

MATERIAL SAFETY DATA SHEET

NAME OF MATERIAL/PREPARATION

NİCARDEN

| | |
|---------------------|----------------------|
| Date of Preparation | 06/06/2011 |
| Date of Issue | 08/06/2011 |
| MSDS No | FORM_MSDS_R&D_011_00 |
| Renewal Date/No | - |

Sayfa No: 1/8

PREPARED BASED ON REGULATION ON PREPARATION AND DISTRIBUTION OF SAFETY DATA SHEETS ABOUT HAZARDOUS MATERIALS AND PREPARATIONS (O.G. issue no 27092 dated 26/12/2008).

1. MATERIAL/PREPARATION AND COMPANY/OWNER IDENTIFICATION:

1.1 Material/Preparation Identification:

Product Name : NİCARDEN
Product Content : PROPINEB 70%
Formulation Form : WP (WETTABLE POWDER)

Propineb

Cas No : 12071-83-9
EC No : 235-134-0
FRAC Class : M3, M multi-site: alkylenebis(dithiocarbamate)

1.2 Usage of the Material/Preparation:

Fungicide

1.3 Company Identification:

2. Manufacturing and License Holding Company:

Company Name: AGRİ SCIENCES TARIM VE İLAÇ ÜR. SAN. TİC. LTD. ŞTİ.
Address : Bekir Saydam Caddesi Pancar No: 31 Torbalı / İZMİR
Telephone : +90 0232 864 13 33
Fax : +90 0232 864 16 79

2.1 Emergency Contact Telephone:

In case of an emergency please call +90 0232 864 13 33.

3. COMPOSITION AND INFORMATION ON INGREDIENTS:

| Material | g/L | CAS No | EINECS/ELINCS | Hazard | R ¹ | Classification |
|----------|-----|------------|---------------|-----------|--------------------------------|---|
| Propineb | 70 | 12071-83-9 | 235-134-0 | Xn, Xi, N | R20, R48/20/22, R43, R50 | Xn; R20, T; 48/20/22, R43, N; R50 |
| Others* | - | | | | | |

- ¹ R explanations are under section 16.

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- * **Outside classification due to absence of hazardous material.**

4. HAZARD IDENTIFICATION:



T: TOXIC

R20

: Harmful if inhaled.

R43

: May cause sensitivity in case contact with skin.

R48/20/22

: Harmful: Significant hazard for health if inhaled for a while.

R50

: Very toxic for aquatic organisms.



N: DANGEROUS FOR THE ENVIRONMENT

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5. FIRST AID MEASURES:

Poisoning indicators : May cause dizziness, nausea and vomiting if it's used carelessly although it has low toxicity.

General Information : Survivors are removed from the danger zone. In case of danger of fainting during storing and transporting, it's placed laterally. The pesticide contaminated clothes are removed immediately.

In Case Contact with Skin : Wash skin immediately with plenty of soap and water.

In Case Contact with Eye : Wash eyes with plenty of water. Consult an eye specialist.

If Swallowed : Call a doctor immediately.

Information for Doctor: See Chapter 11 for information on toxicology.

The active ingredient whose chemical group is stated in part 2 :

Dithiocarbamat (Propineb)

Treatment Precautions: First aid, decontamination, symptomatic treatment.

Antidote: No specific antidote

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6. FIRE FIGHTING MEASURES

5. FIRE FIGHTING MEASURES

Personal protection equipment for fire fighting: Do not inhale the gases occurred during the explosion and fire. If possible use air-independent respiratory masks.

Hazards: Consider the hazardous gases come out during the fire.

Extinguishers: Foam, Carbon dioxide, fire extinguishing powder.

Other Information: Move the product away from the fire place, cool the containers using water. If possible, use sand and soil after the fire extinguishing liquid.

7. ACCIDENTAL RELEASE MEASURES:

General Information: Please use the personal protection equipment defined under Section 8.

Personal Precautions: Do not touch spilled product or contaminated surfaces. Do not eat, drink or smoke while handling spilled product.

Spill Clean-up Procedure: Collect the product with a liquid retaining material (e.g. sand, sawdust, chemical binders). Place the product into tight plastic containers and keep safely until it is disposed. Contaminated materials and surfaces should be cleaned in compliance with environmental regulations.

Additional Precautions: Refer to Section 7 for safe handling instructions. Refer to Section 8 for personal protections equipment. Refer to Section 13 for disposal.

8. HANDLING AND STORAGE

Handling : Please use the personal protection equipment specified under Section 8. Do not eat or drink while handling the product. Avoid contact with the mouth, the skin or the eyes. Do not inhale the product. After handling the product thoroughly you're your

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hands. When handling closed containers no additional safety precautions other than the specified ones are needed. Only handle the product in rooms with a local suction device.

Storage : Please store the product in its original container, in a cool, dry and well-ventilated place. Keep away from food, drink and animal feed items. Protect from exposure to direct sunlight. Protect against freezing. Keep the product away from the reach of children.

9. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Precautions: Ensure appropriate general or local ventilation to keep the product concentration under allowed limits.

Personal Protection Equipment:

Eye Protection: Use eye protection equipment compliant with EN 166.

Skin Protection: Use protective clothing and appropriate gloves. Use 2 layers of clothing, if possible. Use CE marked Nitrile Rubber (min. 0.40 mm thick). Contaminated gloves should be washed. Any gloves that cannot be cleaned inside and outside should be disposed.

Respiratory Protection: Use respiratory apparatuses compliant with EN 149:2001. Any respiratory protection apparatus should only be used for short term operations, as a part of risk minimization measures, e.g. in case of local ventilation. Comply with operation instructions and warnings of the manufacturer during use of respiratory protection apparatuses.

Good Hygiene Conditions: Do not eat, drink or smoke while handling the product. Make sure to wash your hands each time before eating, drinking, smoking or going to the toilet.

10. PHYSICAL AND CHEMICAL PROPERTIES

Form : Solid, powder

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Colour : Beige
Odour : Light characteristic
Specific Gravity : 6.0-8.0 10% (20⁰C)
pH : 0,65 ± 0,05 g/cm³
Solubility in Water : Dispers

11. STABILITY AND REACTIVITY

Conditions to avoid : Extreme temperatures and exposure to direct sunlight
Materials to avoid : Carbon disulphide and hydrosulfite formation is possible for acids.

12. TOXICOLOGICAL INFORMATION

Propineb Technical Material:

Acute Oral LD₅₀ rat >5000 mg/kg LD₅₀ rabbit >2500 mg/kg

Skin and eye Acute percutan LD₅₀ rat >5000 mg/kg (Not irritating to eye and skin for rabbits)

Respiration LC₅₀ rat (4 hours) 2420 mg/m³ air

NOEL (2y) 2,5 rat mg/kg; mouse 106 mg/kg; dog 25 mg/kg b.w per day.

ADI/RfD (JMPR) 0,007 mg/kg b.w; 0.0003 mg/kg b.w. propylenethiourea (PTU) [1993-2004]; (EC) 0,007 mg/kg b.w. [2003]

Toxicity Class: WHO (a.i.) U , EPA classification (formulation) IV

13. ECOLOGICAL INFORMATION

Propineb Technical Material:

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Birds : Acute Oral LD₅₀ >5000 mg/kg (Japanese quail)

Fish : LC₅₀ (96 hours) rainbow trout 0,4 mg/l, golden orfe 133 mg/l.

Daphnia LC₅₀ (48 hours) 4,7 mg/L. Alg E_rC₅₀ (96 hours) 2,7 mg/l

Bee : Not toxic for bees. LD₅₀ (effect) > 164 ng/bee

14. DISPOSAL CONSIDERATIONS

Product : Do not dispose product waste together with household wastes. Waste residue should not be spilled into wastewater canals. Any product wastes should be disposed of in compliance with Hazardous Wastes Control Regulations.

Contaminated Materials : Empty containers should not be used for other products. Completely emptied and rinsed containers should be disposed in compliance with regulations. Non-clearable containers should be disposed of as hazardous materials.

15. TRANSPORTATION INFORMATION

**ADR/RID/ADNR
/RID/ADNR**

UN-No. : 3077

Class : 9

Packing Group : III

Product Type : UN 3082 ENVIRONMENTALLY HAZARDOUS MATERIAL, LIQUID N.O.S. (not includes wastes) (Includes Propineb)

IMDG

UN-No. : 3077

Class : 9

Packing Group : III

EMS :

Marine Pollutant : Yes



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Product Type :UN 3082 ENVIRONMENTALLY HAZARDOUS MATERIAL, LIQUID N.O.S. (not includes wastes) (Includes Propineb)

IATA

UN-No. : 3077

Class : 9

Packing Group : III

Product Type :UN 3082 ENVIRONMENTALLY HAZARDOUS MATERIAL, LIQUID N.O.S. (not includes wastes) (Includes Propineb)

16. REGULATORY INFORMATION

This data sheet is prepared based on regulation on preparation and distribution of safety data sheets about hazardous materials and preparations (O.G. issue no 27092 dated 26/12/2008).

Hazard Marks and Symbols:



T:Toxic **N: DANGEROUS FOR THE ENVIRONMENT**

Hazardous Materials Listed on the Label: Includes Propineb.

Risk Phrases:

Physicochemical:-

Health :

R20 : Harmful if inhaled.

R43 : May cause sensitivity in case contact with skin.

R48/20/22 : Harmful: Significant hazard for health if inhaled or swallowed.

Environment :

R50 : Very toxic for aquatic organisms.

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Safety Phrases:

S36/37 : Use suitable protective clothes and protective gloves.
S22 : Do not inhale its dusts.
S24 : Avoid contacting with skin.
S60 : Dispose this material and container as hazardous waste.
S61 : Avoid releasing into environment. Apply special usage directives / Safety Information Form.

Important Labelling:

Follow instructions to avoid personal and environmental risks

Additional Information :Propineb: WHO (a.i.) U , EPA classification (formulation) IV

17. OTHER INFORMATION

N: Dangerous for the environment

Xn: Harmful

Xi: Irritant

All Risk Phrases under Section 2:

R20 : Harmful if inhaled.

R48/20/22 : Harmful: Significant hazard for health if inhaled and swallowed.

R43 : May cause sensitivity in case contact with skin.

R50 : Very toxic to aquatic organisms.

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

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Renewal Date/No : -
Prepared By : Secil CANAYAKIN

This material safety data sheet is provided as a supplement to instructions of manufacturer; however it does not replace instructions of manufacturer. The information provided in this sheet only conforms to the regulatory criteria known at the time of the preparation of Safety Data Sheet. Required data are gathered in accord with "Regulation on Preparation and Distribution of Safety Data Sheets about Hazardous Materials and preparations (O.G. issue no 27092 dated 26/12/2008)". Concerned organizations and persons are invited to comply with the abovementioned regulation.