

MATERIAL SAFETY DATA SHEET

NAME OF MATERIAL/PREPARATION

BRUST

Date of Preparation	18/09/2013
Date of Issue	18/09/2013
MSDS No	FORM_MSDS_R&D_116_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 : **BRUST**
Product Content : Myclobuthanil 245 g/L
Formulation Form : EC (Emulsion Concentrate)

Myclobuthanil

Cas No: 88671-89-0

FRAC: 3, G1 SBI Class I, DMI: triazole

1.2 Usage of the Material/Preparation:

Fungicide

1.3 Company Identification:

Manufacturing and License Holding Company:

Company Name : AGRI SCIENCES TARIM VE ILAC UR. SAN. TIC. LTD. STI.
Address : Bekir Saydam Caddesi Pancar No: 31 Torbali / IZMIR
Telephone : +90 0232 864 13 33
Fax : +90 0232 864 16 79

1.4 Emergency Contact Telephone:

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

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2. COMPOSITION AND INFORMATION ON INGREDIENTS:

Material	g/Kg	CAS No	EINECS/ELINCS	Hazard	R ¹	Classification
Myclobuthanil	245	88671-89-0	-	Xn,N;	R22,R36,R51/53,R63	R36,N;R52/53
N-Butanol	20	71-36-3	-	Xn	R10,R22,R37/38,R41,R67	R10, R67
M-Pyrol	250	872-50-4	212-828-1	Xi, T	R61, R36/37/38	Xi; R36/37/38
Solvesso 100	>350	918-668-5	-	Xn; Xi	R10, R20/21, R38	R10, Xn; R20/21, R38
Others	Outside classification due to absence of hazardous material.					

- ¹ R explanations are under section 16.

3. HAZARD IDENTIFICATION



Xn: HARMFUL



N: DANGEROUS FOR THE ENVIRONMENT

R10: Flammable.

R20/21: Harmful to health if inhaled and contact with skin

R22: If swallowed, it is harmful

R36/37/38: Irritates eyes, respiratory system and skin.

R52/53: Too toxic for aquatic organisms and may cause long-term adverse effects in the aquatic environment.

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R61: It may give harm to unborn children.

R67: Vapors may cause numbness and dizziness.

4. FIRST AID MEASURES

Poisoning Symptoms: Poisoning symptoms are not known, however take care of general protection warnings

First Aid Measures: Move the patient away from the contaminated area. Take off the contaminated clothes. If any difficulty to breath, apply artificial respiration. In case contact with skin, wash with plenty of water and soap. In case contact with eye, rinse for 15 minutes at least. If required, call the doctor. If the patient is not conscious, do not give through mouth. Show the label and package of the product to the doctor. See section 8 for personal protection equipment.

Antidote and Necessary Information: There is no specific antidote. The treatment is applied according to the symptoms

5. FIRE FIGHTING MEASURES

Extinguisher: Water spray, CO₂, extinguishing powder, foam, sand. Alcohol resistant foam is preferred. General purposed synthetic foam (including AFFF)

In well-ventilated areas: Avoid contacting with this material during fire-fighting process. If possible to contact, use respiratory device and full-chemical resistant fire-fighting clothes. Combined-filter face mask. (It does not protect against carbon monoxide!) Insulation device (It is not affected by environment and it is independent air supply). Prevent the extinguishing water to spread to the environment. Avoid contacting with this material during fire-fighting process. If possible to contact, use respiratory device and full-chemical resistant fire-fighting clothes.

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6. 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.

Clean-up Methods: Product is collected with liquid holder materials (such as sand, sawdust, chemical binders). Collect the material in 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

7. HANDLING AND STORAGE

Handling : Please use the personal protection equipment specified under Section 8. Do not eat or drink while using. Prevent the contact with mouth, skin and eyes. Do not inhale. Wash your hands after using. Other security precautions are not required except of stated warnings during using the closed package. Use only in rooms, in which there is a local sucking device.

After using, wash your hands well. Keep the containers closed.

Use in adequate ventilation.

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Storage : Keep in original package in cool, dry and well ventilated places. Keep away from food, drink and animal feed items. Keep away from direct sunlight. Protect against freezing. Keep it in places that children cannot reach. Storage temperature: 0-40° C

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Precautions: Ensure appropriate general or local ventilation to keep the product concentration under allowed limits. (Myclobutanil TWA 0.5 mg/m³)

Personal Protection Equipment:

Eye : Use eye protection equipment compliant with EN 166.

Skin : 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 : 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.

Hygiene Measures: Do not eat, drink or smoke while handling the product. Wash your hands each time before eating, drinking, smoking or going to the toilet

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9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: Clear Liquid
Color	: Yellow, Brown
Odor	: Weak
Density	: 0,98 g/cm ³ + 0, 05 (20 ⁰ C)
Flashing Point	: 43 C ±5
pH	: 4-8 1% (20 ⁰ C)

10. STABILITY AND REACTIVITY

Conditions to be avoided : Extreme temperatures and direct sun light. Active material is decomposed in high temperatures. The gas, occurred during the decomposition, may cause pressure in closed systems.

Materials to be avoided : Avoid contacting with strong oxidizers

Dangerous reaction : Decomposition products are based on temperature, air and existence of other materials. It includes carbon monoxide, carbon dioxide and hydrogen chloride. The occurred poisonous gases during the oxidation: Hydrogen cyanide and nitrogen oxide

11. TOXICOLOGICAL INFORMATION

Myclobutanil Technical Material:

Acute Oral LD₅₀ female rat 3,7 mg/kg.

Skin LD₅₀ rat >2000 mg/kg.

It may cause eye irritation in medium level. It may cause destruction on light cornea. Vapor may cause eye irritation.

Inhalation LC₅₀ (aerosol) rat ≥5 mg/m³

NOAEL rat 2.5 mg/kg b.w. (long-term toxicity)

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12. ECOLOGICAL INFORMATION

Myclobutanil Technical Material:

Fish LC₅₀ (96 hours) rainbow trout 10,3mg/l,
Algae EC₅₀ (48 hours) *Daphnea Magna* 7,1 mg/l.
LD₅₀ (oral) Apis mellifera (bees):> 171 ug / bee;
LD 50(contact), Apis mellifera (bees):> 200 ug / bee

13. DISPOSAL INFORMATION

Product : Do not dispose it 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.

14. TRANSPORTATION INFORMATION

ADR/RID/ADNR

UN-No. : 3082

Hazard Mark : 9

Packing Group : III

Product type : UN 3082 MATERIAL HARMFUL FOR ENVIRONMENT, LIQUID N.O.S (INCLUDE MYCLOBUTANIL, M-PYROL VE SOLVESSO 100)

IMDG

UN-No. : 3082

Class : 9

Packing Group : III



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EMS :
Marine Pollutant : Yes
Product type : UN 3082 MATERIAL HARMFUL FOR ENVIRONMENT, LIQUID N.O.S (INCLUDE MYCLOBUTANIL, M-PYROL VE SOLVESSO 100)
IATA
UN-No. : 3082
Class : 9
Packing Group : III
Product type : UN 3082 MATERIAL HARMFUL FOR ENVIRONMENT, LIQUID N.O.S (INCLUDE MYCLOBUTANIL, M-PYROL VE SOLVESSO 100)

15. 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:



Xn: HARMFUL



N: Harmful for Environment

Hazardous Materials Listed on the Label

Includes Myclobutanil, m-pyrol and solvesso 100.

Risk Phrases:

Physicochemical:

R10: Flammable.

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Health:

R20/21: Harmful to health if inhaled and contact with skin

R22: If swallowed, it is harmful

R36/37/38: Irritates eyes, respiratory system and skin.

R61: It may give harm to unborn children.

R67: Vapors may cause numbness and dizziness.

Environment:

R52/53: Too toxic for aquatic organisms and may cause long-term adverse effects in the aquatic environment

Safety Phrases:

S1/2: Lock it up and keep out of the reach of children

S13: Keep away food, drink and feedstuff.

S25: Avoid contacting with eye.

S26: In case of eye contact, wash with plenty of water and call a doctor.

S29: Do not pour to sewage system

S36/37/39: Use appropriate protective clothes, gloves and glass/mask.

S43: If fired, use pressured water, CO₂, fire extinguisher powder, foam, sand.

S46: Contact a doctor if swallowed, show the container or label

S53: Avoid from exposure. Obtain the special usage instructions before the using.

S56: Dispose this material and the container in dangerous and special waste collecting places.

S61: Avoid contaminating environment. See the special usage instructions/safety data sheet.

S64: In case of swallow, wash the mouth with water (If the patient is conscious)

Important Labeling:

Follow instructions to avoid personal and environmental risks

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16. OTHER INFORMATION

All Danger Signs and Explanations under Section 2

Xn: Harmful

Xi: Irritant

N: Dangerous for the environment

All Risk Phrases under Section 2:

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R10: Flammable.

R20/21: Harmful to health if inhaled and contact with skin

R22: If swallowed, it is harmful

R36/37/38: Irritates eyes, respiratory system and skin.

R41: Critical damage risk for eye

R52/53: Too toxic for aquatic organisms and may cause long-term adverse effects in the aquatic environment.

R61: It may give harm to unborn children.

R63: Damage risk for unborn children

R67: Vapors may cause numbness and dizziness

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Prepared By : Zeynep ÇOBAN

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.