GLYSTEEL™ 540 SL

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifiers

Product name: Glysteel™ 540 SL

PMRA Registration No.: 36148

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

Crop protection product, herbicide

Details of the supplier of the safety data sheet

Company: Avesta CropScience Inc.
Address: Suite 2900, Bentall 5
550 Burrard Street
Vancouver, BC, V6C 0A3

Telephone: 1-800-607-5443

Website: https://avestacrop.com

Emergency telephone number: 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

Signal word: Danger
Hazard statements: May cause cancer.

Precautionary statements - prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves, protective clothing, eye protection and face protection.

Precautionary statements – response
Seek medical advice/attention if exposed or concerned.

Precautionary statements – storage
Store locked up.

Precautionary statements – disposal
Dispose of contents and container in accordance with local, regional, national and international regulations, as applicable.

Other information
May cause adverse effects if swallowed or in contact with skin.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name: Glyphosate-potassium
CAS No.: 39600-42-5
Weight-%: 45-60%

Chemical name: D-Glucopyranose, oligomers, decyl octyl glycosides
CAS No.: 68515-73-1
Weight-%: 5-10%

SECTION 4: FIRST-AID MEASURES

General advice: If exposed or concerned, get medical advice/ attention.

Inhalation: Remove to fresh air. Get medical attention if symptoms occur.

Eye contact: Rinse thoroughly with plenty of water, including under the eyelids. Get medical attention if symptoms occur.

Skin contact: Wash skin with soap and water. Get medical attention if symptoms occur.

Ingestion: Rinse mouth. Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention if symptoms occur.

Symptoms: None known.

Effects of exposure: May cause cancer. See Section 11 for additional toxicological information.

Note to physicians: Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media for safety reasons: None known based on information supplied.

Special hazards arising from the substance or mixture: None known based on information supplied.

Explosion data
Sensitivity to mechanical impact: None.
Sensitivity to static discharge: None.

Special protective equipment and precautions for firefighters: Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with skin, eyes, or clothing. Use personal protective equipment as required.

Other information: Refer to protective measures listed in Sections 7 and 8.

Methods for containment: Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Dike spill area. Soak up with inert absorbent material. Collect and transfer to properly labelled containers. Clean contaminated surfaces thoroughly.

Prevention of secondary hazards: Clean contaminated objects and areas thoroughly, observing environmental regulations.

SECTION 7: HANDLING AND STORAGE

Advice on safe handling: Handle in accordance with good industrial hygiene and safety practices. Avoid contact with skin, eyes, and clothing. Do not eat, drink, or smoke when using this product. Do not mix or apply this product, or spray solutions of this product, in galvanized steel or unlined steel (except stainless steel) containers or spray tanks. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

General hygiene considerations: Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling. Contaminated work clothing should not be allowed out of the workplace.

Storage conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Do not store this product, or spray solutions of this product, in galvanized steel or unlined steel (except stainless steel) containers or spray tanks.

Packaging materials: Stainless steel. High-density polyethylene (HDPE).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by region-specific regulatory bodies.

Engineering controls:
Showers
Eyewash stations
Ventilation systems

Eye/face protection: Wear safety glasses with side shields or goggles.

Hand protection: Wear suitable gloves.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: Respiratory protection: Not normally required under typical handling conditions. Where engineering controls are insufficient to maintain airborne concentrations at acceptable levels, or if irritation occurs, use appropriate respiratory protection as determined by an industrial hygienist.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Form: Viscous liquid

Odour: Mild

Odour threshold: No data available.

Colour: Yellow to orange

pH value (as aqueous solution): 4.87-4.89

Liquid Density: No data available.

Melting point: No data available.

Boiling temperature: No data available.

Flash point: 81°C

Flammability: No data available.

Dynamic viscosity: 26.3 mPa·s

Relative density: 1.36–1.38 at 20°C

SECTION 10: STABILITY AND REACTIVITY

Reactivity: None under normal use conditions.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: May produce hydrogen gas if this product comes into contact with galvanized steel or unlined steel.

Hazardous polymerization: Hazardous polymerization does not occur.

Conditions to avoid: Contact with galvanized steel or unlined steel; excessive heat; freezing.

Incompatible materials: Oxidizing agents, galvanized steel, unlined steel.

Hazardous decomposition products: None known based on the information supplied.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation: Specific test data for the substance or mixture are not available.

Eye contact: Specific test data for the substance or mixture are not available.

Skin contact: Specific test data for the substance or mixture are not available. May cause irritation. May be harmful in contact with skin.

Ingestion: Specific test data for the substance or mixture are not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea. May be harmful if swallowed.

Symptoms related to the physical, chemical, and toxicological characteristics

Symptoms: Gastrointestinal irritation (nausea, vomiting, diarrhea) may occur; skin irritation may occur.

Acute toxicity

Numerical Measures of Toxicity

Oral LD_{50}: 5,000 mg/kg (rat)

Dermal LD_{50}: 2,000 mg/kg (rat)

Inhalation LC_{50}: 5.674 mg/L (rat, 4 h; dust/mist)

Chemical name: D-Glucopyranose, oligomers, decyl octyl glycosides
CAS No.: 68515-73-1
Oral LD_{50}: Not applicable
Dermal LD_{50}: > 2000 mg/kg (rabbit)
Inhalation LC_{50}: Not applicable.

Delayed and immediate effects, as well as chronic effects from short- and long-term exposure

Skin corrosion/irritation
On the basis of test data: Non-irritant.

Serious eye damage/eye irritation
On the basis of test data: Non-irritant.

Respiratory or skin sensitization
On the basis of test data: Guinea pig maximization test (GPMT) – Not sensitizing.

Germ cell mutagenicity
No information available.

Carcinogenicity
The mixture has not been tested for carcinogenicity. The carcinogenicity classification is based on available data for individual ingredients. Glyphosate-potassium has been classified by IARC as Group 2A (probably carcinogenic to humans). This classification does not constitute a carcinogenicity classification for the mixture under WHMIS 2015.

The information below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name: Glyphosate-potassium
39600-42-5
ACGIH: Not listed.
IARC: Group 2A - Probably carcinogenic to humans.
OSHA: Present.

Reproductive toxicity: No information available.
STOT - single exposure: No information available.
STOT - repeated exposure: No information available.
Aspiration hazard: No information available.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity
Method: OECD Test No. 203: Fish, Acute Toxicity Test
Species: Brachydanio rerio
Endpoint type: LC_{50}
Effective dose: >100 mg/L
Exposure time: 96 hours

Method: OECD Test No. 217: Soil microorganisms, Carbon Transformation Test
Species: Soil microorganisms
Exposure time: 28 days
Results: Non-toxic

Method: OECD Test No. 202: Daphnia sp., Acute Immobilization Test
Species: Daphnia magna
Endpoint type: EC_{50}
Effective dose: >100 mg/L
Exposure time: 24 and 48 hours

Method: OECD Test No. 207: Earthworm, Acute Toxicity Tests
Species: Earthworm
Endpoint type: LC_{50}
Effective dose: >5,000 mg/kg
Exposure time: 14 days

Method: OECD Test No. 214: Honey bees, Acute Contact Toxicity Test
Species: Honey bees
Endpoint type: LD_{50}
Effective dose: >204.7 ug/bee

Method: OECD Test No. 201: Freshwater alga and cyanobacteria, Growth Inhibition Test
Species: Pseudokirchneriella subcapitata
Endpoint type: EC_{50}
Effective dose: >100 mg/L
Exposure time: 72 hours
Results: Does not inhibit the growth of algae

Method: OECD Test No. 216: Soil microorganisms, nitrogen transformation test
Species: Soil microorganisms
Exposure time: 28 days
Results: Non-toxic

Chemical name: D-Glucopyranose, oligomers, decyl octyl glycosides
68515-73-1
Algae/aquatic plants: Not applicable
Fish: LC50: = 170 mg/L (96 h, Danio rerio)
Toxicity to microorganisms: Not applicable
Crustacea: Not applicable

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

Other adverse effects: No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues/unused products: Dispose of according to local regulations and applicable environmental legislation.

Contaminated packaging: Do not reuse empty containers.

SECTION 14: TRANSPORTATION INFORMATION

TDG: Not regulated
IATA: Not regulated
IMDG: Not regulated

Although the product contains ingredients with carcinogenicity classifications, the mixture does not meet the criteria for classification as dangerous goods under TDG, IATA, or IMDG.

SECTION 15: REGULATORY INFORMATION

International regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer
Not applicable.

The Stockholm Convention on Persistent Organic Pollutants
Not applicable.

The Rotterdam Convention
Not applicable.

International Inventories
Contact the supplier for inventory compliance status.

SECTION 16: OTHER INFORMATION

This SDS summarizes our current understanding of the health and safety hazards associated with the product and guides how to handle and use it safely in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace, including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact the company. This Safety Data Sheet has been prepared in accordance with the Canadian Hazardous Products Act (HPA) and the Hazardous Products Regulations (HPR) and follows the requirements of WHMIS 2015.