

**RESISTANT WEEDS WARNING:** Torus is a GROUP E HERBICIDE, from the triazolinone chemical family. Naturally occurring weed biotypes resistant to GROUP E herbicides can become more prevalent after many years of continuous use. To delay the onset of, or control resistant weeds, use in rotation with herbicides of different mode of action. Since the occurrence of resistant weeds is difficult to detect prior to use, Adria New Zealand Ltd accepts no liability for losses that may result from the failure of this product to control resistant weeds.

**GENERAL INFORMATION:** Torus acts as a synergistic herbicide when added to glyphosate, glufosinate-ammonium and other knock-down, non-selective herbicides. Torus rapidly reduces the burndown time when used in mixture with knockdown herbicides and also broadens the weed control spectrum and improves efficacy against various broadleaf weeds. Visual symptoms will generally be apparent within days. Torus will not control grass weeds. Torus is most effective under ideal growth conditions, whereas efficacy will be impaired under extreme conditions such as moisture stress or very cold temperatures.

**COMPATIBILITY:** Torus is compatible with most commonly used knockdown herbicides such as glyphosate and glufosinate-ammonium. No other adjuvants are generally required.

**TIMING:** Torus is mainly effective against small weeds, and will generally be less effective against weeds which have grown past the 8 leaf stage.

**MIXING:** With the spray tank half-full of water, add the recommended volume of Torus to the spray tank, with agitation running at all times. Then add the recommended amount of knockdown herbicide (e.g. glyphosate) and a buffering agent if necessary to maintain an ideal water pH range.

**CLEANING SPRAY EQUIPMENT AFTER USE:** Drain spray tank completely and flush system twice with clean water immediately after spraying. Discard rinse water on land already sprayed or on waste land away from desirable plants and water sources. If a susceptible crop is to be sprayed next, additional cleaning with detergent is recommended. In this case, after the initial flush with clean water, refill the spray tank adding an alkali detergent to make a 0.5 percent solution. (e.g. – a low foam laundry detergent added at 500g/100 litres of water). Flush through the boom and hoses, and allow to stand with agitation engaged for 15 minutes. Drain the system and flush thoroughly with clean water.

**WEEDS SPECTRUM:** Torus will significantly improve the control of certain broadleaf weeds such as Cleavers, Dandelion, Fathen, Field pansy, Mayweeds, Redroot, Scarlet pimpernel, Shepherds purse, Spurrey, Willow weed, Wireweed, as well as other broadleaf weeds.

**RECOMMENDATIONS:**

CROP	RATE	REMARKS
<b>Broad spectrum weed control prior to planting crops and/or before direct drilling new crops.</b>	Tankmix 50-100ml/ha of Torus with glyphosate or glufosinate-ammonium (e.g. Nirvana) at the registered label rates of the companion herbicide. An adjuvant such as Opti-Cover GT can be added to improve coverage and reduce spray drift.	Torus will significantly reduce the weed burndown time when tankmixed with knockdown herbicides such as glyphosate. Torus will also significantly improve the efficacy against many broadleaf weeds, particularly certain weeds which glyphosate and glufosinate-ammonium may be relatively weak against. The lowest recommended use rate can be used where the weeds are very small and actively growing. Use the higher rate on larger weeds. The efficacy of Torus may be compromised or reduced where weeds have shut down due to drought stress or other environmental conditions. Torus should only be applied as a tankmix partner with knockdown herbicides and should not be applied as a standalone herbicide.
<b>Seed Potatoes - Dessication of Haulms</b>	Apply 250ml/ha of Torus in mixture with a crop mineral oil and a non-ionic wetting agent at recommended label rates.	Torus can be applied from the onset of senescence. It is important that the spray application ensures thorough coverage of the crop. In potato crops with very vigorous haulms or where re-growth occurs following a single application, a second application may be necessary to achieve satisfactory desiccation. This may be the situation for certain potato varieties, because of inherent vigour. A minimum interval between applications of 7 days should be observed to achieve optimum performance. An alternative potato desiccant such as Diquat 200SL may be used prior to the application of Torus if there is a desire to bring forward the desiccation and harvest timing.

**Note:** Beware: Apply this product carefully. Spray drift may cause serious damage to other desirable plants.

**IT IS AN OFFENCE** for users of this product to cause residues exceeding the relevant MRL in the **FOOD NOTICE: Maximum Residue LEVELS FOR Agricultural Compounds.**

**WITHHOLDING PERIODS:**

**GRAZING WITHHOLDING PERIOD:** Not required when used as directed. Grazing should be avoided, however, until weeds have died down. The recommendations and withholding period of the partner herbicide must be adhered to.

**SEED POTATOES:** 14 days. Exposed potato tubers must not be sprayed.

PROPER SHIPPING NAME	HAZARD CLASS	UN No.	HAZCHEM	PACKING GROUP
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CARFENTRAZONE-ETHYL 24%) Do not carry on a passenger service vehicle.	9	3082	2X	III

**WARNING**  
KEEP OUT OF REACH OF CHILDREN  
**ECOTOXIC**

**Torus®**

**A herbicide for use as a tankmix partner with certain knockdown herbicides in order to broaden the weed control spectrum and improve efficacy against a range of broadleaf weeds, and for seed potato haulm desiccation.**

Active Ingredient: contains 240g/litre carfentrazone-ethyl in the form of an oil-in-water emulsion.

**GROUP E HERBICIDE**

Registered pursuant to the ACVM Act 1997 No. P9308  
See [www.foodsafety.govt.nz](http://www.foodsafety.govt.nz) for registration conditions

In a transport emergency dial 111, Police or Fire Brigade.  
For specialist advice in an emergency only call:  
**0800 734 607 (24 hours).**



**Net Contents: 1 litre**



**READ LABEL CAREFULLY BEFORE USING**



HSNO Classifications: 3.1D, 6.1E (oral), 6.3B, 6.4A, 6.9B, 9.1A, 9.2A  
Approved under the HSNO Act 1996, HSR000436. See [www.epa.govt.nz](http://www.epa.govt.nz) for controls.  
Qualified Person/Contractor: Required.

**WARNING:** Combustible liquid. This substance may be harmful if swallowed. Causes mild skin irritation. May cause damage to organs through prolonged or repeated exposure. May cause eye irritation. Toxic to aquatic life with long lasting effects. Very toxic to the soil environment.

**ECOTOXICITY: VERY TOXIC TO AQUATIC LIFE WITH LONG-LASTING EFFECTS.** Do not apply onto or into water. A strategy to minimise spray drift should be employed at all times when applying spray near aquatic environments. **Very toxic to earthworms.** Very toxic to some plant species. **Beware: Spray drift hazard. Apply this product carefully. Certain plants may be killed or damaged from contact with this product.** Do not allow spray drift to occur outside the target area. Do not apply directly into or onto water. Do not apply substance to plants if bees are foraging.

**STORAGE:** Store locked up in the original, unopened container in a cool, dry, well-ventilated place, out of direct sunlight and away from stockfeed or foodstuffs. As a Class 9 Substance with Ecotoxicity Classifications, storage must be carried out in such a manner as to prevent contamination of waterways. It is recommended that The New Zealand Standard for the Management of Agrichemicals (NZS8409) is followed. See Safety Data Sheet for further information.

**SAFETY DIRECTIONS:** Keep out of reach of children. Avoid contact with skin and eyes. Keep away from heat, sparks, open flames or hot surfaces. Do not breathe fumes, vapours or spray. In case of fire: Use dry chemical extinguisher, foam, carbon dioxide or water spray to extinguish. When mixing or applying wear appropriate clothing including impervious, elbow-length gloves and eye protection. Wash hands and exposed skin before meals and after work. Avoid contamination of any water supply with chemical or empty container. Ensure compliance with relevant regional air management plans.

**TRANSPORT:** Do not carry Torus on a passenger service vehicle.

**RECORD KEEPING:** Records of use as described in NZS8409 Management of Agrichemicals must be kept.

**EQUIPMENT:** Apply using accurately calibrated and well maintained equipment. Thoroughly decontaminate equipment after use.

**PRODUCT DISPOSAL:** Ensure unwanted product is used by another operator strictly in accordance with label directions.

**CLEANING:** Flush spray equipment thoroughly with clean water after use.

**DISPOSAL OF CONTAINER:** Triple rinse container and add residue to spray tank. Return clean, empty container to an AgRecovery site for disposal. Avoid contamination of any water supply with chemical or empty container.



**FIRST AID:** If medical advice is needed, have product container or label at hand. Call a POISON CENTER or doctor/physician if you feel unwell. If skin irritation occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**SPILLS:** Contain leak or spillage and prevent entry to drains or waterways. Full protective clothing such as PVC or neoprene gloves, waterproof hat, coat and trousers worn outside rubber boots, with suitable respiratory and eye protection, should be worn during clean up and disposal. Keep unprotected people away from site. Absorb spillage with material such as soil or sawdust and dispose of safely.

**Batch No. and Manufacturing Date:** See on packaging.  
**Registered to and Distributed by:** Adria New Zealand Limited.  
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Ph: 09 412 9817. Fax: 09 412 9807. [www.adria.nz](http://www.adria.nz)



**NOTICE TO BUYER:** Careful tests have proved that the product is suitable for the recommended purposes when used in accordance with our instructions. However, since storage and use of product are beyond our control, we do not therefore accept any liability for damage or loss of efficacy which may result from the use of this product, whether used in accordance with the directions or not. We are liable for a consistent quality of the product, but the risk of its storage and use is not borne by us.