

MATERIAL SAFETY DATA SHEET

PRODUCT NAME

TRINITY

Date of Preparation	31/08/2011
Date of Issue	14/09/2011
MSDS No	FORM_MSDS_R&D_040_00
Rev. Date/No	

Sayfa No: 1/9

This MSDS is written according to MSDS PREPARATION AND DISTRIBUTION REGULATION FOR HAZARDOUS SUBSTANCE AND PREPARATIONS (R.G. 26/12/2008-27092)

1. Identification Of The Product And The Company

Trade Name : TRINITY (PENDIMETHANIL 330 g/L)
Formulation Type : Emulsion Concantrate
Cas No : 40487-42-1
EC No : 254-938-2
HRAC : K1 WSSA 3 dinitroaniline

1.1 Use Of Substance:

Herbicide

1.2 Manufacturer Information

Company Name : AGRI SCIENCES Tarım ve İlaç Ür. San. ve Tic. Ltd. Şti.
Address : Bekir Saydam Cad. No: 31 Pancar, Torbalı-İZMİR TURKEY
Tel : +90 232 864 13 33
Fax Number : +90 232 864 16 79
Website : www.agri-sci.com

1.3 Emergency:

Emergency Tel : +90 232 8641433

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2. Composition /Information On Ingredients

Material	g/L	CAS No	EINECS/ELINCS	Hazardous	R ¹	Classification
Pendimethanil	330	40487-42-1	254-938-2	Xi, N	R43, R50, R53	Xi, R43, N; R50, R53
Xylene	>400	1330-20-7	215-535-7	Xn, Xi	R10, R20/21, R38	R10, Xn; R20/21, Xi; R38

- ¹ R: Please see section 16 of explanation of R phrases

3. Hazard Identification



Xn: Hazardous



N: Dangerous for environment

R10: Flammable

R20/21: Harmful by inhalation and in contact with skin.

R38: Irritating to skin

R43: May cause sensitisation by skin contact.

R50: Very toxic to aquatic organisms.

R53: May cause long-term adverse effects in the aquatic environment.

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4. First Aid Measures

TOXICATION SYMPTOMS:

Irritation in eyes and on skin, engorgement, fever.

FIRST AID PRECAUTIONS:

If swallowed, do not make the patient vomit. Call a doctor immediately. In case of eye or skin contact, wash well with water min. for 15 minutes and call the doctor.

ANTIDOTE:

No special antidote. Symptomatic treatment is followed.

TREATMENT:

If swallowed, immediately make the patient plenty of milk, egg white or if these are unavailable, water. Avoid alcohol. Call the doctor for medical treatment.

5. Fire Fighting Measures

Flash Point : >35 °C

Flammability: Toxic gases containing oxides of sulphur and phosphorous may be evolved if involved in fires or exposed to extreme heat. Breathable air apparatus may be required in confined area. Stay upwind.

Suitable Extinguishing Media: Water fog, dry chemical, foam or carbon dioxide. Alcohol resistant foams are preferred if available.

Special fire fighting procedures: Fire fighters should use self contained breathing apparatus. Prevent runoff of fire water. Avoid exposure to smoke.

6. Accidental Release Measures

Spills & Disposal: Contain spill and absorb with sand or proprietary absorbent (vermiculite). Prevent from entering drains, waterway or sewers. Collect in sealed open top containers for disposal.

Triple rinse containers, add rinsate to the spray tank, then offer container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. On-site disposal of concentrate is not acceptable.

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Personal Protection: Good standards of industrial and personal hygiene are recommended. See Section 8.

7. Handling And Storage

Keep out of reach of children, do not store with food, feed or other material to be used or consumed by humans or animals. Do not contaminate water supplies, lakes, streams, or ponds.

Store in a secure, dry, well-ventilated area, segregated from oxidizers and incompatible materials. Protect from moisture.

8. Exposure Controls/Personal Protection

Engineering Controls: Natural ventilation only required when handling the concentrate. A local exhaust should be used in confined areas to keep the level of solvent within acceptable limits.

Personal Protective Equipments

The concentrate is harmful, skin absorption is the most common route of exposure. May be irritated the eyes and skin. Repeated minor exposure may have cumulative effects. Avoid contact with the skin and eyes and avoid breathing the vapour. Do not inhale the spray mist. When opening the container of concentrate and preparing the spray, wear cotton overalls buttoned to the neck and wrist, washable hat and elbow-length PVC gloves.

When using in an enclosed area wear face shield. If product spilled on skin wash affected area thoroughly with soap and water. After use and before eating drinking or smoking, wash hands, arms, face thoroughly with soap and water. After each day's use, wash gloves, face shield and contaminated clothing. Do not eat or smoke while spraying.

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9. Physical And Chemical Properties

Form : EC

Color : Light yellow to orange

Physical State: Liquid

pH : 3-8

Flash-Point : Min.28 °C

Density : 0,925 – 1,025 g/cm³

10. Stability And Reactivity

Chemical Stability: Stable under standard conditions

Conditions to avoid: Contact with iron and strong alkalis and storage above 50 °C will not occur

Compatibility: Avoid contact with strong oxidizers

11. Toxicological Information

Pendimethanil

Oral Acute oral LD₅₀ for rats >5000, male mice 3399, female mice 2899, rabbits >5000, beagle dogs >5000 mg/kg. **Skin and eye** Acute percutaneous LD₅₀ for rabbits >2000 mg/kg. Non-irritating to skin and eyes (rabbits). **Inhalation** LC₅₀ for rats >320 mg/l. **NOEL** (2 y) for dogs 12.5 mg/kg b.w.; (14 d) for rats 10 mg/kg b.w. (*EPA RED*). **ADI/RfD** (EC) 0.125 mg/kg b.w. [2003]; (EPA) cRfD 0.1 mg/kg b.w. [1996]. **Water GV** 0.02 mg/l **Toxicity Class** WHO (a.i.) III; EPA (formulation) III **EC classification** (Xi; R43| N; R50, R53)

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12. Ecological Information

Pendimethanil

Animals In rats, the major metabolic routes for pendimethanil involve hydroxylation of the 4-methyl and *N*-1-ethyl groups, oxidation of these alkyl groups to carboxylic acids, nitro-reduction, cyclisation and conjugation (J. Zulian, *J. Agric. Food Chem.*, 1990, **38**, 1743). **Plants** In plants, the 4-methyl group on the benzene ring is oxidised to the carboxylic acid via the alcohol. The amino nitrogen is also oxidised. At harvest time, residues in crops are below the validated sensitivity of the analytical method (0.05 ppm). **Soil/Environment** In soil, the 4-methyl group on the benzene ring is oxidised to the carboxylic acid via the alcohol; the amino nitrogen is also oxidised. DT₅₀ in soil is 3–4 mo (A. Walker & W. Bond, *Pestic. Sci.*, 1977, **8**, 359). K_d ranges from 2.23 (0.01% o.m., pH 6.6) to 1638 (16.9% o.m., pH 6.8) (H. J. Pedersen *et al.*, *Pestic. Sci.*, 1995, **44**, 131).

13. Disposal Considerations

Pesticide wastes are toxic. Do not reuse product containers. Dispose of product containers, waste containers and residues according to local health and environmental regulations.

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14. Transport Information

ADR/RID

UN Number: 1993

Proper Shipping Name: Combustible liquids, n.o.s.

Hazard Class: 3

Packing group: III

Sea (IMDG-Code)

UN Number: 1993

Proper Shipping Name: Combustible liquids, n.o.s.

Hazard Class: 3

Packing group: III

Marine pollutant: yes

Air (ICAO / IATA)

UN Number: 1993

Proper Shipping Name: Combustible liquids, n.o.s.

Hazard Class: 3

Packing group: III

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15. Regulatory Information

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This product is including Pendimethanil and Xylene.



Xn: Hazardous



N: Dangerous for environment

Risk Phrases

R10: Flammable

R20/21: Harmful by inhalation and in contact with skin.

R38: Irritating to skin

R43: May cause sensitisation by skin contact.

R50: Very toxic to aquatic organisms.

R53: May cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S1/2 : Keep locked up and out of the reach of children

S13 : Keep away from food, drink and animal foodstuffs

S20 : When using do not eat or drink.

S24 : Avoid contact with skin

S 29 : Do not empty into drains

S 36/37/39 : Wear suitable protective clothing, gloves and eye/face protection

S45 : In case of accident or if you feel unwell seek medical advice immediately

(show the label where possible)

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S:46 : If swallowed, seek medical advice immediately and show this container or label

S 56 : Dispose of this material and its container at hazardous or special waste collection point

S64 : If swallowed, rinse mouth with water (only if the person is conscious)

16. Other Informations

N : Dangerous for environment

Xi : Irritant

Xn : Hazardous

Section 2

R10: Flammable

R20/21: Harmful by inhalation and in contact with skin.

R38: Irritating to skin

R43: May cause sensitisation by skin contact.

R50: Very toxic to aquatic organisms.

R53: May cause long-term adverse effects in the aquatic environment.

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage use of the product. It is not applicable to unusual or non- standard uses of the product nor where instructions or recommendations are not followed.

All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.