



# OzCrop Glyphosate 540 K Herbicide

## OzCrop Pty Ltd

Chemwatch Hazard Alert Code: 2

Chemwatch: 5360-28  
Version No: 4.1.1.1  
Safety Data Sheet according to WHS and ADG requirements

Issue Date: 18/02/2021  
Print Date: 19/02/2021  
S.GHS.AUS.EN

### SECTION 1 Identification of the substance / mixture and of the company / undertaking

#### Product Identifier

Product name	OzCrop Glyphosate 540 K Herbicide
Chemical Name	Not Applicable
Synonyms	APVMA Number: 83692
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains glyphosate potassium)
Chemical formula	Not Applicable
Other means of identification	Not Available

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

Relevant identified uses	Agricultural herbicide.
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#### Details of the supplier of the safety data sheet

Registered company name	OzCrop Pty Ltd
Address	G13/25 Solent Circuit Norwest NSW 2153 Australia
Telephone	+61 2 8123 0170
Fax	+61 2 8123 0171
Website	<a href="http://www.ozcrop.com.au">http://www.ozcrop.com.au</a>
Email	orders@ozcrop.com.au

#### Emergency telephone number

Association / Organisation	In Transport Emergency DIAL 000
Emergency telephone numbers	1800 033 111 (24 hours - Australia wide)
Other emergency telephone numbers	Not Available

### SECTION 2 Hazards identification

#### Classification of the substance or mixture

Poisons Schedule	S5
Classification [1]	Skin Corrosion/Irritation Category 2, Eye Irritation Category 2B, Acute Aquatic Hazard Category 2, Chronic Aquatic Hazard Category 2
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

#### Label elements

Hazard pictogram(s)	
Signal word	Warning

#### Hazard statement(s)

H315	Causes skin irritation.
H320	Causes eye irritation.
H411	Toxic to aquatic life with long lasting effects.

#### Precautionary statement(s) Prevention

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

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## Precautionary statement(s) Response

<b>P305+P351+P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>P337+P313</b>	If eye irritation persists: Get medical advice/attention.
<b>P391</b>	Collect spillage.
<b>P302+P352</b>	IF ON SKIN: Wash with plenty of water.
<b>P332+P313</b>	If skin irritation occurs: Get medical advice/attention.
<b>P362+P364</b>	Take off contaminated clothing and wash it before reuse.

## Precautionary statement(s) Storage

Not Applicable

## Precautionary statement(s) Disposal

<b>P501</b>	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
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## SECTION 3 Composition / information on ingredients

## Substances

See section below for composition of Mixtures

## Mixtures

CAS No	%[weight]	Name
39600-42-5	30-60	<u>glyphosate potassium</u>
Not Available		(540g/L)
Not Available	balance	Ingredients determined not to be hazardous

## SECTION 4 First aid measures

## Description of first aid measures

<b>Eye Contact</b>	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> <li>▶ Wash out immediately with fresh running water.</li> <li>▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</li> <li>▶ Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
<b>Skin Contact</b>	<p>If skin contact occurs:</p> <ul style="list-style-type: none"> <li>▶ Immediately remove all contaminated clothing, including footwear.</li> <li>▶ Flush skin and hair with running water (and soap if available).</li> <li>▶ Seek medical attention in event of irritation.</li> </ul>
<b>Inhalation</b>	<ul style="list-style-type: none"> <li>▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>▶ Other measures are usually unnecessary.</li> </ul>
<b>Ingestion</b>	<ul style="list-style-type: none"> <li>▶ For advice, contact a Poisons Information Centre or a doctor at once.</li> <li>▶ Urgent hospital treatment is likely to be needed.</li> <li>▶ <b>If swallowed do NOT induce vomiting.</b></li> <li>▶ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>▶ Observe the patient carefully.</li> <li>▶ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>▶ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>▶ Transport to hospital or doctor without delay.</li> </ul>

## Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## Treatment for significant glyphosate exposures

The presence of a phosphono-group in the structure has been incorrectly interpreted as an organophosphate which suggests cholinesterase inhibition in poisoning cases. Retrospective studies on glyphosate poisoning have shown atropine and pralidoxime been mistakenly administered to counteract such poisoning cases.

There is no available antidote for glyphosate poisoning and treatment is largely symptomatic in nature.

In any significant ingestion exposure, the acute syndrome of glyphosate/ surfactant toxicity may occur within the first 24 hours of ingestion and may progress rapidly. These cases of significant ingestion, in particular those greater than a mouthful (> 0.5 ml/kg) of larger than 41% glyphosate concentrations SHOULD BE EVALUATED BY A PHYSICIAN AND CONSIDERED FOR HOSPITAL ADMISSION.

## Prevention of absorption

On admission to a hospital, normally, further absorption of the ingested herbicide would be prevented by performing gastric lavage. It is usually considered if no significant spontaneous vomiting has occurred. Gastric lavage may be very effective if performed within one to two hours post ingestion.

However, if a co-ingestant has pharmacologic properties that slows gastrointestinal movement, lavage may be indicated even after a prolonged post-ingestion time.

Activated charcoal is also given to absorb remaining glyphosate. Cathartics speed gastrointestinal transit time and decrease the time that the drug or chemical is available for absorption. Cathartics also hasten the elimination of the charcoal/drug complex in the GI tract.

## Enhanced elimination

Glyphosate is excreted very well by the kidneys. Thus to increase the elimination of the glyphosate, adequate urine flow will ensure the rapid elimination of the glyphosate. This elimination can be enhanced by a technique known as forced diuresis.

**Monitoring of the blood pressure**

A poisoned patient would normally be monitored for signs of haemodynamic or blood pressure instability. If the patient has a reduced blood pressure, intravenous fluids administration would be instituted to ensure adequate blood volume. If the blood pressure reduction is severe, then blood vessel vasoconstrictors (otherwise known as vasopressors) would be given to maintain the blood pressure. This would include the administration of drugs such as dopamine, noradrenaline, adrenaline or phenylephrine, which would raise the blood pressure rapidly.

<http://www.prn2.usm.my/mainsite/bulletin/sun/1997/sun14.html>

Dr. Mohd. Isa Abd. Majid

Toxicology Laboratory at the National Poison Centre, Universiti Sains Malaysia, 11800 Minden, Penang.

A 1991 survey of 93 attempted suicides by drinking undiluted Roundup type preparations noted 7 deaths within hours of intakes of 85 to 200 ml. Severe effects shown were pulmonary dysfunction, kidney failure, coma, hypotension requiring pressor amines, repeated seizures, cardiac arrest. 13 of 93 showed only mild effects, nausea, vomiting and recovered within 24 hours.

**SECTION 5 Firefighting measures****Extinguishing media**

- ▶ Foam.
- ▶ Dry chemical powder.
- ▶ BCF (where regulations permit).
- ▶ Carbon dioxide.
- ▶ Water spray or fog - Large fires only.

**Special hazards arising from the substrate or mixture**

<b>Fire Incompatibility</b>	▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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**Advice for firefighters**

<b>Fire Fighting</b>	<ul style="list-style-type: none"> <li>▶ Alert Fire Brigade and tell them location and nature of hazard.</li> <li>▶ Wear breathing apparatus plus protective gloves in the event of a fire.</li> <li>▶ Prevent, by any means available, spillage from entering drains or water courses.</li> <li>▶ Use fire fighting procedures suitable for surrounding area.</li> <li>▶ <b>DO NOT</b> approach containers suspected to be hot.</li> <li>▶ Cool fire exposed containers with water spray from a protected location.</li> <li>▶ If safe to do so, remove containers from path of fire.</li> <li>▶ Equipment should be thoroughly decontaminated after use.</li> </ul>
<b>Fire/Explosion Hazard</b>	<ul style="list-style-type: none"> <li>▶ The material is not readily combustible under normal conditions.</li> <li>▶ However, it will break down under fire conditions and the organic component may burn.</li> <li>▶ Not considered to be a significant fire risk.</li> <li>▶ Heat may cause expansion or decomposition with violent rupture of containers.</li> <li>▶ Decomposes on heating and may produce toxic fumes of carbon monoxide (CO).</li> <li>▶ May emit acrid smoke.</li> </ul> <p>Decomposes on heating and produces: carbon dioxide (CO<sub>2</sub>) nitrogen oxides (NO<sub>x</sub>) phosphorus oxides (PO<sub>x</sub>) other pyrolysis products typical of burning organic material.</p>
<b>HAZCHEM</b>	•3Z

**SECTION 6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

See section 8

**Environmental precautions**

See section 12

**Methods and material for containment and cleaning up**

<b>Minor Spills</b>	<p>Environmental hazard - contain spillage.</p> <ul style="list-style-type: none"> <li>▶ Clean up all spills immediately.</li> <li>▶ Avoid breathing vapours and contact with skin and eyes.</li> <li>▶ Control personal contact with the substance, by using protective equipment.</li> <li>▶ Contain and absorb spill with sand, earth, inert material or vermiculite.</li> <li>▶ Wipe up.</li> <li>▶ Place in a suitable, labelled container for waste disposal.</li> </ul>
<b>Major Spills</b>	<p>Environmental hazard - contain spillage.</p> <p>Moderate hazard.</p> <ul style="list-style-type: none"> <li>▶ Clear area of personnel and move upwind.</li> <li>▶ Alert Fire Brigade and tell them location and nature of hazard.</li> <li>▶ Wear breathing apparatus plus protective gloves.</li> <li>▶ Prevent, by any means available, spillage from entering drains or water course.</li> <li>▶ No smoking, naked lights or ignition sources.</li> <li>▶ Increase ventilation.</li> <li>▶ Stop leak if safe to do so.</li> <li>▶ Contain spill with sand, earth or vermiculite.</li> <li>▶ Collect recoverable product into labelled containers for recycling.</li> <li>▶ Absorb remaining product with sand, earth or vermiculite.</li> <li>▶ Collect solid residues and seal in labelled drums for disposal.</li> <li>▶ Wash area and prevent runoff into drains.</li> </ul>

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- ▶ If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

## SECTION 7 Handling and storage

## Precautions for safe handling

<b>Safe handling</b>	<ul style="list-style-type: none"> <li>▶ <b>DO NOT allow clothing wet with material to stay in contact with skin</b></li> <li>▶ Avoid all personal contact, including inhalation.</li> <li>▶ Wear protective clothing when risk of exposure occurs.</li> <li>▶ Use in a well-ventilated area.</li> <li>▶ Prevent concentration in hollows and sumps.</li> <li>▶ <b>DO NOT enter confined spaces until atmosphere has been checked.</b></li> <li>▶ Avoid smoking, naked lights or ignition sources.</li> <li>▶ Avoid contact with incompatible materials.</li> <li>▶ When handling, <b>DO NOT eat, drink or smoke.</b></li> <li>▶ Keep containers securely sealed when not in use.</li> <li>▶ Avoid physical damage to containers.</li> <li>▶ Always wash hands with soap and water after handling.</li> <li>▶ Work clothes should be laundered separately.</li> <li>▶ Use good occupational work practice.</li> <li>▶ Observe manufacturer's storage and handling recommendations contained within this SDS.</li> <li>▶ Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.</li> </ul>
<b>Other information</b>	<ul style="list-style-type: none"> <li>▶ Store in original containers.</li> <li>▶ Keep containers securely sealed.</li> <li>▶ Store in a cool, dry, well-ventilated area.</li> <li>▶ Store away from incompatible materials and foodstuff containers.</li> <li>▶ Protect containers against physical damage and check regularly for leaks.</li> <li>▶ Observe manufacturer's storage and handling recommendations contained within this SDS.</li> </ul>

## Conditions for safe storage, including any incompatibilities

<b>Suitable container</b>	<ul style="list-style-type: none"> <li>▶ <b>DO NOT use mild steel or galvanised containers</b></li> <li>▶ Metal can or drum</li> <li>▶ Packaging as recommended by manufacturer.</li> <li>▶ Check all containers are clearly labelled and free from leaks.</li> </ul>
<b>Storage incompatibility</b>	<p>Glyphosate preparations are considered safe, however they can be poisonous in large doses. They must be used with care.</p> <ul style="list-style-type: none"> <li>▶ Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive mixture with air.</li> </ul> <p>Reacts with mild steel, galvanised steel and zinc to produce hydrogen (H<sub>2</sub>).</p> <ul style="list-style-type: none"> <li>▶ Avoid reaction with oxidising agents</li> </ul>

## SECTION 8 Exposure controls / personal protection

## Control parameters

## Occupational Exposure Limits (OEL)

## INGREDIENT DATA

Not Available

## Emergency Limits


Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
OzCrop Glyphosate 540 K Herbicide	Not Available	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
glyphosate potassium	Not Available	Not Available

## Exposure controls

<b>Appropriate engineering controls</b>	<p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.</p> <p>Employers may need to use multiple types of controls to prevent employee overexposure.</p> <p>General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in specific circumstances. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.</p>								
	<table border="1"> <thead> <tr> <th>Type of Contaminant:</th> <th>Air Speed:</th> </tr> </thead> <tbody> <tr> <td>solvent, vapours, degreasing etc., evaporating from tank (in still air).</td> <td>0.25-0.5 m/s (50-100 f/min)</td> </tr> <tr> <td>aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)</td> <td>0.5-1 m/s (100-200 f/min.)</td> </tr> <tr> <td>direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)</td> <td>1-2.5 m/s (200-500 f/min.)</td> </tr> </tbody> </table>	Type of Contaminant:	Air Speed:	solvent, vapours, degreasing etc., evaporating from tank (in still air).	0.25-0.5 m/s (50-100 f/min)	aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)	direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)
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Continued...

	<p>grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).</p> <p>2.5-10 m/s (500-2000 f/min.)</p> <p>Within each range the appropriate value depends on:</p> <table border="1"> <thead> <tr> <th>Lower end of the range</th> <th>Upper end of the range</th> </tr> </thead> <tbody> <tr> <td>1: Room air currents minimal or favourable to capture</td> <td>1: Disturbing room air currents</td> </tr> <tr> <td>2: Contaminants of low toxicity or of nuisance value only.</td> <td>2: Contaminants of high toxicity</td> </tr> <tr> <td>3: Intermittent, low production.</td> <td>3: High production, heavy use</td> </tr> <tr> <td>4: Large hood or large air mass in motion</td> <td>4: Small hood-local control only</td> </tr> </tbody> </table> <p>Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.</p>	Lower end of the range	Upper end of the range	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents	2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity	3: Intermittent, low production.	3: High production, heavy use	4: Large hood or large air mass in motion	4: Small hood-local control only
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<b>Personal protection</b>											
<b>Eye and face protection</b>	<ul style="list-style-type: none"> <li>▶ Safety glasses with side shields.</li> <li>▶ Chemical goggles.</li> <li>▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]</li> </ul>										
<b>Skin protection</b>	See Hand protection below										
<b>Hands/feet protection</b>	<ul style="list-style-type: none"> <li>▶ Wear chemical protective gloves, e.g. PVC.</li> <li>▶ Wear safety footwear or safety gumboots, e.g. Rubber</li> </ul> <p>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</p> <p>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</p> <p>Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.</p> <p>Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:</p> <ul style="list-style-type: none"> <li>- frequency and duration of contact,</li> <li>- chemical resistance of glove material,</li> <li>- glove thickness and</li> <li>- dexterity</li> </ul> <p>Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).</p> <ul style="list-style-type: none"> <li>- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.</li> <li>- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.</li> <li>- Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use.</li> <li>- Contaminated gloves should be replaced.</li> </ul> <p>As defined in ASTM F-739-96 in any application, gloves are rated as:</p> <ul style="list-style-type: none"> <li>- Excellent when breakthrough time &gt; 480 min</li> <li>- Good when breakthrough time &gt; 20 min</li> <li>- Fair when breakthrough time &lt; 20 min</li> <li>- Poor when glove material degrades</li> </ul> <p>For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended.</p> <p>It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.</p> <p>Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task.</p> <p>Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:</p> <ul style="list-style-type: none"> <li>- Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.</li> <li>- Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential</li> </ul> <p>Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.</p>										
<b>Body protection</b>	See Other protection below										
<b>Other protection</b>	<ul style="list-style-type: none"> <li>▶ Overalls.</li> <li>▶ P.V.C apron.</li> <li>▶ Barrier cream.</li> <li>▶ Skin cleansing cream.</li> <li>▶ Eye wash unit.</li> </ul>										

**Respiratory protection**

Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the

ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	A-AUS / Class1	-
up to 50	1000	-	A-AUS / Class 1
up to 50	5000	Airline *	-
up to 100	5000	-	A-2
up to 100	10000	-	A-3
100+			Airline**

\* - Continuous Flow \*\* - Continuous-flow or positive pressure demand

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO<sub>2</sub>), G = Agricultural chemicals, K = Ammonia(NH<sub>3</sub>), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

## SECTION 9 Physical and chemical properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Transparent liquid; mixes with water.		
<b>Physical state</b>	Liquid	<b>Relative density (Water = 1)</b>	1.37
<b>Odour</b>	Not Available	<b>Partition coefficient n-octanol / water</b>	Not Available
<b>Odour threshold</b>	Not Available	<b>Auto-ignition temperature (°C)</b>	Not Applicable
<b>pH (as supplied)</b>	5	<b>Decomposition temperature</b>	Not Available
<b>Melting point / freezing point (°C)</b>	Not Available	<b>Viscosity (cSt)</b>	Not Available
<b>Initial boiling point and boiling range (°C)</b>	Not Available	<b>Molecular weight (g/mol)</b>	Not Applicable
<b>Flash point (°C)</b>	Not Applicable	<b>Taste</b>	Not Available
<b>Evaporation rate</b>	Not Available	<b>Explosive properties</b>	Not Available
<b>Flammability</b>	Not Applicable	<b>Oxidising properties</b>	Not Available
<b>Upper Explosive Limit (%)</b>	Not Applicable	<b>Surface Tension (dyn/cm or mN/m)</b>	Not Available
<b>Lower Explosive Limit (%)</b>	Not Applicable	<b>Volatile Component (%vol)</b>	Not Available
<b>Vapour pressure (kPa)</b>	Not Available	<b>Gas group</b>	Not Available
<b>Solubility in water</b>	Miscible	<b>pH as a solution (1%)</b>	Not Available
<b>Vapour density (Air = 1)</b>	Not Available	<b>VOC g/L</b>	Not Available

## SECTION 10 Stability and reactivity

<b>Reactivity</b>	See section 7
<b>Chemical stability</b>	<ul style="list-style-type: none"> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
<b>Possibility of hazardous reactions</b>	See section 7
<b>Conditions to avoid</b>	See section 7
<b>Incompatible materials</b>	See section 7
<b>Hazardous decomposition products</b>	See section 5

## SECTION 11 Toxicological information

### Information on toxicological effects

<b>Inhaled</b>	The material is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
<b>Ingestion</b>	Accidental ingestion of the material may be damaging to the health of the individual. A 1991 survey of 93 attempted suicides by drinking undiluted Roundup type preparations noted 7 deaths within hours of intakes of 85 to 200 ml. Severe effects shown were pulmonary dysfunction, kidney failure, coma, hypotension requiring pressor amines, repeated seizures, cardiac arrest.

OzCrop Glyphosate 540 K Herbicide

<b>Skin Contact</b>	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.	
<b>Eye</b>	There is some evidence to suggest that this material can cause eye irritation and damage in some persons.	
<b>Chronic</b>	Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Based on experience with similar materials, there is a possibility that exposure to the material may reduce fertility in humans at levels which do not cause other toxic effects. A 1991 survey of 93 attempted suicides by drinking undiluted Roundup type preparations noted 7 deaths within hours of intakes of 85 to 200 ml. Severe effects shown were pulmonary dysfunction, kidney failure, coma, hypotension requiring pressor amines, repeated seizures, cardiac arrest. Exposure to male farmers to herbicides based on glyphosates was associated with increased miscarriages and premature births in their families. Commercial preparations (for example Roundup) can be much more toxic than glyphosate alone, as adjuvant (tallow ethoxylate) have been added to increase biological potency.	
<b>OzCrop Glyphosate 540 K Herbicide</b>	<b>TOXICITY</b> Not Available	<b>IRRITATION</b> Not Available
<b>glyphosate potassium</b>	<b>TOXICITY</b> Oral(Mammal) LD50; >5000 mg/kg <sup>[2]</sup>	<b>IRRITATION</b> Not Available
<b>Legend:</b>	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. * Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances	

<b>GLYPHOSATE POTASSIUM</b>	for sodium salt:		
<b>Acute Toxicity</b>	✗	<b>Carcinogenicity</b>	✗
<b>Skin Irritation/Corrosion</b>	✓	<b>Reproductivity</b>	✗
<b>Serious Eye Damage/Irritation</b>	✓	<b>STOT - Single Exposure</b>	✗
<b>Respiratory or Skin sensitisation</b>	✗	<b>STOT - Repeated Exposure</b>	✗
<b>Mutagenicity</b>	✗	<b>Aspiration Hazard</b>	✗
<b>Legend:</b>	✗ – Data either not available or does not fill the criteria for classification ✓ – Data available to make classification		

SECTION 12 Ecological information

Toxicity

OzCrop Glyphosate 540 K Herbicide	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
glyphosate potassium	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	96	Algae or other aquatic plants	-6.08-8.87mg/L	4
	NOEL	48	Not Available	0.249-mg/L	4
<b>Legend:</b>	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.  
Wastes resulting from use of the product must be disposed of on site or at approved waste sites.  
Toxic to bees.  
The initial, and still integral, toxicity test is the adult honey bee acute contact study. This lab study determines the amount of pesticide that kills 50% of a test group of bees, or LD50. (LD=Lethal Dose).  
If the Acute Contact LD50 is less than or equal to 2 micrograms per bee, the pesticide is classified as Toxicity Group I, "highly toxic to bees."  
If the LD50 is less than 11 but greater than 2 micrograms per bee, it is classified as Toxicity Group II, "toxic to bees."  
If the LD50 of the pesticide is greater than 11 micrograms per bee (Toxicity Group III), it is relatively nontoxic, and no bee caution statement is required on the label.  
Toxicity Groups I and II are "bee-toxic pesticides" and the label will have specific use instructions to reduce the risk to pollinators.  
A bee-toxic pesticide that does not have extended residual toxicity can often be applied after pollinator foraging is complete (such as in the early evening) without harming pollinators that arrive the following day.

**DO NOT discharge into sewer or waterways.**

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

Bioaccumulative potential

Ingredient	Bioaccumulation
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**OzCrop Glyphosate 540 K Herbicide**

Ingredient	Bioaccumulation
	No Data available for all ingredients

**Mobility in soil**

Ingredient	Mobility
	No Data available for all ingredients



**SECTION 13 Disposal considerations**

**Waste treatment methods**

<b>Product / Packaging disposal</b>	<ul style="list-style-type: none"> <li>▶ <b>DO NOT allow wash water from cleaning or process equipment to enter drains.</b></li> <li>▶ It may be necessary to collect all wash water for treatment before disposal.</li> <li>▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</li> <li>▶ Where in doubt contact the responsible authority.</li> <li>▶ Recycle wherever possible or consult manufacturer for recycling options.</li> <li>▶ Consult State Land Waste Authority for disposal.</li> <li>▶ Bury or incinerate residue at an approved site.</li> <li>▶ Recycle containers if possible, or dispose of in an authorised landfill.</li> </ul>
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**SECTION 14 Transport information**

**Labels Required**

	
<b>Marine Pollutant</b>	
<b>HAZCHEM</b>	*3Z

**Land transport (ADG)**

<b>UN number</b>	3082	
<b>UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains glyphosate potassium)	
<b>Transport hazard class(es)</b>	Class	9
	Subrisk	Not Applicable
<b>Packing group</b>	III	
<b>Environmental hazard</b>	Environmentally hazardous	
<b>Special precautions for user</b>	Special provisions	274 331 335 375 AU01
	Limited quantity	5 L

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in;  
(a) packagings;  
(b) IBCs; or  
(c) any other receptacle not exceeding 500 kg(L).  
- Australian Special Provisions (SP AU01) - ADG Code 7th Ed.

**Air transport (ICAO-IATA / DGR)**

<b>UN number</b>	3082	
<b>UN proper shipping name</b>	Environmentally hazardous substance, liquid, n.o.s. * (contains glyphosate potassium)	
<b>Transport hazard class(es)</b>	ICAO/IATA Class	9
	ICAO / IATA Subrisk	Not Applicable
	ERG Code	9L
<b>Packing group</b>	III	
<b>Environmental hazard</b>	Environmentally hazardous	
<b>Special precautions for user</b>	Special provisions	A97 A158 A197 A215
	Cargo Only Packing Instructions	964
	Cargo Only Maximum Qty / Pack	450 L
	Passenger and Cargo Packing Instructions	964
	Passenger and Cargo Maximum Qty / Pack	450 L



OzCrop Glyphosate 540 K Herbicide

Passenger and Cargo Limited Quantity Packing Instructions	Y964
Passenger and Cargo Limited Maximum Qty / Pack	30 kg G

Sea transport (IMDG-Code / GGVSee)

UN number	3082		
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains glyphosate potassium)		
Transport hazard class(es)	IMDG Class	9	
	IMDG Subrisk	Not Applicable	
Packing group	III		
Environmental hazard	Marine Pollutant		
Special precautions for user	EMS Number	F-A , S-F	
	Special provisions	274 335 969	
	Limited Quantities	5 L	

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
glyphosate potassium	Not Available

Transport in bulk in accordance with the ICG Code

Product name	Ship Type
glyphosate potassium	Not Available

SECTION 15 Regulatory information

Safety, health and environmental regulations / legislation specific for the substance or mixture

glyphosate potassium is found on the following regulatory lists

Not Applicable

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	No (glyphosate potassium)
Canada - DSL	No (glyphosate potassium)
Canada - NDSL	No (glyphosate potassium)
China - IECSC	No (glyphosate potassium)
Europe - EINEC / ELINCS / NLP	No (glyphosate potassium)
Japan - ENCS	No (glyphosate potassium)
Korea - KECI	No (glyphosate potassium)
New Zealand - NZIoC	Yes
Philippines - PICCS	No (glyphosate potassium)
USA - TSCA	No (glyphosate potassium)
Taiwan - TCSI	No (glyphosate potassium)
Mexico - INSQ	No (glyphosate potassium)
Vietnam - NCI	No (glyphosate potassium)
Russia - ARIPS	No (glyphosate potassium)
<b>Legend:</b>	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 Other information

Revision Date	18/02/2021
Initial Date	12/07/2019

SDS Version Summary

Version	Issue Date	Sections Updated
3.1.1.1	01/11/2019	One-off system update. NOTE: This may or may not change the GHS classification
4.1.1.1	18/02/2021	Classification, Fire Fighter (fire/explosion hazard), Fire Fighter (fire fighting), Physical Properties

**OzCrop Glyphosate 540 K Herbicide****Other information**

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

**Definitions and abbreviations**

PC—TWA: Permissible Concentration-Time Weighted Average  
PC—STEL: Permissible Concentration-Short Term Exposure Limit  
IARC: International Agency for Research on Cancer  
ACGIH: American Conference of Governmental Industrial Hygienists  
STEL: Short Term Exposure Limit  
TEEL: Temporary Emergency Exposure Limit.  
IDLH: Immediately Dangerous to Life or Health Concentrations  
OSF: Odour Safety Factor  
NOAEL :No Observed Adverse Effect Level  
LOAEL: Lowest Observed Adverse Effect Level  
TLV: Threshold Limit Value  
LOD: Limit Of Detection  
OTV: Odour Threshold Value  
BCF: BioConcentration Factors  
BEI: Biological Exposure Index

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