

1: Identification of the Substance and Supplier

Product Name DEAL 360
Recommended Use Herbicide

Suppliers Details Orion AgriScience Ltd

Unit 1, 15 Sir Gil Simpson Drive, Harewood, Christchurch, 8053

PO Box 39 071, Harewood, Christchurch, 8545

 Web Address
 www.orionagriscience.co.nz

 Email Address
 orders@orionagriscience.co.nz

Telephone Number (03) 928 2386 (office hours), 0800 674 6627 (free phone)

 Emergency Telephone
 0800 CHEMCALL (0800 243 622) (24 hours)

 National Poison Centre
 0800 POISON (0800 764 766) (24 hours)

Date of Issue/Revision Feb 2025

2: Hazards Identification

Hazard Pictograms



Signal Words

Hazard Classes:

Hazardous to the Aquatic Environment - Chronic (Cat. 2)

Precautionary Statements:

Prevention

Response

Storage

Disposal

Warning

Hazard Statements:

H411 Toxic to aquatic life with long lasting effects

P101 If medical advice is needed, have product container or label at hand

P102 Keep out of reach of children

P103 Read carefully and follow all instructions

P273 Avoid release to the environment

Read label before use. Avoid contact with eyes and skin. Do not breathe in the spray mist. Wash hands thoroughly after use. When mixing or applying, wear personal protection as described in section 8. Take all reasonable steps to ensure that this product does not cause any significant adverse effects to the environment beyond the

application area.

P391 Collect spillage

First aid measures described in section 4. Contain and collect spillage for disposal. In an emergency call 111, Police or Fire Brigade. For specialist advice in an emergency only,

call 0800 CHEMCALL (0800 243 6225) (24 hrs).

Store in the original tightly closed container in a secure area

P501 Dispose of contents by using it in accordance with this label. Dispose of the

container via AgRecovery after triple rinsing (use the rinsate for spraying).

3: Composition/Information on Ingredients

IngredientCAS NoContent (% w/v)Glyphosate isopropylamine (active ingredient)38641-94-049

Other ingredients Proprietary Remainder

4: First Aid Measures

If medical advice is needed, have product container or label at hand. For advice call the National Poisons Centre or a Doctor

Page: 1 of 6



Ingestion: Seek medical advice if feeling unwell.

Skin Contact: Wash with plenty of soap and water. Seek medical advice if irritation occurs.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if easy to do so. Continue rinsing.

Seek medical advice if irritation persists.

Inhalation:Seek medical advice if feeling unwellWorkplace Facilities:Hand wash facility. Eye wash facility

Advice to Doctor: No specific antidote. Treat symptomatically
National Poison Centre 0800 POISON (0800 764 766) (24 hours)

Symptoms of Exposure which could occur if this material is not handled in accordance with instructions:

Ingestion: Burning sensation in throat and chest, nausea, vomiting, diarrhoea

Skin Contact:IrritationEye Contact:IrritationInhalation:Irritation

5: Fire-Fighting Measures

Fire/Explosion Hazard Non-Flammable

HAZCHEM Code 3Z ERP Guide No 47

Extinguishing Media Water spray, foam, dry chemical or C02. Avoid water jet.

Fire Fighting Instructions During a fire, toxic fumes may be emitted. Wear self-contained breathing apparatus. Contain runoff.

Specific Hazards Arising from Fire No data available

6: Accidental Release Measures

Personal Precautions Caution: Floors may be slippery if wet. Wear personal protective clothing and equipment as described in

section 8. Exclude non-essential people from the area.

Environmental Precautions Prevent further spillage or leakage. Prevent material from entering drains, waterways, etc.

Clean UpAbsorb spillage with inert material such as spill kit, sand or cat litter. Collect and place in a sealable

container for disposal. Wash down affected area with water and detergent. Absorb and collect washings for

disposal. Dispose of safely to a suitable landfill.

7: Handling and Storage

Storage: Keep out of reach of children. Store in the original tightly closed container in a secure area.

Handling and Use: Refer to Prevention statements in section 2 above. Exclude people and animals from the application area,

both during application and for the duration of the REI.

REI Until spray has dried

8: Exposure Controls / Personal Protection

Tolerable Exposure Limit

None established

Workplace Exposure Standards

None established

Engineering ControlsSelect spray application equipment to minimize exposure to operator and bystanders

Personal Protection:

Eye Safety glasses/goggles (or full face respirator incorporating visor) when mixing or applying

SkinCotton overalls snugly fitting at the neck, wrist and ankle, boots and waterproof gloves when mixing and

applying

RespiratoryNot required where spray mist is not inhaled. Otherwise, respirator (organic vapour and particulate matter)

is required.

Clean protective equipment after use

Page: 2 of 6



9: Physical and Chemical Properties

Appearance Clear Amber liquid

Odour Slight

Odour Threshold Does not apply

pH 4 - 7 Melting Point/Freezing Point $<0^{\circ}$ C Boiling Point $>100^{\circ}$ C

Flash Point
Does not apply
Flammability
Does not apply
Upper/Lower Flammability Limits
Does not apply
Vapour Pressure
Does not apply
Vapour Density
Relative Density
Does not apply
1.10 g/mL (approx.)

Solubility in Water Soluble

Partition Coefficient: n-octanol/water
Auto ignition Temperature
Does not apply
Decomposition Temperature
Does not apply
Kinematic Viscosity
Does not apply
Particle characteristics
Does not apply

10: Stability and Reactivity

Stability Stable under normal conditions

Hazardous Reactions See below

IncompatibilityThis product should only be mixed, contained in or sprayed by, equipment made from stainless steel,

fibreglass, plastic, aluminum, brass or copper. A highly flammable gas (hydrogen) may be formed from the contact of this product with galvanised or unlined steel. All spray equipment, including pumps, spray tanks,

lines, nozzles, and landing gear (aircraft) should be thoroughly washed with water after each day of

spraying

Hazardous Decomposition Products See above

11: Toxicological Information

This section describes effects which could occur if this material is not handled in accordance with this data sheet and label instructions

Acute Oral ToxicityLD50 > 5000 mg/kgAcute Dermal ToxicityLD50 > 5000 mg/kgAcute Inhalation ToxicityLD50 > 5 mg/L

Skin corrosion/irritation

Serious eye damage/Eye irritation

Respiratory or skin sensitisation

Germ cell mutagenicity

Carcinogenicity

Reproductive Toxicity

Specific Organ Toxicity – Single

Information is not available
Information is not available
Information is not available
Information is not available

exposure

Specific Organ Toxicity – Repeated Information is not available

exposure

Aspiration hazard Information is not available

12: Ecological Information

This section describes effects which could occur if this material is not handled in accordance with this data sheet and label instructions

Page: 3 of 6



The following information is presented in respect of the active ingredient:

• Acute Oral LD50 (Rat) >2000 mg/kg

• LC50 (96 hr) (Rainbow trout) 38 mg/l

LC50 (48 hr) (Daphnia) 40 mg/l

EC50 (72 hr) (Algae) 19 mg/l

• Non toxic to bees

Persistence/degradability Biodegradable. DT50 (soil) 15 days (typical)

Bioaccumulative Potential Octanol-water partition coefficient LoqP = -3.2 (low)

Soil Mobility Soil organic carbon water partitioning coefficient Koc = 1424 (slightly mobile)

Environmental Exposure Limit: None established

13: Disposal Considerations

Product Dispose of product by using it in accordance with the label. Waste product should be disposed of to a

suitable landfill. For disposal of large quantities contact Orion AgriScience Ltd.

Container Dispose of to a suitable landfill or via AgRecovery. Do not burn. Do not use packaging for any other

purpose.

9

14: Transport Information

Dangerous Goods

UN Number 3082

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (GLYPHOSATE ISOPROPYLAMINE 49%)

Class

Subsidiary Class None
Packing Group

Additional Information MARINE POLLUTANT

MTQ (Non-Commercial) 1000 litres

Passenger Service Vehicle No restriction

15 Regulatory Information

EPA Approval No HSR007694
ACVM Registration No P9824

Qualified Person Only required when used as an aquatic herbicide for application onto or into water

Certified Handler Not required

Workplace Only No

Tracking Not required
Record Keeping Not required

Site Requirements under EPA Notice

and HSWHS Regs:

- A hazardous substance location compliance certificate is not required
- A hazardous area is not required
- Separation distances for class 3 and class 6 substances to protected places and public places is not applicable
- Fire extinguishers are not required
- Signage is required for more than 1000 litres
- An emergency response plan is required for more than 1000 litres
- Secondary containment is required for more than 1000 litres
- Segregation from incompatible substances is not applicable

Additional Requirements Refer to NZS 8409:2021 'Management of Agrichemicals', and relevant local and regional council plans

16: Other Information

Page: 4 of 6



SDS review date

Glossarv

20 February 2025

ADE Acceptable Daily Exposure – A daily dose, received via any route, below which no adverse effects are

expected over a lifetime of exposure

ACVM Agricultural Compounds and Veterinary Medicines group of the Ministry of Primary Industries

Cat. GHS category

Ceiling A concentration that should not be exceeded at any time during any part of the working day

Certified Handler A qualification issued by a Compliance Certifier to handle and use particularly toxic substances (Acute

Toxicity Category 1 or 2 – Oral, Dermal or Inhalation)

DT50 Time (days) for 50% reduction in concentration

EC50 Concentration required to produce an effect in 50% of organisms

Environmental Exposure Limit Maximum concentration limit of a substance in an environmental medium, e.g., water, soil.

EPA Notice Hazardous Property Controls Notice 2017

ER Guide Australian and New Zealand Emergency Response Guide Book

GHS Globally harmonized system of classification and labelling of chemicals

Hazardous Substance Location For locations storing hazard substances of certain classes above threshold quantities

Compliance Certificate

Hazardous Area A designated area designed for the presence of flammable substances - Refer AS/NZS 60079.10.1:2009

HAZCHEM Code Emergency action code for emergency services

HSHPC NoticeHazardous Substances (Hazardous Property Controls) Notice 2017 **HSWHS Regs**Health and Safety at Work (Hazardous Substances) Regulations 2017

LC50 Concentration that will kill 50% of organisms

LD50 Dose that will kill 50% or organisms

MTQ Maximum Transport Quantity. The maximum amount of dangerous goods that can be transported by road

by the user

Notification Advance notice given to neighbours and other affected parties, of details of proposed application, and

other details as described

Octanol-Water Partition Coefficient

The partition coefficient of a substance between n-octanol and water, used as the Logarithm base 10

form, as an indicator that a substance may bioaccumulate

PDE Permitted Daily Exposure - A daily dose below which no adverse effects are expected over a lifetime of

exposure

Protected Place Residential properties, schools, hospitals, kindys, factories, shops, warehouses, etc., and other places where

people assemble

Public Place A place frequented by the public, including roads (does not include private property)

Qualified PersonA requirement for the loader, contractor or person applying the product to hold a qualification such as a

GROWSAFE Certificate, Unit Standard 21563, etc.

Record Keeping Includes a spray diary or other record of application

REI Restricted Entry Interval – The length of time after application before entry into the treated area is

permitted without the use of protective equipment. For indoor environments, this time period commences

once ventilation after treatment begins.

Segregation Certain classes of substances must not be in contact with, and must be stored separately from, certain

other classes as specified in HSWHS Regs and the HSHPC Notice

Separation Distances The distances specified in Part 11 and Part 13 of HSWHS Regs between storage and/or use of hazardous

substances and protected places and/or public places of certain classes above threshold quantities

Signage Positioned at entrances to commercial premises providing information on the hazardous substances

Page: 5 of 6



present

Soil Adsorption Coefficient (Kd)

The ratio of the concentrations of a substance adsorbed onto a solid sorbent to that dissolved in a liquid

phase. The higher the value the less mobile the chemical is in soil

Soil Organic Carbon-Water The ratio of the mass of a chemical that is adsorbed in the soil per unit mass of organic carbon in the

Partitioning Coefficient (Koc) soil. The higher the value the less mobile the chemical is in soil

Short term exposure level – 15 minute time weighted average

Tolerable Exposure LimitMaximum concentration limit of a substance above which persons must not be exposed

Tracking For some particularly hazardous substances, a record must be kept of the transport, storage, sale and use

of the product

TWA Time weighted average calculated over an 8 hour working day

Workplace Exposure Standard An occupational health standard limiting concentrations of specified substances to which persons are

exposed

Workplace Only

A product that is restricted to a workplace only and under the supervision of a certified handler

Please Note

Users must ensure that the most up to date version of this safety data sheet is used.

This Safety Data Sheet summarises information on this product, and how to safely handle and use the product. Each user should familiarise themselves with the product label and Safety Data Sheet, and consider the information in the context of how the product will be handled and used, including in conjunction with other products. Orion AgriScience Ltd assumes no responsibility for the accuracy, completeness or suitability of this information. The user is responsible for determining the suitability and accuracy of this information for their particular purposes.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Page: 6 of 6