Nufarm Boost Herbicide
Safety Data Sheet

Issue Date: 2025-06-11 Supersedes Date: 2017-12-20 {Reserved}

1. Identification

Product Name: **Nufarm Boost Herbicide**
PCP Registration No.: **30377**
Refer to the approved product label for handling and use instructions.
Product Type: **Herbicide**

Supplier:
Nufarm Agriculture Inc.
5101, 333 - 96th Ave NE
Calgary, Alberta T3K 0S3
1-800-868-5444

Telephone Numbers:
24 Hour Emergency Response Number, Chemtrec, 1-800-424-9300.
For medical emergencies, ProPharma Group, 1-877-325-1840.
For product and use information, Nufarm Agriculture Inc., 1-800-868-5444.

2. Hazard Identification

Classified according to UN GHS Version 5.

Physical Hazards:
None

Health Hazards:

Eye irritation	Category 2B
Acute toxicity (Oral)	Category 5
Acute toxicity (Dermal)	Category 5
Acute toxicity (Inhalation)	Category 5

Environmental Hazards:

Hazardous to aquatic environment, acute	Category 1

Signal Word:
WARNING

Hazard Statements:
Causes eye irritation. May be harmful if swallowed. May be harmful in contact with skin. May be harmful if inhaled. Very toxic to aquatic life.

Precautionary Statements:
Causes eye irritation. Avoid contact with skin, eyes and clothing. Wear goggles or face shield during mixing/loading. Wear coveralls or a long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves. Rinse gloves before removal. After use, wash hands and other exposed skin. Remove and wash contaminated clothing before reuse.
Avoid breathing dust. Use only outdoors or in a well-ventilated area.
This product contains an active ingredient which is toxic to aquatic organisms.

3. Composition / Information on Ingredients

Hazardous Components	CAS No.	Wt. %
Thifensulfuron-methyl	79277-27-3	50
Chemical Synonyms: methyl 3-[[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino]sulfonyl]-2-thiophenecarboxylate		
Tribenuron-methyl	101200-48-0	25
Chemical Synonyms: methyl 2-[[[[(4-methoxy-6-methyl-1,3,5- triazin-2-yl)methylamino]carbonyl]amino]sulfonyl]benzoate		
Calcium carbonate	1317-65-3	<0.5
Chemical Synonyms: $CaCO_3$, limestone		

Other ingredients are considered non-hazardous.

Content as Expressed on Product Label
Thifensulfuron-methyl … 50%
Tribenuron-methyl … 25%

4. First Aid Measures

If swallowed, call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.
If on skin or clothing, take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.
If in eyes, hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.
If inhaled, move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

5. Fire-fighting Measures

Extinguishing Media: Product does not support sustained combustion. Use extinguishing media appropriate to surrounding fire conditions.
Special Firefighting Procedures: Firefighters should wear self-contained breathing apparatus and full protective clothing when fighting chemical fires. Minimize and contain water runoff.
Flash Point:..... Does not flash.
Conditions of Flammability: ..... None. Under severe dusting conditions, this material may form explosive mixtures in air.
Hazardous Decomposition Products:... Carbon oxides, sulphur oxides, nitrogen oxides, calcium oxide, irritating fumes and smoke.
National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 1 Flammability: 1 Reactivity: 0
Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

6. Accidental Release Measures

Use safety equipment and procedures appropriate to the size of the spill. Keep unnecessary people away. Contain and sweep up material of small spills. Do not vacuum up material to prevent generation of fine dust. For large spills outdoors, cover to protect from moisture, and contain the spill area to prevent spread or dispersion. Avoid contamination of natural waters and sewers. Contain all affected material in a closed, labeled container for proper disposal. Isolate from other waste materials. Clean contaminated area such as hard surfaces with detergent and water, collecting cleaning solution for proper disposal. Large spills to soil or similar surfaces may necessitate removal of top soil.

7. Handling and Storage

Handling: Avoid contact with skin, eyes and clothing. After use, wash hands and other exposed skin. Wear coveralls or a long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves. Rinse gloves before removal. Remove and wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Avoid breathing dust.
Storage: Store the container tightly closed away from seeds, fertilizer, plants and foodstuffs. Store in a cool, dry place.

8. Exposure Controls / Personal Protection

Engineering Controls: Use only outdoors or in a well-ventilated area.
Personal Protective Equipment: Goggles or face shield, coveralls or a long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves. Rinse gloves before removal.
Exposure Guidelines:

Component	TWA*	STEL**	Reference/Note
Thifensulfuron-methyl	NE	NE	None found
Tribenuron-methyl	1 mg/m^3	NE	Manufacturer's

			recommendation
Calcium carbonate	10 mg/m^3 (total dust) 3 mg/m^3 (respirable fraction)	20 mg/m^3	WorkSafeBC, 2015

*Time-weighted Average, 8-hour unless otherwise noted.
**Short Term Exposure Limit
NE = Not Established
Refer to approved product label for additional exposure control guidance.

9. Physical and Chemical Properties

NOTE: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification. If no value is determined for the formulation, the value listed is the most relevant value of the predominant ingredient(s).

Appearance (physical state, colour, etc.) ..... light brown granule
Odour ..... slightly pungent
Odour threshold ..... not available
pH 5.6
Melting point / Freezing point ..... not applicable
Initial boiling point and boiling range ..... not applicable
Flash point ..... not applicable
Evaporation rate ..... not applicable
Flammability (solids, gases) ..... not available
Upper / Lower flammability or explosive limits ... not available
Vapour pressure ..... 1.7 x 10^{-5} mPa @ 25C (thifensulfuron-methyl)
5.2 x 10^{-5} mPa @ 25C (tribenuron-methyl)
Vapour density ..... not available
Relative density 0.67
Solubility(ies) ..... dispersible in water, sparingly soluble
Partition coefficient: n-octanol/water ..... logP = 0.02 @ pH 7, (thifensulfuron-methyl)
logP = 0.78 @ pH 7, 25C (tribenuron-methyl)
Autoignition temperature ..... 420C (tribenuron-methyl)
Decomposition temperature ..... not available
Viscosity ..... not applicable

10. Stability and Reactivity

Reactivity: Not reactive.
Chemical Stability: Stable under normal handling and storage conditions.
Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
Conditions to Avoid: None known.

Incompatible Materials: Strong oxidizing agents, acids.
Hazardous Decomposition Products: Carbon oxides, sulphur oxides, nitrogen oxides, calcium oxide, irritating fumes and smoke.

11. Toxicological Information

Likely routes of exposure: Inhalation, ingestion, skin and eye contact.
Eye contact: Causes eye irritation.
Skin contact: May cause mild skin irritation, generally of minimal degree.
Ingestion: May be harmful if swallowed. No significant adverse health effects are expected if only small amounts are swallowed.
Inhalation: May be harmful if inhaled. May cause irritation of the mucous membranes.
Medical Conditions Aggravated by Exposure: Skin exposure may aggravate preexisting skin conditions. Inhalation of dust may aggravate preexisting respiratory conditions.
Toxicological Data:

Acute oral LD_{50} (mg/kg) ..... >2000 (Rat)
Acute dermal LD_{50} (mg/kg) ..... >2000 (Rat)
Acute inhalation LC_{50} (mg/l) ..... >5.01 (Rat)
Skin corrosion/irritation ..... Considered as minimally irritating to skin
Serious eye damage/irritation ..... Considered as moderately irritating to the eye
Respiratory or skin sensitization ... Not considered a skin sensitizer
Germ cell mutagenicity ..... Thifensulfuron-methyl and tribenuron-methyl did not produce genetic damage in bacterial or mammalian cell cultures or in animals.
Carcinogenicity ..... Thifensulfuron-methyl is not considered to be a carcinogen. Tribenuron-methyl produced an increased incidence of mammary tumors in female rats at dose levels also producing other significant effects.
Reproductive toxicity ..... Thifensulfuron-methyl induced some effects possibly indicating increased sensitivity of the young relative to maternal animals. Tribenuron-methyl is not considered a reproductive toxin.

12. Ecological Information

Ecotoxicity:
Data are for thifensulfuron-methyl, from published sources.
Aquatic Invertebrate: 48-Hour EC_{50} (mg/L) ..... 984 (*Daphnia*)
Fish: 96-Hour LC_{50} (mg/L) ..... 410 (Rainbow Trout), 520 (Bluegill Sunfish)
Algae: 72-120-Hr EC_{50} (mg/L) .. >0.0157 (*Selenastrum*), >0.00815 (*Navicula*), >0.0175 (*Skeletonema*), >0.0263 (*Anabaena*)
Birds: Oral LD_{50} (mg/kg) ..... >2510 (Mallard Duck); 8-Day Dietary LC_{50} >5620 (Mallard Duck, Japanese Quail)
Bees: Contact LD_{50} ..... >12.5 µg/bee

Data are for tribenuron-methyl, from published sources.
Aquatic Invertebrate: 48-Hour EC_{50} (mg/L) ..... 984 (*Daphnia*)

Fish: 96-Hour LC_{50} (mg/L) ..... 738 (Rainbow Trout)
Algae: 120-Hour EC_{50} (mg/L) .... 0.0208 (*Selenastrum*)
Birds: Oral LD_{50} (mg/kg) ..... >2250 (Bobwhite Quail); 8-Day Dietary LC_{50} >5620 (Mallard Duck, Bobwhite Quail)
Bees: LD_{50} ..... >100 µg/bee (contact), >9.1 µg/bee (oral)

Persistence and Degradability: Thifensulfuron-methyl and tribenuron-methyl are non-persistent to slightly persistent in field soils of intended use, DT_{50} 1 - 7 days. Degradation in soil occurs primarily by aqueous hydrolysis and by direct microbial degradation. Hydrolysis is affected by temperature and soil pH, being faster in acidic than in alkaline soils.
Mobility in Soil: Thifensulfuron-methyl and its degradation products have the potential to leach, but are rapidly degraded. Tribenuron-methyl is virtually immobile.
Bioaccumulation Potential: Negligible.

13. Disposal Considerations

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Disposal should be made in accordance with federal, provincial and local regulations.

Do not reuse container for any purpose. If applicable, return container in accordance with return program. If a recyclable container, dispose of at a container collection site. Contact local distributor, dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site, triple or pressure rinse the empty container adding rinsings to spray tank, and make container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

14. Transport Information

Canadian TDG Description (Road & Rail):
UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (thifensulfuron-methyl, tribenuron-methyl), Class 9, PG III, Marine Pollutant.

Section 1.45.1 of the TDG Regulations provides an exemption from documentation and safety marks only for this product and only when transported by a road or railway vehicle.

United States:
DOT Description:
Non Regulated – See 49 CFR 173.132(b)(3) & 172.101 Appendix A

≥ 882 Pounds per complete package
UN 3077, Environmentally hazardous substance, solid, n.o.s.
(thifensulfuron-methyl, tribenuron-methyl), 9, III, Marine Pollutant

IMDG

UN 3077, Environmentally hazardous substance, solid, n.o.s. (thifensulfuron-methyl, tribenuron-methyl), 9, III, Marine Pollutant

IATA

UN 3077, Environmentally hazardous substance, solid, n.o.s. (thifensulfuron-methyl, tribenuron-methyl), 9, III, Marine Pollutant

15. Regulatory Information

Pest Control Products Act Registration Number: 30377

Read the approved label, authorized under the Pest Control Products Act, prior to using or handling the pest control product.

This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. Following is the hazard information required on the pest control product label:

WARNING: CONTAINS THE ALLERGENS MILK AND SOY

WHMIS exempt.

16. Other Information

This Safety Data Sheet (SDS) is designed to comply with the Globally Harmonized System (GHS) of classification, and the *Hazardous Products Regulations*.

This SDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use. The product labeling provides that information specifically for product use as intended.

Company and published information is used in the development of this SDS. The information herein is presented in good faith and believed accurate at the date of publication. However, no warranty, expressed or implied, is given.

Revisions to the last issue: New address and logo.

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