	67-63-0	220-661-7	34.3%
Phosphoric acid	7664-38-2	231-633-2	10.7%
Alkylarylpolyoxyethylene glycols	127087-87-0	NE	35%
Constituents inactive as a spray adjuvant	NE	NE	20%

3. HAZARDS IDENTIFICATION SUMMARY:

EMERGENCY OVERVIEW: CAUTION! This product is a moderate eye irritant. It may irritate the skin, the respiratory system, and if swallowed, the throat and gastrointestinal system. Keep out of reach of children.

POTENTIAL HEALTH EFFECTS:

ROUTES OF EXPOSURE: Inhalation, skin contact, skin absorption, eye contact, **INHALATION:** Exposure to the vapor or mist may cause upper respiratory irritation.

SKIN CONTACT: Slightly irritating.

EYE CONTACT: Vapor or mist may cause redness and tearing to the eyes.

INGESTION: Harmful if swallowed.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: May cause upper respiratory irritation,

gastrointestinal irritation, skin irritation, and eye irritation.

CARCINOGENICITY: Not listed by NTP or IARC. Not regulated as a carcinogen by OSHA.

4. FIRST AID MEASURES:

INHALATION: Move the exposed person to fresh air, free from risk of further exposure. If the person is not breathing call 9-1-1, then give artificial respiration. 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 five minutes and continue to rinse the eyes. Seek medical attention if no relief.

SKIN CONTACT: Remove contaminated clothing. Rinse area with clean water for 15-20 minutes. Then call the poison control center or a doctor for treatment advice.

INGESTION: Call a poison control center or doctor immediately for treatment advice. DO NOT INDUCE VOMITING. Lower the head when the exposed person is vomiting to minimize entry into the throat and lungs.

5. FIRE FIGHTING MEASURES:

FLASHPOINT AND METHOD: 70 °F (21 °C)

EXTINGUISHING METHOD: Use dry chemicals, carbon dioxide, or foam.

FIRE OR EXPLOSION HAZARDS: This material under complete combustion will form oxides of carbon and phosphorus.

SPECIAL FIREFIGHTING PROCEDURES: Keep upwind of fire. Full emergency equipment with a NIOSH-approved self-contained breathing apparatus and full protective clothing should be worn by firefighters.

6. ACCIDENTAL RELEASE MEASURES:

SPILL OR LEAK PROCEDURES: Wear PPE. Avoid breathing vapor or mist. Isolate the area and prevent material from getting into waterways. Absorb with vermiculite, sand, or other inert absorbent and place the collected material in a closed container. Finish cleaning the spill area with small amounts of soap and water.

7. HANDLING AND STORAGE:

STORAGE TEMPERATURE: Keep containers tightly closed and above freezing. Store in a cool dry area.

SPECIAL SENSITIVITY: Avoid contact with skin and eyes, Wear PPE per Section 8.

HANDLING AND STORAGE PRECAUTIONS: Avoid breathing the vapor or mist. Use normal safety procedures and good personal hygiene. Wash thoroughly after use and before eating, drinking, chewing gum, or using tobacco.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION:

EYE PROTECTION: Use safety glasses or goggles. There is potential for vapor or mist exposure to cause injury to the eyes.

SKIN PROTECTION: Wear chemically resistant gloves (e. g. nitrile, butyl, or neoprene.) Wear a long sleeved shirt, long pants, and shoes and socks.

RESPIRATORY PROTECTION: Wear a respirator if the airborne conditions result in an aerosol forming.

ENGINEERING CONTROLS: Provide adequate ventilation when product is used. Eyewash and shower should be provided in mixing and loading areas.

9. PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL FORM: Liquid. COLOR: Colorless.

ODOR: Distinct isopropyl alcohol odor. **SOLUBILITY IN WATER:** Miscible.

FLASH POINT: 70 °F (21 °C). SPECIFIC GRAVITY (water=1): 1.02 @ 68 °F (20 °C.)

pH: Acidic. BOILING POINT: 159 °F (70 °C)

10. STABILITY AND REACTIVITY:

STABILITY: This product is stable material under normal conditions of storage and handling.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBLES: Avoid temperatures above 70 °F (21 °C). Avoid contact with strong oxidizers or

strong bases.

DECOMPOSITION PRODUCTS: Product will burn. The products of complete combustion are oxides of phosphorus and oxides of carbon

11. TOXICOLOGICAL INFORMATION:

Willowood Buffer Spreader is a moderate eye irritant and mild skin irritant. The significant routes of exposure are eyes, skin, and ingestion.

12. ECOLOGICAL INFORMATION:

This product is a plant nutrient and may be toxic to some aquatic organisms.

13. DISPOSAL CONSIDERATIONS:

WASTE DISPOSAL METHOD: This material is a liquid. Wear vapor or mist respirator and other recommended PPE to dispose of the material. Dispose of in accordance with the regulations of local, state, and federal regulatory agencies.

14. TRANSPORT INFORMATION:

This product is considered flammable for transportation purposes.

US DOT (ground) SHIPPING NAME:

UN1805, Phosphoric acid solution, DG Class 8, Packing Group III, LTD QTY, Limited quantity exception granted if inner packaging is less than 1.3 gallons (5.0 liters.)

IATA (air) SHIPPING NAME: (CARGO AIRCRAFT ONLY)

UN1805, Phosphoric acid solution, DG Class 8, Packing Group III Use packing instruction 821 and package is limited to 230 gallons (860 L).

IMO (water) SHIPPING NAME:

UN1805, Phosphoric acid solution, DG Class 8, Packing Group III Use packing instructions of P001 and LP01.

15. REGULATORY INFORMATION:

OSHA STATUS: This product is not hazardous under the OSHA criteria.

TSCA STATUS: All components are exempted.

CERCLA REPORTABLE QUANTITY: Phosphoric acid 5000 pounds (2272.7 kg) **CALIFORNIA PROPOSITION 65:** Not regulated under California Proposition 65.

RCRA STATUS: Not regulated under RCRA

SARA 311/312 HAZARD NOTIFICATION/REPORTING

IMMEDIATE Y FIRE Y SUDDEN RELEASE OF PRESSURE N

DELAYED Y REACTIVE N

SARA TITLE III: None.

SECTION 302 EXTREMELY HAZARDOUS: None. SECTION 311/312 HAZARD CATEGORIES: None.

SECTION 313 TOXIC CHEMICALS: None.

16. OTHER INFORMATION:

National Fire Protection Association (NFPA)/Hazardous Materials Identification System (HMIS)

NFPA HMIS

0 Least

1 Health 1 Slight 1 Health

1 Flammability 2 Moderate 1 Flammability

0 Instability 3 High 0 Reactivity

4 Severe H PPE

RISK PHRASES: R20, Harmful by inhalation; R21, Harmful in contact with skin; R22, harmful if swallowed; R36, Irritating to eyes; and R38, Irritating to skin.

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.

SECTION XVI - ABBREVIATIONS /DISCLAIMER

REASON FOR ISSUE: Updated Willowood USA contact Information.

APPROVAL DATE: 08/15/2011

PREPARED BY: Jack Firkins REVIEWED BY: Joe Middione

ABBREVIATIONS

AICS Australian Inventory of Chemical Substances

CAS# Chemical Abstract Service Number

^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

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

Israel Hazardous Substances Law and Regulations List of 1993

MAC Netherlands MAK Germany

MITI Ministry of International Trade and Industry

NA Not Applicable
ND Not Determined
NE Not Established
PICCS Philippines

PPE Personal Protective Equipment

Prop Proprietary

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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