



SAFETY DATA SHEET

FIRSTRATE™ 450

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY

1.1 Identifiers

Product name: **FIRSTRATE™ 450**

1.2 Recommended use of the chemical and restrictions on use

Product Use: Non-selective herbicide

1.3 Supplier contact details:

Company name: Grosafe Chemicals Limited
Address: 20 Jean Batten Drive Mt Maunganui, 3116
Telephone: 0800 220 002
Email: info@grosafe.co.nz

Emergency telephone number 0800 CHEMCALL (0800 243 622)

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the Hazardous Chemical

Hazardous substance according to Hazardous Substances and New Organisms (HSNO) Act 1996

HSNO Substance Approval: HSR000769

Classifications: Skin irritation Category 2, Eye irritation Category 2, Hazardous to the aquatic environment chronic Category 2.

2.2 Label elements:

Pictograms:



Signal Word: WARNING

Hazard statements:

- H315 Causes skin irritation.
- H319 Cause eye irritation.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention

- P103 Read label before use.
- P264 Wash hands and any exposed skin thoroughly after handling.
- P273 Avoid release to the environment.

P280 Wear protective gloves and eye protection.

Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P332 + P313 If skin irritation occurs: Get medical advice.

P362 Take off contaminated clothing and wash before reuse.

P305 + P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

+ P338

P337 + P313 If eye irritation persists: Get medical advice.

P391 Collect spillage.

Storage

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Disposal

P501 Dispose of contents/container in accordance with local regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS	Proportion % w/w
Glyphosate	1071-83-6	37 – 40*
Tallow alkyl amine ethoxylate	61791-26-2	1><10
Other Ingredients	Trade Secret	Balance

* glyphosate acid at 360 g/L present as the isopropylamine salt (CAS No 38641-94-0)
This is a commercial product whose exact ratio of components may vary slightly.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General Information:

For advice call the National Poison Centre, telephone 0800 POISON [0800 764 766] for advice. Have label or Safety Data Sheet at hand

Ingestion: If swallowed, do NOT induce vomiting. Drink plenty of water. Get medical advice if you feel unwell.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. If irritation persists then get medical advice.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists then get medical attention.

Inhalation: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor for advice if person feels unwell.

4.2 Symptoms caused by exposure

None specified.

4.3 Medical attention and special treatment

Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media

Water spray (fog), foam.

5.2 Specific hazards arising from the chemical

Smoke and toxic/harmful fumes.

5.3 Special protective equipment and precautions for fire fighters

Wear full personal protective equipment including with self-contained breathing apparatus (SCBA).
Contain run-off to prevent run-off to sewers and waterways.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

In the event of an accidental spill, wear full protective clothing, eye and face protection. Wash contaminated personal protective equipment and clothing, and dry before re-use.

6.2 Environmental precautions

Prevent spillage from entering drains or waterways. If contamination of drains, streams, watercourses occurs or is unavoidable, warn the local water authority.

6.3 Methods and materials for containment and cleaning up

Contain spilled material, recover into labelled drums that can be sealed for safe disposal. If spray mixture is spilled, recover liquid or absorb with inert material e.g. vermiculite, soil and collect in drums. Deal with all spillages immediately.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Read the label before use. Use only outdoors or in well-ventilated environment. Avoid contact with skin and eyes. Avoid inhalation of spray mists. Wear coat/trouser (overalls), boots, waterproof hat, respirator, gloves and eye protection when handling product. Wash hands and exposed skin after handling. Do not eat, drink or smoke when using. Contaminated work clothing should not leave the work place. Do not use spray equipment contaminated with this product for any other purpose unless first thoroughly cleaned with a suitable cleaning detergent.

7.2 Conditions for safe storage

Store securely in the closed original packaging out of reach of children and in a dry, cool, well-ventilated area. Keep away from food, drink and animals feeding stuffs.
Storage must be in accordance with the current version of NZS 8409 Management of Agrichemicals. Stores containing 1000 L or more require secondary containment, signage and emergency response plans.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters – exposure standards, biological monitoring

None specified.

8.2 Engineering controls

Use outdoors to ensure adequate ventilation.

8.3 Personal protective equipment (PPE)

The following Standards provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

Eye/Face Protection: Wear protective glasses or goggles when mixing or applying product.

Skin Protection: Wear impervious gloves, coat, trousers, waterproof hat. Ensure all skin areas are covered.

Respirator: Where product is being sprayed and a mist could be produced a respirator should be worn. It should be fitted with a type G cartridge, suitable for agricultural chemicals.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Clear amber/brown liquid

Odour	Mild
Odour threshold	No data available
pH	4.5 – 5.5 (neat)
Melting/Freezing Point	No data available
Boiling Point /Range	No data available
Flash point	Not applicable
Flammability (solid, gas)	Not applicable
Vapour Pressure	No data available
Vapour density	No data available
Specific density	~1.2
Solubility	Soluble in water
Partition Co-efficient n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Not applicable

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Not available.

10.2 Chemical stability

Store in the closed original container in a dry, cool, well-ventilated area and out of direct sunlight.

10.3 Conditions to Avoid

Incompatible materials,

10.4 Incompatible materials and possible hazardous reactions

Oxidising agents.

10.5 Hazardous decomposition products

Fire Decomposition: Smoke and unspecified compounds.

Polymerisation: This product will not undergo polymerisation reactions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Health hazard information

The product is classified for health hazards according to an assessment of information on product.

11.2 Toxicological information

Acute toxicity:	Not classified as being acutely toxic if ingested, in contact with skin or if inhaled.
Aspiration hazard:	Product is not classified with aspiration hazard warning.
Respiratory irritation:	Not classified.
Skin corrosion/irritation:	Skin irritant.
Serious eye damage/irritation:	Eye irritant.
Respiratory or skin sensitisation:	No classified for skin and respiratory sensitisation.
Germ cell mutagenicity:	No ingredients in product identified as presumed or suspected mutagens.
Carcinogenicity:	No ingredients in product identified as presumed or suspected carcinogens.
Reproductive toxicity:	Not classified for reproductive/developmental effects.
Specific target organ toxicity – single/repeated exposure:	Not classified for adverse effects to organs or systems through prolonged or repeated exposure.

Narcotic effects: None identified.

11.3 Toxicological data:

Glyphosate acid	Oral LD ₅₀ (rabbit) 3800 mg/kg bw
Tallow alkyl amine ethoxylate	Oral LD ₅₀ (rat) > 2000 mg/kg bw
	Dermal LD ₅₀ (rat) 2000 mg/kg bw
	Inhalation LC ₅₀ (rat, nose only) >5.0 mg/L

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

This product is classified as being toxic to aquatic life with long lasting effects.

12.2 Environmental Fate

Persistence and Biodegradability:

Non persistent. DT₅₀ is < 30 days.

Bioaccumulation: Not expected to bioaccumulate.

Soil mobility: No information for formulated mixture.

Other adverse effects: No information.

Ecotoxicity data:

Glyphosate acid	Fish: <i>Oncorhynchus mykiss</i> LC ₅₀ (96 h) 38 mg/L
	Bluegill sunfish LC ₅₀ (96 h) 46 mg/L
	Alga: <i>Pseudokirchneriella subcapitata</i> EC ₅₀ (72 h) growth, 19 mg/L
	Crustacea: <i>Daphnia magna</i> EC ₅₀ (48 h) 4.0 mg/L
	Diatom: <i>Skeletonema costatum</i> EC ₅₀ (96 h) 1.2 mg/L
	Aquatic plant: <i>Lemna gibba</i> EC ₅₀ (7 d) biomass, 12 mg/L

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Product Disposal

Use the product for its intended purpose according to label. Otherwise dispose of unused product to waste management facility for pesticides or to landfill.

13.2 Container Disposal

Do not use packaging for storage of other products. Triple rinse container and add residue to mixture. If circumstances, especially wind direction, permit the empty containers may be burned, otherwise bury in a suitable land fill.

SECTION 14: TRANSPORT INFORMATION

Road and Rail Transport:

Classified as Dangerous Good Class 9 according to NZS5433 Transport of Dangerous Goods on Land

Marine Transport (IMO/IMDG):

Classified as Dangerous Good Class 9 by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport (ICAO/IATA):

Classified as Dangerous Good Class 9 by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulation for transport by air.

UN Number: 3082

UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (CONTAINS GLYPHOSATE 45%)

Transport hazard class(es) 9

Packing Group:	III
Special Precautions for User:	
IMDG Marine pollutant:	Yes
Transport in Bulk:	Not available
HAZCHEM	3Z

SECTION 15: REGULATORY INFORMATION

15.1 HSNO Act 1996

Hazardous substance according to Hazardous Regulations

Approved substance number: HSR000769

Hazardous classifications: Skin irritation Category 2, Eye irritation Category 2, Hazardous to the aquatic environment chronic Category 2.

Controls: refer to HS Notices (www.epa.govt.nz) and HSW HS Regulations (www.worksafe.govt.nz)

- Where the substance is applied onto or into water and the water has the potential to leave the place containing the application area, clauses 62, 63 and 64 of the Hazardous Property Controls Notice apply as if the substance has a hazard classification of hazardous to the aquatic environment acute Category 1.

Safety Data Sheet:	Any quantity
Restricted to workplace only:	No
Quantity that requires management in accordance with HSW HS Regulations:	1000 L
Quantity for secondary containment and emergency response plan:	1000 L
Quantity for signage:	1000 L

15.2 ACVM Act 1997

Registration number: P7336

Refer to www.foodsafety.govt.nz for registration conditions.

SECTION 16: OTHER INFORMATION

16.1 Date of preparation or last revision of SDS

SDS issued	20 August 2021
SDS supersedes	January 2017
Reason issued	Update SDS format, hazardous classifications and product information.

16.2 ABBREVIATIONS

ADI	Acceptable Daily Intakes
CAS number	Chemical Abstracts Service Registry Number
CCID	Chemical Classification Identification Database
EPA	Environmental Protection Authority
ErC₅₀	Half maximal Effective Concentration
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
HSNO	Hazardous Substances and New Organisms
HS	Health and Safety

HSR	Hazardous Substances Register
IARC	International Agency for Research on Cancer
LC₅₀	Median Lethal Concentration
LD₅₀	Median Lethal Dose
SDS	Safety Data Sheets
NOAEL	No Observable Adverse Effect Level
NOEL	No Observable Effect Level
NOS	Not otherwise specified
STEL	Short Term Exposure Limit
SWA	Safety Work Australia
TWA	Time-Weighted Average
UN Number	United Nations Number

16.3 REFERENCES

Manufacturer information
EPA CCID and Approved Substance databases
University of Hertfordshire Pesticides Properties Database

16.4 OTHER

FIRSTRATE is a trademark of Grosafe Chemicals Ltd

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End of Safety Data Sheet