

Section 1: Identification

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| Product name: | Dynamite™ |
| Other names: | 2,4-D ethyl hexyl ester 680EC |
| Recommended use: | Selective herbicide for control of broadleaf weeds in pasture and turf. |
| Manufacturer/Importer details: | PGG Wrightson Limited 1 Robin Mann Place Christchurch Airport Christchurch New Zealand Phone: 03 372 0800 |
| 24 hour emergency contact: | 0800 CHEMCALL (0800 243 622) |
| National Poisons Centre: | 0800 POISON (0800 764 766) |

Section 2: Hazard identification

Product is classified as hazardous according to the Hazardous Substances (Classification) Notice 2017 of the HSNO Act, 1996.

HSNO Approval: HSR000962

Hazardous classification: 6.1D, 6.3B, 6.5B, 6.9A, 9.1A, 9.2A, 9.3B



Signal word:

DANGER

Hazard statements:

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H316 Causes mild skin irritation.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H421 Very toxic to the soil environment.
H432 Toxic to terrestrial vertebrates.

Prevention statements:

P102 Keep out of reach of children.
P103 Read label before use.
P260 Do not breathe mist/vapours/spray.
P264 Wash exposed skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.



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| Response statements: | <p>P273 Avoid release to the environment. P280 Wear eye protection/face protection and protective gloves.</p> <p>P101 If medical advice is needed, have product container or label at hand. P301 + P312 IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell. P330 Rinse mouth. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P333 + P313 If skin irritation or rash occurs: Get medical advice. P363 Wash contaminated clothing 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 if you feel unwell. P391 Collect spillage.</p> |
| Storage statement/s: | Nil |
| Disposal statement/s: | P501 Dispose of product and containers in accordance with local Regulations. See section 13 for more details. |
| Additional Label requirements: | <p>Do not apply directly into or onto water (except as allowed for on product label).</p> <p>Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.</p> |

Section 3: Composition/information on ingredients

Chemical identity of ingredients with health or environmental hazards:

| <i>Ingredient</i> | <i>CAS No.</i> | <i>Proportion w/w</i> |
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| 2,4-D ethyl hexyl ester | 1928-43-4 | 59 |
| Other ingredients | Trade secret | balance |
| * 2,4-D ethyl hexyl ester 680 g/L | | |

Section 4: First-aid measures

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| First aid measures: | If medical advice is needed, have product container or label at hand. For advice contact National Poisons Centre at 0800 POISON [0800 764 766] or a doctor. |
| Inhalation: | Remove person to fresh air and keep at rest in a position comfortable for breathing until recovered. Get medical advice if person feels unwell. |
| Ingestion: | Rinse mouth. Get medical advice if person feels unwell. |
| Skin contact: | Wash with soap and water. Get medical advice if irritation or rash occurs. |
| Eye contact: | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice if irritation persists. |



| First aid facilities: | Provide eye baths and safety showers close to areas where product contact or splashing may occur. | | | | | | | | | | |
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| Advice to doctor: | Treat symptomatically. | | | | | | | | | | |
| Section 5: Fire-fighting measures | | | | | | | | | | | |
| Flammability: | Non-flammable. Not a fire or explosion hazard. | | | | | | | | | | |
| Appropriate extinguishing media: | Foam, water spray, dry powder, carbon dioxide (CO ₂). | | | | | | | | | | |
| Combustion products: | Smoke, carbon dioxide, carbon monoxide and other unidentified compounds. | | | | | | | | | | |
| Special protective equipment and precautions for fire-fighters: | Wear protective equipment including self-contained breathing apparatus (SCBA). | | | | | | | | | | |
| HAZCHEM code: | 3Z | | | | | | | | | | |
| Section 6: Accidental release measures | | | | | | | | | | | |
| Personal precautions: | Wear protective equipment; chemical resistant coveralls, boots, gloves, eye protection. Wear respiratory protection if there is a risk of contact with vapours or mist. | | | | | | | | | | |
| Environmental precautions: | Contain spill. Prevent from entering waterways, drains, sewers. Notify local authorities if contamination of waterway occurs. | | | | | | | | | | |
| Procedure for clean up: | Contain and recover liquid into labelled container for re-use or disposal. Absorb residue or small spills with suitable material, e.g. sand, vermiculite. Dispose of contaminated waste to approved landfill. | | | | | | | | | | |
| Section 7: Handling and storage | | | | | | | | | | | |
| Safe handling: | Read label before use. Wear personal protective equipment. To be used only by suitably qualified person and in compliance with HSNO Controls. | | | | | | | | | | |
| Safe storage: | Keep out of reach of children. Keep container tightly closed when not in use. Store in secure, cool, well-ventilated area away from foodstuffs, seeds, fertilisers and human/animal health products. Storage must be in accordance with the NZS 8409 Management of Agrichemicals. | | | | | | | | | | |
| Section 8: Exposure controls/personal protection | | | | | | | | | | | |
| Occupational exposure limits: | <table border="1"> <thead> <tr> <th><i>Ingredient</i></th> <th><i>Form of exposure</i></th> <th><i>WES-TWA</i></th> <th><i>WES-STEL</i></th> </tr> </thead> <tbody> <tr> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table> | | | <i>Ingredient</i> | <i>Form of exposure</i> | <i>WES-TWA</i> | <i>WES-STEL</i> | - | - | - | - |
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| Biological limit value: | No Workplace Exposure Standard or Biological Exposure Indices are set for 2,4-D ethyl hexyl ester as of WorkSafe's 12 th edition of WES and BEI values, published in November 2020. |
| Engineering controls: | Use with adequate ventilation, i.e. outdoors. |
| Respiratory protection: | Not required if used outdoors with adequate ventilation. If risk of inhalation, wear respirator fitted with suitable filter. |
| Hand protection: | Waterproof gloves, e.g. PVC, nitrile. |
| Eye protection: | Chemical goggles, safety glasses with side shields or face shield. |
| Skin protection: | Chemical resistant coveralls and closed in boots. |
| General hygiene: | Do not eat, drink or smoke while using. Wash hands and exposed skin thoroughly with soap and water before meals and after work. Wash protective clothing daily after work. |
| Personal Protection: | Further information on specific types of personal protective gear and related standards is available in Section 16. |

Section 9: Physical and chemical properties

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| (a) | Appearance: | Brown liquid |
| (b) | Odour: | Slight hydrocarbon |
| (c) | Odour threshold: | No available |
| (d) | pH: | 3.0 – 5.0 (aqueous dilution) |
| (e) | Melting point/freezing point: | Not available |
| (f) | Initial boiling point and boiling range: | Not available |
| (g) | Flash point: | Non-flammable |
| (h) | Flammability (solid, gas): | Not applicable |
| (i) | Upper/lower flammability or explosive limits: | Not applicable |
| (j) | Vapour pressure: | Not available |
| (k) | Vapour density: | Not available |
| (l) | Relative density: | 1.1 – 1.2 |
| (m) | Solubility: | Emulsifies in water. |
| (n) | Partition coefficient n-octanol/water: | Not available |
| (o) | Auto-ignition temperature: | Not available |
| (p) | Decomposition temperature: | Not available |
| (q) | Kinematic viscosity: | Not available |

Section 10: Stability and reactivity

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| Stability of the substance: | Stable under normal conditions of storage and use. |
| Conditions to avoid: | No information available. |
| Incompatible materials: | Strong acids, alkalis and oxidising agents. |
| Hazardous decomposition products: | Not known to occur. |

Section 11: Toxicological information

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| | <p>Toxicity classifications determined by assessment of the components in the formulated mixture.</p> <p>(i) Acute toxicity: Classified as harmful if ingested, by dermal absorption or by inhalation (6.1D all). Symptoms may include headache, nausea and vomiting.</p> <p>(ii) Aspiration hazard: Not classified as aspirant hazard.</p> <p>(iii) Respiratory irritation: Not classified.</p> <p>(iv) Skin corrosion / irritation: Mildly irritating to skin.</p> <p>(v) Serious eye damage / irritation: May cause mild transient irritation to eyes.</p> <p>(vi) Respiratory or skin sensitisation: 2,4-D ethyl hexyl ester identified as contact sensitiser.</p> <p>(vii) Germ cell mutagenicity: Not classified for mutagenic effects.</p> <p>(viii) Carcinogenicity: Not classified for carcinogenic effects.</p> <p>(ix) Reproductive toxicity: Not classified for fertility or developmental effects.</p> <p>(x) Specific organ toxicity: Causes adverse effects to kidneys, liver, gastrointestinal tract and muscular system if prolonged or repeated exposure.</p> <p>(xi) Narcotic effects: Not classified for narcotic effects.</p> <p>Toxicological information for active ingredient: Oral LD₅₀ (mouse): 673 mg/kg bodyweight</p> |
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Section 12: Ecological information

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| | <p>Ecotoxicological classifications determined by assessment of the components in the formulated mixture.</p> <p>(a) Aquatic toxicity: Very toxic to aquatic life.</p> <p>(b) Soil environment: Very toxic to the soil environment.</p> <p>(c) Terrestrial vertebrate toxicity: Harmful to terrestrial vertebrates.</p> <p>(d) Terrestrial invertebrate toxicity: Not classified.</p> <p>(e) Persistence and degradability: Soil DT⁵⁰: <1 day However as 2,4-D ethyl hexyl ester has low water solubility, degradation is slower in water.</p> <p>(f) Potential to be bioaccumulative: Identified as bioaccumulative</p> |
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| (g) Mobility in soil: | Product emulsifies in water. |
| Ecotoxicological information for active ingredient: | <i>Skeletonema costatum</i> (algae) EC ₅₀ (72h) 0.23 mg/L <i>Daphnia</i> sp EC ₅₀ (48 h) 5.2 mg/L Bird LD ₅₀ 633 mg/kg |
| Section 13: Disposal considerations | |
| Product disposal: | Dispose of this product only by using according to the label or through Agrecovery chemical disposal or similar approved service or to an approved landfill. |
| Container disposal: | Recycle through Agrecovery if possible or appropriate recycling facility. Alternatively, crush and bury in an approved landfill. Do not use container for any other purpose. Avoid contamination of any water supply or stream with product or empty container. |
| Section 14: Transport information | |
| UN number: | 3082 |
| UN proper shipping name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D ETHYL HEXYL ESTER 68%) |
| UN class: | 9 |
| Packing group: | III |
| Subsidiary risk: | - |
| Environmental hazards: | Marine Pollutant |
| Special precautions: | - |
| <p style="color: red;">This product is classified as a Dangerous Good. Consult the Land Transport Rule: Dangerous Goods 2005 and NZS 5433:2012 Transport of Dangerous Goods on Land for more information</p> | |
| Section 15: Regulatory information | |
| HSNO: | Approved substance under the HSNO Act 1996. |
| HSNO approval number: | HSR000962 – GF-1320 |
| Tolerable exposure limit / environmental exposure limit: | Not Set |
| HSNO controls: | See www.epa.govt.nz |
| Additional controls: | Do not apply onto or into water |
| ACVM: | Registered under the Agricultural Compounds Veterinary Medicines Act 1997. |
| ACVM registration number: | P9761 |
| Conditions of registration: | See www.foodsafety.govt.nz |
| Section 16: Other information | |



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| Date of issue: | 11/01/2021 |
| Reason for reissue: | New format |
| Replaces: | SDS issued December 2019 |
| Information references: | Supplier Safety Data Sheet NZ EPA Approved hazardous substances with controls Workplace Exposure Standards and Biological Exposure Indices |
| Abbreviations: | ACVM: Agricultural Chemicals and Veterinary Medicines Group HSNO: Hazardous substances and New Organisms Act 1996 (HSNO Act) EPA: Environmental Protection Authority of New Zealand CAS Number: Chemical Abstracts Service Number LD50: Lethal Dose 50% (Population) LC50: Lethal Concentration 50% (Population) WES-TWA: Workplace exposure standards – Time-weighted average WES-STEL: Workplace exposure standards – Short-term exposure limit |
| Personal Protection Standards: | 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 |

The data provided in this safety data sheet is based on current knowledge and experience. The purpose of this document is to describe the product in terms of its safety requirements. The above details do not imply any guarantee concerning composition, properties or performance of the product.