



SAFETY DATA SHEET

Force® Penetrant

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY

1.1 Identifiers

Product name: Force® Penetrant

1.2 Recommended use of the chemical and restrictions on use

Product Use: Agricultural/horticultural surfactant additive for spray mixtures

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: HSR002503
Classifications: Acute dermal toxicity Category 4, Acute inhalation toxicity Category 4, Skin Irritation Category 2, Serious eye damage Category 1, Hazardous to the aquatic environment chronic Category 2.

2.2 Label elements:

Pictograms:



Signal Word: DANGER

Hazard statements:

- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H411 Toxic to aquatic life with long lasting effects.

Additional labelling statements required under Hazardous Substances (Labelling) Notice 2017**Precautionary statements:***Prevention*

| | |
|------|---|
| P102 | Keep out of reach of children. |
| P103 | Read label before use. |
| P261 | Avoid breathing vapours/aerosols. |
| P264 | Wash hands thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/clothing/eye protection. |

Response

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| P101 | If medical advice is needed, have product container or label at hand. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P312 | Call a POISON CENTRE or doctor/physician if you feel unwell. |
| P332 + P313 | If skin irritation occurs: Get medical advice/attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P304 + P340 | IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. |
| P312 | Call a POISON CENTRE or doctor/physician 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. Continue rinsing. |
| P310 | Immediately call a POISON CENTRE or doctor. |
| P391 | Collect spillage. |

Storage

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Disposal

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| P501 | Dispose of contents/container in accordance with local regulations. |
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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredients | CAS | Proportion % w/w |
|---|--------------|------------------|
| Oxirane, 2-methyl-, polymer with oxirane, mono[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]-1-disiloxanyl]propyl] ether | 134180-76-0 | 75 |
| Other ingredients | Trade secret | balance |

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]. Have label or Safety Data Sheet at hand.

Ingestion: If swallowed, rinse mouth with water. Call the NATIONAL POISONS CENTRE or doctor for advice if you feel unwell. Have product label or SDS at hand.

Skin Contact: Remove contaminated clothing and wash skin with plenty of soap and water. Get medical advice if you feel unwell or irritation occurs.

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

Inhalation: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call the NATIONAL POISONS CENTRE or doctor for advice if you feel unwell.

4.2 Symptoms caused by exposure

Unlikely to cause harmful effects under normal conditions of handling and use.

4.3 Medical attention and special treatment

Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media

Use water spray or fog, foam, CO₂ or dry chemical as appropriate for surrounding materials. Do not use a full water jet. Contain extinguishing media to prevent runoff into drains, sewers, waterways.

5.2 Specific hazards arising from the chemical

Fire decomposition products may be toxic/harmful and/or irritating if inhaled.

Evacuate people to safe area upwind of fire.

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

Have this SDS available. In the event of a spill, wear appropriate protective clothing and eye/hand 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, etc. is unavoidable, warn the local water authority.

6.3 Methods and materials for containment and cleaning up

Contain spilled material. For small liquid spills, use absorbent material such as sand, soil, vermiculite and recover into labelled drums that can be sealed for safe disposal. For large liquid spills, recover liquid into labelled containers then absorb remaining liquid and transfer to drums for disposal. Clean area with water and detergent.

Dispose of contaminated materials to approved landfill in accordance with local regulations.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Read the label before use. Use only outdoors or in well-ventilated area.

When mixing product avoid inhalation of spray mist/aerosols. Wear protective equipment such as coat/trouser (overalls), boots, gloves and eye protection.

Wash hands and exposed skin with soap and water after handling and before rest or meal breaks.

Do not eat, drink or smoke when using.

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 and out of direct sunlight. Keep away from sources of heat, food, drink and animal feedstuffs.

Storage of 1000 L or more of this product requires an emergency response plan, secondary containment and signage.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters – exposure standards, biological monitoring

None of the components have assigned exposure limits.
Hazardous components without workplace control parameters

8.2 Engineering controls

Use in well-ventilated area or outdoors.

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 chemical splash goggles if eye contact is possible.

Skin Protection: Wear impervious chemical resistant gloves (e.g. nitrile, butyl), coveralls, socks and chemical resistant footwear. For overhead spray exposure, wear chemical resistant headgear. Ensure all skin areas are covered.

Respirator: Use outdoors in well-ventilated area or use local exhaust ventilation. Where product is being sprayed and a mist could be produced a respirator should be worn. It should be fitted with a cartridge, suitable for particulates.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance | Light yellow liquid |
| Odour | Characteristic |
| Odour threshold | Not known |
| pH | 6~8.0 |
| Melting/Freezing Point | <0°C |
| Boiling Point /Range | >200°C |
| Flash point | 102°C |
| Flammability (solid, gas) | Not applicable |
| Vapour Pressure | No data available |
| Vapour density | No data available |
| Specific gravity/bulk density | ~1.02 |
| 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 | 40 – 90 mPa.s (25 °C) |

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

This product is unlikely to react or decompose under normal storage conditions.

10.2 Chemical stability

Stable under normal temperatures and pressure for storage and use.

10.3 Conditions to Avoid

Avoid storage in direct sunlight or exposure to heat.

10.4 Incompatible materials and possible hazardous reactions

No specific information available.

10.5 Hazardous decomposition products

Fire Decomposition: Smoke, carbon and silicon oxides and other unspecified compounds.

10.6 Polymerisation

Not known to occur.

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

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| Acute toxicity: | Classified as harmful in contact with skin or if is inhaled. May be harmful if ingested. |
| Aspiration hazard: | Product contains no components with aspiration hazard. |
| Respiratory irritation: | May be slightly irritating. |
| Skin corrosion/irritation | Skin irritant (ECHA database). |
| Serious eye damage/irritation | Causes eye damage (ECHA database). |
| Respiratory or skin sensitisation | Not classified. |
| 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 | No ingredients in product identified suspected of damaging fertility or the unborn child. |
| Specific target organ toxicity – single/repeated exposure | No ingredients identified for specific target organ toxicity. |
| Narcotic effects | Product contains no ingredient identified as causing narcotic effects. |

11.3 Toxicological data:

Oral, LD₅₀ (rat) >3200 mg/kg bw
Dermal, LD₅₀ (rabbit) >2000 mg/kg bw
Inhalation, LC₅₀ 4 hr (rat) >1.08 mg/L air

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

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

12.2 Environmental Fate

Breakdown in soil and groundwater: Information not available.

Bioaccumulation: Information not available.

Partition coefficient (octanol/water): Information not available.

Soil mobility: Information not available.

12.3 Ecotoxicity data:

Active ingredient (100%)

Fish: Rainbow trout LC₅₀ (96 hr) 2.1 mg/L

Crustacea: *Daphnia spp* EC₅₀ (48 h) 1.1 mg/L

Alga: *Scenedesmus subcapitata* EC₅₀ (72 hr) 28.2 – 152.2 mg/L

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Product Disposal

Refer to product label. If possible, dispose of by using according to the label. Otherwise dispose of to an approved landfill in accordance with local regulations.

13.2 Container Disposal

Refer to product label. Do not use packaging for storage of other products. Empty packaging should be disposed of to an approved recycler or crushed and sent to approved landfill.

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.

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| UN Number: | 3082 |
| UN Proper Shipping Name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (POLYETHER SILOXANE 75%) |
| Transport hazard class(es) | 9 |
| Packing Group: | III |
| HAZCHEM: | 3Z |
| Special Precautions for User: | - |
| IMDG Marine pollutant: | YES |
| Transport in Bulk: | Not available |

SECTION 15: REGULATORY INFORMATION

15.1 HSNO Act 1996

Hazardous substance according to Hazardous Substances (Hazard Classification) Notice 2020.

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|-----------------------------------|---|
| Approved substance number: | HSR002503 |
| Hazardous classifications: | Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2020 Acute dermal toxicity Category 4, Acute inhalation toxicity Category 4, Skin irritation Category 2, Serious eye damage Category 1, Hazardous to the aquatic environment chronic Category 2. |
| Controls: | Refer to control on www.epa.govt.nz for Controls. |

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|--|--------------|
| 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 |

Additional information: Refer to HS Notices (www.epa.govt.nz) and HSW HS Regulations (www.worksafe.govt.nz)

15.2 ACVM Act 1997

Registration number: Exempt

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

SECTION 16: OTHER INFORMATION

16.1 Date of preparation or last revision of SDS

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|-----------------------|--|
| SDS issued | 26 October 2021 |
| SDS supersedes | SDS dated 19 August 2021 |
| Reason issued | Update for the latest Hazard classifications |

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

EPA CCID and Approved Substance databases
PPDB- Pesticides Properties DataBase

16.4 OTHER

FORCE is a tradename of Grosafe Chemicals Ltd

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End of Safety Data Sheet