Heads Up Plant Protectants 3002 Millar Ave. Saskatoon SK CANADA S7K5X9

Date of MSDS Preparation (Y/M/D): 2013/03/15

MSDS Prepared by:

Heads Up Plant Protectants

For further information contact: 1-866-368-9306

1. PRODUCT IDENTIFICATION Synonyms: Saponin Extract CAS No: 404589-23-7 Molecular Weight: not applicable to mixtures Chemical Formula: not applicable Product Codes:

2. COMPOSITION/IN	COMPOSITION/INFORMATION ON INGREDIENTS				
Ingredient	<u>CAS No</u>	Percent	<u>Hazardous</u>		
Saponin	404589-23-7	61.3%	no		

3. HAZARDS IDENTIFICATION

Caution. Avoid inhalation of the dust

4. FIRST AID MEASURES

Inhalation:	Remove to fresh air. If not breathing, give artificial respiration. If
	breathing is difficult, give oxygen (i.e. medical attention).
Ingestion:	Drink plenty of milk or water. Acute Oral LD 50 > 5,000gm/Kg
	body weight.
Skin Contact:	Slightly irritating. Rinse with water. Get medical attention if
	irritation persists.
Eye Contact:	Mildly irritating. Flush with water, lifting lower and upper eyelids
	occasionally. Call a physician if irritation persists.

5. FIRE FIGHTING MEASURES

The product itself is non-flammable.

- Fire: As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.
- Explosion: Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Fire Extinguishing Media: Water spray, dry chemical, alcohol foam, or carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

Ventilate area of dust. Clean up spills in a manner that does not disperse dust in the air. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

7. HANDLING AND STORAGE

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne Exposure Limits: 0.5 mg. / liter of air
Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible.
Personal Respirators (NIOSH Approved): Wear a dust mask when handling powder.
Skin and Eye Protection: Wear protective clothing including boots and gloves to avoid contact with open cuts or sores. May cause mild irritation to eyes, nose and throat. Wear a dust mask when handling powder.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Cream – Beige Yellow fine particle powder.
Odor:	mild slightly meaty odor.
Solubility:	Soluble in water.
Specific Gravity:	No information found.
pH:	6.27
Boiling Point:	No information found.
Melting Point:	156.2 degrees C
Bulk Density:	0.20 g/ml
Vapor Density (Air=1):	No information found.
Vapor Pressure (mm Hg):	No information found.
Evaporation Rate (BuAc=1):	No information found.

10. STABILITY AND REACTIVITY

Stability: Stable under ordinary conditions of use and storage. Hazardous Decomposition Products:

Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization: Will not occur.

Incompatibilities: Strong oxidizers.

Conditions to Avoid: Incompatibles.

11. TOXICOLOGICAL INFORMATION

Acute inhalation LC 50 calculated by Probit Method was 0.824 mg/L for male rats and > 2.04 mg/L for female rats. Primary Eye irritation, mildly irritating. Acute Oral Toxicity LD 50 single dose > 5,000 mg/Kg Body weight in rats.Primary skin irritation, slightly irritating in rabbits. Acute dermal toxicity >5,000 mg/Kg body weight in rats. Dermal Sensitization, not a contact sensitizer in Guinea Pigs.

12. ECOLOGICAL INFORMATION

Toxic to fish and other aquatic organisms. Do not contaminate water bodies or wetland areas.

13. DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility.

14. TRANSPORT INFORMATION Not regulated.

15. REGULATORY INFORMATION

16. OTHER INFORMATION

Label Hazard Caution: Avoid Breathing Dust of powder.

Label Precautions: Avoid breathing dust. Wear a dust mask when handling powder.

Label First Aid: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

NOTICE TO READER: THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CONTROLLED PRODUCTS REGULATIONS AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.