

MATERIAL SAFETY DATA SHEET

NAME OF MATERIAL/PREPARATION

CYCLAFON

Date of Preparation	15/08/2012
Date of Issue	15/08/2012
MSDS No	FORM_MSDS_R&D_078_00
Renewal Date/No	

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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 : **CYCLAFON**
Product Content : Copper hydroxide 53,8% DF (35% metallic copper equivalent)
Formulation Form : Water Dispersible Dry Fluid Granule (DF)

BAKIR HİDROKSİT

Cas No : 20427-59-2
EC No : 243-815-9
FRAC : M1, M multi-site: inorganic

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.

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3. COMPOSITION AND INFORMATION ON INGREDIENTS:

Material	g/L	CAS No	EINECS/ELINCS	Hazard	R ¹	Classification
Copper hydroxide	53,8	20427-59-2	243-815-9	N	R50/53	N; R50/53
Others	Outside classification due to absence of hazardous material.					

- ¹ R explanations are under section 16.

4. HAZARD IDENTIFICATION:



N: DANGEROUS FOR THE ENVIRONMENT

R50/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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5. FIRST AID MEASURES:

Poisoning indicators: Rapid breathing, irritability, bloody diarrhea, anxiety, blurred vision, dizziness, headache, green-blue colour vomiting, runny nose, metallic taste in the mouth, the water and electrolyte loss, fatigue.

First Aid Measures: Take first aid measures below immediately following poisoning and call a doctor. Bring the pharmaceutical package and label together. Hold eyelids open in case infected with the eyes and rinse with water for fifteen minutes. Remove the patient from pesticide area and apply artificial respiration. If ingested through the mouth, make the patient drink plenty of milk, egg whites, gelatine solution. If you don't have these, make the patient drink plenty of water to make him/her vomit.

Antidote and Required Information: There is no special antidote. Stomach is washed with activated charcoal. Plasma and Novadrol is given in order to help the blood stream.

6. FIRE FIGHTING MEASURES

Important protection equipment for fire fighting: Do not inhale the gases that may occur during explosion and fire. If possible, wear air-free breathing mask during fire..

Hazards: Toxic gases that may occur during fire must be taken into account.

Fire extinguishers: Foam, carbon dioxide, extinguishing powder.

Other Information: Remove the product from the fire location, cool the containers with water. If possible, use sand or soil after the fire-fighting water.

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.

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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 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.

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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

Appearance : Solid, granule
Colour : Green-blue
Odour : Light characteristic
pH : 5-11 1% (20⁰C)
Solubility in Water :

11. STABILITY AND REACTIVITY

Conditions to avoid: Extreme temperatures and exposure to direct sunlight

Hazardous reactions: When stored and handled appropriately no hazardous reactions are observed.

Hazardous Decomposition Products : When stored and handled appropriately no Hazardous Decomposition Products are occurred.

12. TOXICOLOGICAL INFORMATION

Copper Hydroxide Technical Article:

Acute oral toxicity: LD₅₀ mouse = 489–1280 mg/kg (technical.)

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Acute dermal and eye toxicity: percutaneous LD₅₀ rabbit > 3160 mg/kg. It may be irritating and corrosive for the eye.

Inhalation toxicity: LC₅₀ (4 hours) mouse =0.56 mg/l. **NOEL** 16–17 mg Cu/kg b.w. daily **ADI/RfD** (JECFA evaluation) Copper compounds 0.5 mg/kg [1982]; (WHO) 0.5 mg/kg [1998]; (EC) 0.15 mg Cu/kg b.w. [2007].

Toxicity Classification: WHO (a.i.) III; EPA (formulation) III.

13. ECOLOGICAL INFORMATION

Copper Hydroxide Technical Article:

Bird acute Oral LD₅₀ mallard ducks 223 mg Cu/kg.

Diet LC₅₀ (8 days) mallard ducks 219.7 mg Cu/kg b.w. daily.

Fish LC₅₀ (96 hours) rainbow trout 10 mg Cu/l.

Daphnia EC₅₀ (48 hours) 0.0422 mg Cu/l.

Alg EC₅₀ 22.5 mg Cu/l.

Bee LD₅₀ (oral) 49.0 µg Cu/bee; (contact) 42.8 µg Cu/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.

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15. TRANSPORTATION INFORMATION

ADR/RID/ADNR

UN-No. : 3077

Hazard Mark : 9

Packing Group : III

Product feature :UN 3077 ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, SOLID, N.O.S. (DOESN'T CONTAIN WASTE) (CONTAINS COPPER
HYDROXIDE)

IMDG

UN-No. : 3077

Class : 9

Packing Group : III

Marine Pollutant : -

Product feature :UN 3077 ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, SOLID, N.O.S. (DOESN'T CONTAIN WASTE) (CONTAINS COPPER
HYDROXIDE)

IATA

UN-No. : 3077

Class : 9

Packing Group : Product feature :UN 3077 ENVIRONMENTALLY
HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DOESN'T CONTAIN WASTE)
(CONTAINS COPPER HYDROXIDE))

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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:



N: DANGEROUS FOR THE ENVIRONMENT

Hazardous Materials Listed on the Label

Contains copper hydroxide.

Risk Phrases:

Physicochemical : -

Health : -

Environment : R50/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S1/2: Keep in a locked place and away from children

S9: Keep container in a well-ventilated place.

S29: Do not empty into drains.

S56: Dispose of this material and its container at hazardous or special waste collection point.

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Important Labelling:

Follow instructions to avoid personal and environmental risks.

Additional Information:

Toxicity Class: WHO (a.i.) III; EPA Formulation III.

17. OTHER INFORMATION

N: DANGEROUS FOR THE ENVIRONMENT

All Risk Phrases under Section 2:

R50/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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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.