

SAFETY DATA SHEET

Issuing date: May 1, 2024

Version: 1

1. PRODUCT AND COMPANY IDENTIFICATION

1.1. Product identifier

PRODUCT NAME : Saponin Extract

1.2. Relevant identified uses of the substance or mixture and uses advised against

RECOMMENDED USE : Seed Treatment

1.3. Details of the supplier of the safety data sheet

SUPPLIER NAME : Heads Up® Plant Protectants Inc.

SUPPLIER ADDRESS : 3002 Millar Ave
Saskatoon, Saskatchewan. Canada. S7K5X9

SUPPLIER PHONE NUMBER : 1 (866) 368-9306

EMERGENCY PHONE NUMBER : Heads Up Plant Protectant Inc.
1 (866) 368-9306

2. HAZARDS IDENTIFICATION

2.1. Classification

Acute Toxicity (Inhalation) : Category 4

Serious Eye Damage/Eye Irritation : Category 2B

Skin Corrosion/Irritation : Category 3

2.2. Label elements

HAZARD PICTOGRAMS



SIGNAL WORD : **Warning**

HAZARD STATEMENTS : **H332** – Harmful if inhaled
H316 – Causes mild skin irritation
H320 – Causes eye irritation

PRECAUTIONARY STATEMENTS : **P261** – Avoid breathing dust
P272 – Use only outdoors or in a well ventilated area
P332 + P313 – IF SKIN irritation occurs, get medical attention, advice.
P264 – Wash exposed skin thoroughly after handling.

RESPONSE : **P304+P340 +P312**: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

STORAGE : **NA**

DISPOSAL : **NA**

2.3. Other hazards

OTHER HAZARDS NOT CONTRIBUTING TO THE CLASSIFICATION : **NA**

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Mixtures

This product is a mixture.

Component name	Identifier (CAS-no.)	%
Chenopodium quinoa saponins	404589-23-7	61.3
Other inert ingredients not contributing to hazard classification	-	to 100

Disclaimer: Exact identities and/or concentrations of inert ingredients have been withheld as a trade secret

4. FIRST AID MEASURES

4.1. Description of first aid measures

GENERAL : Take hazard and precautionary statements into account.

IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists, get medical advice/attention.

IF ON SKIN : Wash skin thoroughly with soap and water. Remove contaminated clothes. IF SKIN irritation occurs, get medical attention, advice.

IF INHALED : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell

IF SWALLOWED : Drink plenty of milk or water.

4.2. Most important symptoms and effects, both acute and delayed

No information available

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

SUITABLE EXTINGUISHING MEDIA : Water, CO₂, dry chemical, dry sand, alcohol-resistant foam.

UNSUITABLE EXTINGUISHING MEDIA : N/A

5.2. Special hazards arising from the substance or mixture

SPECIFIC HAZARDS FOR FIREFIGHTING : N/A

HAZARDOUS DECOMPOSITION PRODUCTS : Carbon monoxide (CO), Carbon dioxide (CO₂).

5.3. Advice for firefighters

PROTECTION DURING FIREFIGHTING : Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire-fighting clothing (includes fire-fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and accidental emergency procedures

PERSONAL PRECAUTIONS : Avoid inhalation and contact with skin and eyes. Appropriate personal protective equipment should be worn.

6.2. Methods and materials for containment and cleaning up

FOR CONTAINMENT AND CLEAN UP : Provide adequate ventilation. Avoid inhalation of dust. Dispose of according to the local regulations.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

PRECAUTIONS FOR SAFE HANDLING : Avoid excessive inhalation of dust and contact with skin or eyes. Follow good manufacturing practices for housekeeping and personal hygiene. Wash any exposed skin immediately after handling. Do not eat, drink, or smoke while using this product. Contaminated clothing and shoes should be thoroughly cleaned before re-use.

7.2. Conditions for safe storage, including any incompatibilities

STORAGE CONDITIONS : Keep in tightly closed container, store in a cool, dry, ventilated area. Protect against physical damage.

INCOMPATIBLE MATERIALS : None known

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

CONTROL PARAMETERS : If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

8.2. Exposure controls

ENGINEERING CONTROLS : If appropriate, isolate mixing rooms and other areas where this material is used or openly handled. Apply local exhaust system or maintain these areas under negative air pressure relative to the rest of the operation. Ensure access to showers, eye wash stations and have adequate ventilation systems.

SKIN PROTECTION : Avoid skin contact. Use gloves resistant to this material when prolonged or frequently repeated contact could occur.

EYE PROTECTION : Use tight-fitting goggles, face shield or safety glasses.

RESPIRATORY PROTECTION : Heads Up® Plant Protectant has an airborne exposure limit of 0.5 mg/ L of air. Therefore, NIOSH/MSHA approved respiratory protection

is recommended when handling. Positive pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. Wear a dust mask when handling powder.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

PHYSICAL STATE	: Fine particle powder
COLOR	: Beige, yellow
ODOR	: Mild slightly meaty odor
ODOR THRESHOLD	: No information available
pH	: 6.27
MELTING POINT	: 156.2 degrees C
FREEZING POINT	: No information available
BOILING POINT	: No information available
FLASH POINT	: No information available
AUTO-IGNITION TEMPERATURE	: Not Applicable
DECOMPOSITION TEMPERATURE	: No information available
FLAMMABILITY (SOLID, GAS)	: No information available
VAPOR PRESSURE	: No information available
BULK DENSITY (g/mL)	: 0.20
SOLUBILITY	: Soluble in water
VISCOSITY, KINEMATIC	: No information available
VISCOSITY, DYNAMIC	: No information available

10. STABILITY AND REACTIVITY

10.1. Reactivity, stability and hazards

REACTIVITY	:	No hazards to be specifically mentioned.
CHEMICAL STABILITY	:	No information available
POSSIBILITY OF HAZARDOUS REACTIONS	:	No information available
CONDITIONS TO AVOID	:	No information available
INCOMPATIBLE MATERIALS	:	Strong oxidizers
HAZARDOUS DECOMPOSITION PRODUCTS	:	Carbon monoxides, carbon dioxides and unidentified compounds may be formed during combustion.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

ACUTE TOXICITY

Component	Acute Oral Toxicity	Acute Dermal Toxicity	Acute Inhalation Toxicity
Chenopodium quinoa saponins (CAS 404589-23-7)	LD 50 single dose >5000 mg/kg body weight in rats	>5000 mg/kg body weight in rats	LC 50 calculated by Probit Method was 0.824 mg/L for male rats and >2.04 mg/L for female rats

SKIN CORROSION/IRRITATION

Chenopodium quinoa saponins are slightly irritating to the skin in rabbits.

SERIOUS EYE DAMAGE/IRRITATION

Chenopodium quinoa saponins are mildly irritating to the eyes.

RESPIRATORY OR SKIN SENSITIZATION

Chenopodium quinoa saponins are not a contact sensitizer in Guinea pigs.

MUTAGENICITY

No data is available on mutagenicity for this product.

CARCINOGENECITY

No data is available on carcinogenicity for this product.

REPRODUCTIVE TOXICITY

No data is available on reproductive toxicity for this product.

STOT – SINGLE EXPOSURE

No data is available on Specific Target Organ Toxicity – Single Exposure for this product.

STOT – REPEATED EXPOSURE

No data is available on Specific Target Organ Toxicity – Repeated Exposure for this product.

ASPIRATION HAZARD

No data is available on Aspiration Hazards for this product.

12. ECOLOGICAL INFORMATION**12.1. Toxicity****GENERAL ECOLOGICAL TOXICITY**

Chenopodium quinoa saponins are toxic to fish and other organisms. Do not contaminate water bodies or wetland areas.

PERSISTENCE AND BIODEGRADABILITY

No specific data on persistence and biodegradability is available for this product.

BIOACCUMALATIVE POTENTIAL

No specific data on bio accumulative potential is available for this product.

MOBILITY IN SOIL

No specific data on soil mobility is available for this product.

OTHER ADVERSE AFFECTS

No specific data on other adverse effects is available for this product. .

13. DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods****WASTE DISPOSAL METHOD**

: All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

14. TRANSPORT INFORMATION

This product is not considered a dangerous good for transport.

15. REGULATORY INFORMATION**15.1 United States TSCA Inventory (TSCA)**

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

16. OTHER INFORMATION**16.1. Prepared by****SDS PREPARED BY**

: EcoSafe Natural Products Inc.
16-6782 Veyaness Road, V8M 2C2
Saanichton, B.C., Canada

16.2. Revision date**REVISION DATE**

: N/A

REVISION COMMENT

: N/A

16.3 Disclaimer

DISCLAIMER:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

END OF SAFETY DATA SHEET

