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 Dow AgroSciences

# TORDON\* 22K HERBICIDE



Product Registration Number: MAFF 05970

A suspension concentrate containing 240 g/litre (21.1% w/w) picloram as potassium salt.

For the control of a wide range of deep-rooted PERENNIAL and HERBACEOUS WEEDS on NON-CROP LAND such as motorway and railway embankments, roadsides, grassland of no agricultural interest, and industrial areas.

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

**READ DIRECTIONS FOR USE ON ATTACHED LEAFLET.**



**MAY CAUSE SENSITISATION BY SKIN CONTACT.**  
WEAR SUITABLE GLOVES.  
AVOID CONTACT WITH SKIN.  
KEEP OUT OF REACH OF CHILDREN.

To avoid risks to man and the environment, comply with the instructions for use.

**COMPLIANCE WITH THE FOLLOWING CONDITIONS OF USE AND ALL SAFETY PRECAUTIONS MARKED # IS A LEGAL REQUIREMENT**

FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL / INDUSTRIAL HERBICIDE

**Crops/Situations:**

Land not intended for cropping

**Maximum Individual Dose:**

11.2 litres product per hectare

**Maximum Number of Treatments:**

One per year

**READ ALL OTHER SAFETY PRECAUTIONS AND DIRECTIONS FOR USE BEFORE USE.**

## 5 LITRES e

### SAFETY PRECAUTIONS

**Operator protection:**

#Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when handling the concentrate.

#However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

WASH CONCENTRATE from skin or eyes immediately.

*Distributed by:*

**n2n Enviro Ltd**

Portland Street

Staple Hill

Bristol BS16 4PS

Telephone: (01272) 574574

Fax: (01272) 563461

\*Trademark of Dow AgroSciences LLC.

This label is compliant with the CPA Voluntary Initiative Guidance.

WASH HANDS AND EXPOSED SKIN before meals and after work.

**Environmental protection:**

#HARMFUL TO FISH OR OTHER AQUATIC LIFE. Do not contaminate surface waters or ditches with chemical or used container.

KEEP LIVESTOCK OUT of treated areas until any poisonous weeds such as ragwort have died and become unpalatable.

**Storage and disposal:**

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

WASH OUT CONTAINER THOROUGHLY and dispose of safely.

*Approval holder:*

**Dow AgroSciences Limited**

Latchmore Court, Brand Street,

Hitchin, Hertfordshire. SG5 1NH.

Telephone: Hitchin (01462) 457272

Fax: (01462) 426605

24 Hour Emergency Telephone Number: 0870 600 2999



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## DIRECTIONS FOR USE

**IMPORTANT:** This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

### GENERAL INFORMATION

TORDON\* 22K herbicide is a persistent selective weedkiller in liquid form containing 240 g/litre (21.1% w/w) picloram as potassium salt.

### NOTES

**AVOID SPRAY DRIFT.** Do not spray in windy weather. Do not permit spray drift to contaminate crop land or irrigation water, or to drift onto or within the root zone of crops, hedges or fruit, ornamental or forest trees, or gardens.

**WASH EQUIPMENT THOROUGHLY** several times after use, with water and/or a liquid detergent. Spray out. Fill with water and spray out several times before storage, disposing of the washings in a safe place. Equipment used for applying TORDON 22K should not be used for applying other materials to valuable crops.

**SENSITIVE PLANTS** may be harmed by residues of TORDON 22K in soil and treated vegetation. Do not apply TORDON 22K on or adjacent to soil which may be used as garden top-soil, potting soil, etc. or to grass which may be cut and used as mulch or for compost for horticultural or garden crops. Do not use cuttings from treated grass for mulching or composting.

On level ground there is negligible lateral movement but do not apply TORDON 22K around desirable trees or shrubs or where their roots may take up a lethal dose, care should be taken on slopes to prevent leaching into areas where desirable shrubs, etc are present.

### GRASS TOLERANCE

At the recommended rates of use TORDON 22K has a negligible effect on grasses but clover species are highly susceptible and will be eliminated from treated areas.

### WEEDS CONTROLLED AND RATES OF USE

USE	RATE litres/ha	WATER VOLUME litres/ha	EQUIPMENT
White clover, creeping thistle, hogweed,	2.8	450	Chipman Type C, DSP, D or Knapsack Sprayer fitted with Allman No.1 LP nozzle at 0.7 bar. Spray cover 45 cm
Common bird's-foot trefoil, field bindweed, creeping buttercup, burdocks, cat's ear, common chickweed, colt's-foot, creeping cinquefoil, dandelion, docks, hawkweed, Japanese knotweed, mugwort, common nettle, silverweed, tansy, cotton thistle, rosebay willowherb, yarrow	4.2-5.6	450	Chipman Type C, DSP, D or Knapsack Sprayer fitted with Allman No.1 LP nozzle at 0.7 bar. Spray cover 45 cm
Wild mignonette, common ragwort	8.4	450	Chipman Type C, DSP, D or Knapsack Sprayer fitted with Allman No.1 LP nozzle at 0.7 bar. Spray cover 45 cm
Bracken, brambles	11.2	450	Chipman Type C, DSP, D or Knapsack Sprayer fitted with Allman No.1 LP nozzle at 0.7 bar. Spray cover 45 cm.

Note: Bracken should be treated 2-4 weeks before frond emergence.

### TIME OF APPLICATION

For industrial weed control, the best treatment time is late winter or early spring. This will prevent development of most broad-leaved species for the rest of the season. For grass areas excellent results can be achieved with treatment coinciding with periods of vigorous growth.

### APPLICATION

Half fill spray tank with water, add the recommended quantity of TORDON 22K, and then the remainder of the water.

- For spray boom application, use the recommended rate of TORDON 22K in 450 litres of water per hectare.
- For power sprayer application, eg hand-lances, use the recommended rate of TORDON 22K in 1000-2000 litres of water and apply as a drenching spray.
- For localised treatment with a knapsack sprayer, use a solution of 150 ml of TORDON 22K in 18 litres of water. Apply at a pressure of 0.7 bar.

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After filling the spray tank, agitate thoroughly to ensure a complete and uniform solution. Use the made-up solution within 24 hours of mixing. Agitate thoroughly throughout spraying time. Do not leave to stand overnight.

#### Conditions of Supply

All goods supplied by us are of high grade and we believe them to be suitable but, as we cannot exercise control over their storage, handling, mixing or use, or the weather conditions before, during or after application which may affect the performance of the goods, all conditions and warranties, statutory or otherwise, as to the quality or fitness for any purpose of our goods are excluded. No responsibility will be accepted by us or re-sellers for any failure in performance, damage or injury whatsoever arising from their storage, handling, application or use. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in the use of such goods.

#### SAFETY DATA SHEET

This safety data sheet does not form part of the label approved under the Control of Pesticides Regulations 1986. Following the instructions on the pesticide label for the specified uses should ensure that the product is used safely and efficaciously for those uses.

Product Name: **TORDON\* 22K HERBICIDE (SP)**

LV70: 60574

Issue Date: Feb. 93

Ref: H891D

Revised: July 98 (Section(s) 14)

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Dangerous components (see section 16 for complete R-phrases):**

Picloram potassium salt	278 g/L	CAS 002545-60-0	EC No 219-829-6
Inert ingredients	Balance		

#### 3. HAZARDS IDENTIFICATION

Harmful to aquatic organisms. May cause sensitization by skin contact.

#### 4. FIRST-AID MEASURES

Never give fluids or induce vomiting if patient is unconscious or is having convulsions.

##### Ingestion

Do not induce vomiting. Call a physician. The decision of whether to induce vomiting or not should be made by a physician.

##### Eye Contact

Irrigate immediately with water for at least 5 minutes. Consult a physician if irritation persists.

##### Skin Contact

Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Wash contaminated clothing before re-use.

##### Inhalation

Remove to fresh air. Consult a physician.

##### Note to Physician

Supportive care. Treatment based on judgement of physician in response to symptoms of patient.

#### 5. FIRE-FIGHTING MEASURES

##### Extinguishing Media

Water fog or fine spray. Carbon dioxide. Dry chemical fire extinguishers. Foam.

##### Hazardous Combustion Products

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/ or irritating.

##### Protection of Firefighters

Wear protective clothing and use self-contained breathing apparatus.

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**Additional Information**

Keep containers cool by spraying with water. Contain runoff to prevent entry into water or drainage systems.

**6. ACCIDENTAL RELEASE MEASURES****Personal Precautions**

Wear appropriate safety clothing and eye/face protection (see Section 8). Prevent skin contact.

**Environmental Precautions**

Do not wash into sewers or into any body of water. Advise water authority if spillage has entered water course or drainage system.

**Methods of Cleaning Up**

Soak up with sand or other non-combustible absorbent material and place into containers for disposal. For large spills, barricade area and consult manufacturer. If further assistance is required, telephone the emergency contact number.

**7. HANDLING AND STORAGE****Handling**

Use good personal hygiene. Do not consume or store food in the work area. Wash hands and exposed skin before eating, drinking or smoking and after work. Avoid skin contact. Remove contaminated clothing immediately and wash skin area with plenty of water.

**Storage**

Product should be stored in compliance with local regulations.

Store in a cool, dry, well-ventilated place in the original container.

Protect from excessive heat and cold. Do not store near food, drink, animal feeding stuffs, pharmaceuticals, cosmetics or fertilisers. Keep out of reach of children.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Exposure Guidelines**

Picloram: ACGIH Threshold Limit Value (TLV) is 10 mg/m<sup>3</sup> TWA-8 hours.

**Engineering Controls**

Good general ventilation should be sufficient for most conditions.

Local exhaust ventilation may be necessary for some operations.

**Respiratory Protection**

When airborne exposure guidelines and/or comfort levels may be exceeded, use an approved air-purifying respirator.

For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.

**Hand/Skin Protection**

For brief contact, no precautions other than clean body-covering clothing and chemical resistant gloves should be needed.

For emergency conditions: Use protective clothing impervious to this material. Selection of specific items will depend on operation.

**Eye/Face Protection**

Use safety glasses. Where contact with the liquid is likely, chemical goggles are recommended.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	:	liquid
Colour	:	dark brown
Rel. density (water=1)	:	1.14 g/cm <sup>3</sup> (approx.)
Boiling point/range	:	100 deg.C (approx.)
pH	:	9.0-11.2
Vapour pressure	:	22 mmHg/20 deg.C (approx.)
Flash point	:	>100 deg.C (TCC)
Water solubility	:	miscible

**10. STABILITY AND REACTIVITY****Chemical Stability**

Is stable under normal storage conditions.

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**Conditions to Avoid**

Avoid extremes of temperature.

**Materials to Avoid**

Strong basic, acidic or oxidising materials.

**Hazardous Decomposition Products**

None under normal conditions of storage and use.

**11. TOXICOLOGICAL INFORMATION****Ingestion**

Low toxicity if swallowed.  
The oral LD<sub>50</sub> for rats is >2000 mg/kg.

**Skin Contact**

The dermal LD<sub>50</sub> for rabbits is >2000 mg/kg.  
Prolonged skin contact is unlikely to result in absorption of harmful amounts.  
Prolonged or repeated exposure may cause slight skin irritation.

**Sensitisation**

Sensitising to guinea pig skin.

**Eye Contact**

May cause slight eye irritation.

**Inhalation**

No adverse effects anticipated by this route of exposure incidental to proper handling.

**12. ECOLOGICAL INFORMATION**

Assessment largely or completely based on data for active ingredient.

**Persistence and Degradability**

The major route of degradation is by photolysis and photodegradation.  
Microbial degradation leads to formation of parent acid which undergoes further degradation. Half-life of the parent acid in soil is dependent on conditions and is approximately 10-278 days.

**Aquatic Toxicity**

Based on the acid.  
Acute LD<sub>50</sub> for daphnids is reported to be 68 mg/L.  
Algal toxicity EC<sub>50</sub> for green algae is 37 mg/L.

Based on data for the formulation.

Acute LD<sub>50</sub> for sheepshead minnow (*Cyprinodon variegatus*) is >100 mg/L.

**Avian Toxicity**

Based on data for the formulation.  
Dietary LD<sub>50</sub> for mallard duck is >10 mg/kg of diet.  
Dietary LD<sub>50</sub> for bobwhite (*Colinus virginianus*) is >10 mg/kg. diet.

**Other Information**

Active ingredient:  
Material is practically non-toxic to bees on an acute basis.

**13. DISPOSAL CONSIDERATIONS**

Do not contaminate ponds, waterways or ditches with chemical or used container. Wash out thoroughly. Container and washings must be disposed of safely and in accordance with applicable regulations. The preferred options are to send to licensed reclaimer or to permitted incinerators.

Do not re-use container for any purpose.

**14. TRANSPORT INFORMATION**

Sample shipment not allowed by mail. Product is not classified for any mode of transportation.

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**15. REGULATORY INFORMATION**

**Hazard Symbol :** Xi - Irritant

**Risk Phrases :** May cause sensitisation by skin contact (R43).

**Safety Phrases :** Keep out of reach of children (S2).  
Keep away from food, drink and animal feeding stuffs (S13).  
When using do not eat, drink or smoke (S20/21).  
Avoid contact with skin (S24).  
Wear suitable gloves (S37).

**16. OTHER INFORMATION**

The information herein is given in good faith and to the best of our knowledge but no warranty, express or implied, is made.

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