

SAFETY DATA SHEET

MAKAIO

According to the provisions of the "TR Ministry of Environment and Urbanization, KKDIK Regulation, Annex-2" dated 23 June 2017, numbered 30105 arranged appropriately.

1 IDENTITY OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/DISTRIBUTOR

1.1. Identity of the substance/mixture

Name of the product

MAKAIO

1.2. Identified uses of the substance or mixture and uses advised against Use

Agricultural use. Fungicide.

1.3. Safety data sheet supplier's information

Supplier

ISB GLOBE TARIM A..
Gzeloba Mah.2272.Sok.10/C
Muratpasa/ANTALYA
Tel: +90 534 080 99 47
www.isbglobe.com

1.4. emergency phone number

ISB GLOBE: Tel: +90 534 080 99 47
National Poison Information Center (UZEM): 114
Emergency Health Services: 112

2 HAZARDS IDENTIFICATION

2.1. Classification of substance and mixture

Classification (TC 28848)

| | |
|-------------------------------|--|
| Physical and chemical damages | It is not classified as harmful. |
| Human health hazards | Skin Irritation 2- H315, Skin Sens. 1- H317, Eye Damage. 1- H318; Acute Tok.4- H332; Urm. Sys.Tok. 2- H361fd, STOT Repeat. 2- H373 |
| Environmental damages | Aquatic Acute 1- H400, Aquatic Chronic 1- H410 |

Full Text for All Hazard Statements is Given in Section 16.

2.2. Label elements

Labeling (28848 TC)



word of warning

Danger

Contents

Fluazinam, Cymoxanil

Hazard statements

| | |
|--------|--|
| H315 | Causes skin irritation. |
| H317 | It may cause allergic skin reactions. |
| H318 | Causes serious eye damage. |
| H332 | It is harmful if inhaled. |
| H361fd | Suspected of harming fertility. Suspected of causing harm to the unborn child. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

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H410 Long lasting, very toxic effect in the aquatic environment.
EUH401 To avoid risks to human health and the environment, follow the instructions for use.

Precautionary Statements

P102 Keep out of reach of children.
P260 Do not breathe dust/fume/gas/mist/vapour/spray.
P273 Avoid release to the environment.
P280 Wear protective clothing, gloves, eye and face protection.
P302+P252 IF IN SKIN CONTACT: Wash with plenty of water/soap.
P304+P340 IF INHALED: Remove victim to fresh air and keep comfortable for breathing.
Keep in a comfortable position.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. If you have contact lenses, remove them if easy.
Continue rinsing.
P501 Dispose of contents/container according to national regulations.

2.3. Other damages

The product does not contain any substances classified as PBT or vPvB.

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.2. mixes

| Name | EC No. | CAS No. | Quantity (%w/w) | Classification (TC28848) |
|-----------------|-----------|------------|-----------------|--|
| Fluazinan (ISO) | --- | 79622-59-6 | 25-35% | Skin Irritation 2- H315 Skin Sensitive. 1A- H317 Eye Damage. 1- H318 Acute Tox. 4- H332 Urm. Sys.Tok. 2- H361d Aquatic Acute 1- H400 (M=10) Aquatic Chronic 1- H410 (M=10) |
| Cymoxanil (ISO) | 261-043-0 | 57966-95-7 | 15-25% | Acute Tox. 4- H302 Skin Sensitive. 1- H317 Urm. Fog. Tok.2- H361fd STOT Again. 2- H373 Aquatic Acute 1- H400 (M=1) Aquatic Chronic 1- H410 (M=1) |

Full Text for All Hazard Statements is Given in Section 16.

About its composition

- The data is provided in accordance with the latest Turkish and EU regulations.
- Exposure limits are shown in section 8.

4 FIRST AID MEASURES

4.1. Description of first aid measures

General Information

In case of accident or if you feel unwell, seek medical attention immediately (show the label if possible).

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Breathing

Remove affected person to fresh air. If breathing has stopped or slowed down, apply artificial respiration and place in a stable side position for transport. If necessary, supplement oxygen and refer to the nearest health institution. If the patient loses consciousness, seek medical attention.

Swallowing

If the product is swallowed, rinse the patient's mouth with plenty of water and consult a doctor. Unless told to do so by the doctor DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious patient. Get medical support.

Skin Contact

If skin comes into contact with the product, wash it with plenty of water and soap for 15-20 minutes and use a suitable skin cleanser. Immediately remove dirty clothing under running water. Wash clothing before reuse. Consult a doctor if necessary.

Contact with Eyes

If there are contact lenses, they should be removed before rinsing the eyes. Immediately rinse eyes with plenty of water, keeping eyelids open. Continue rinsing for at least 15 minutes. If symptoms occur after washing, consult a doctor immediately.

4.2. The most important symptoms and effects, both acute and delayed

| | |
|--------------------------|---|
| Breathing | : Dizziness, nausea, respiratory irritation. |
| Swallowing | : Weakness. Nausea, vomiting. |
| Skin Contact | : Irritation, redness. Allergic skin reactions may develop in sensitive people. |
| Contact with Eyes | : Serious eye damage, redness. |

4.3. Signs for urgent medical attention and special treatment required

Follow basic assistance and decontamination procedures. Treat according to symptoms.

5 FIRE-FIGHTING MEASURES

5.1. fire extinguishers

Things to be used to extinguish the fire: Water spray, Carbon dioxide, Dry chemicals, sand and soil for small fires.
available.

Unsuitable extinguishing media: Pressurized water.

5.2. Special hazards arising from the substance or mixture

Harmful combustion products: Carbon monoxide, carbon dioxide, nitrogen oxides. Do not breathe the fumes, gases and vapours. During firefighting, remove all living things from the fire area. It should not be mixed unconsciously with other chemicals.

5.3. Advice for firefighting crews

Fight the fire in a sheltered place. Avoid breathing fire vapors. Use protective clothing and equipment (chemical goggles, mask, rubber gloves, boots and apron). Use fire extinguishing methods appropriate for the environment. If there is no risk, move the containers away from the fire area. Dim the extinguishing water, collect it and dispose of it in accordance with the regulations.

protective equipment

In case of fire, use self-contained breathing apparatus and full protective clothing.
Protective face mask, protective gloves and safety helmet.

6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as shown in section 8 of this safety data sheet. Use protective clothing and equipment (glasses, mask, gloves, boots and apron).

In case of splash: Wear an apron or special protective clothing. Avoid contact with eyes and skin.

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Remove ignition sources, people and animals from the area. Do not walk around the contaminated area and do not breathe vapors. Ventilate the contaminated area. Do not breathe vapors.

6.2. Environmental Precautions

Clean the dirty area, do not contaminate water sources and sewers. Prevent its spread with non-flammable absorbers such as sand, soil, sawdust, diatomaceous earth, kaolin or absorbent tape. Use clean, spark-free equipment to collect impregnated materials. Fill the waste into an empty container, identify it and dispose of it in accordance with the Controlled Regulation on Hazardous Wastes.

6.3. Methods and materials for containment and cleaning

Clean the contaminated area with dry soil and similar dry materials. If the product pollutes lakes, rivers and sewers, notify the authorities in accordance with the regulations.

6.4. References to other sections

For personal protection, see section 8. For additional information on hazards to health, see Section 11.
For waste disposal, see section 13.

7 HANDLING AND STORAGE

7.1. Precautions for safe handling

It is stated on the label prepared in accordance with the Label Regulation. Read the relevant warnings. Do not puncture, pressurize or weld containers. Do not touch eyes. Wash and air contaminated clothing before reuse. Wash your hands with soap and water.

7.2. Conditions for safe storage, including any incompatibilities

Store in original container. Store in a cool and dry place. Keep away from animals, children and food sources. Keep away from direct sunlight. Protect against freezing.
Storage Conditions: Store away from fire, moisture and heat sources. Keep away from oxidants, strong acids and bases.

7.3. Specific end uses

Identified uses of this product are detailed in Section 1.2.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

It does not contain any components with occupational exposure limit values.

8.2. Exposure controls

Personal Protective Equipment:



Process Conditions

Provide eye wash station, safety shower.

Technical Measures:

Use only in well-ventilated areas. Avoid creating or breathing mist. If you believe that concentrations of fog or vapor in the air are high, it is recommended that you modify the process or environment to reduce the problem. Keep container tightly closed.

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Respiratory protective measures:

If established exposure limits are likely to be exceeded, respiratory protection should be used. If there are no applicable exposure guidelines, if you experience effects such as respiratory irritation or discomfort, or if the risk assessment process Use respiratory protection when necessary. In emergencies, use an approved overpressure breathing apparatus. Use the following CE-approved air-purifying respirator: Organic vapors and particles, type AP2.

Hand protection:

Use gloves. Wash and dry hands after use. For prolonged or repeated use, use nitrile, neoprene or latex rubber gloves. Barrier creams can be applied to the parts of the skin that may be exposed to chemicals, but these creams should not be applied after exposure to chemicals.

Eye Protection:

Antifog (anti-steam) protective glasses should be used.
Use goggles and/or a visor with face protection in areas where the risk of splashing is high and where there is a risk of direct contact with vapors.

Health Precautions:

Avoid getting it in the eyes. In case of contact with eyes, rinse thoroughly with clean water. Wash hands with plenty of water and soap after handling. Take a bath at the end of the work day. Keep away from food, drink and animal feed. Do not eat, drink or smoke during use. Do not breathe vapours. Provide adequate ventilation. Where practical, adequate ventilation can be achieved by local ventilation and general extraction.

Keep away from animals, food feed and children. Provisions within the framework of the current legislation regarding the protection of the environment must be fully fulfilled.

Skin Protection:

Wear protective clothing (full protective clothing that is chemical resistant, fire resistant, waterproof and antistatic).
Remove contaminated clothing immediately.

Environmental exposure controls

Dispose of rinse water in accordance with local and national laws. Prevent uncontrolled release into the environment.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information about basic physical and chemical properties

| | |
|--------------------------------|----------------------------|
| physical state | Thick. |
| Appearance | Granular powder. |
| Colour | White. |
| Smell | Light characteristic odor. |
| odor threshold | No available information. |
| PH value | 4-7 (1%) |
| Evaporation rate | No available information. |
| Melting Point / Freezing point | No available information. |
| Boiling Point/Boiling range | No information available. |
| flash point | No available information. |
| Auto-Ignition Temperature | 396 °C |
| Decomposition Temperature | No available information. |
| Flammability (solid, gas) | No available information. |
| vapor pressure | There is no. |
| vapor density | No available information. |

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| | |
|----------------------------------|---------------------------|
| Relative Density | No available information. |
| Intensity | No available information. |
| Resolution | It is soluble in water. |
| Viscosity, kinematics | No available information. |
| Viscosity, dynamic | No available information. |
| Explosion characteristics | Not detected. |
| Oxidizing properties | There is no. |
| Particle characteristics | No available information. |

9.2. Other informations

| | |
|------------------------|----------|
| The amount of water | 0.576g/l |
| Wetting ability | 60 s |

10 STABILITY AND REACTIVITY

10.1. Reaction

Stable under normal temperature conditions and recommended usage conditions.

10.2. Chemical stability

It is stable under normal temperature conditions and recommended usage conditions.

10.3. Possibility of harmful reactions

Possibility of harmful exothermic reactions: None

10.4. Situations to avoid

Avoid exposure to high temperatures and direct sunlight.

10.5. Substances to avoid

Avoid oxidizing agents, strong alkalines and acidic materials to avoid exothermic reactions.

10.6. Harmful decomposition products

At high temperatures; Carbon monoxide, carbon dioxide, nitrogen oxides.

Whether stabilizers are needed and available stabilizers: None

Possible changes, if any, in the physical appearance of the substance/mixture as a safety determinant: None

Any harmful decomposition products, if any, that may form in contact with water: None.

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxic effects

Acute Toxicity

Product

ATmixture, Oral 2415mg/kg Does not meet classification criteria based on available data.

ATEmixture, Inhalation 4.79 mg/l It is harmful if inhaled.

fluazinam

ATE, Inhalation, Dust/mist 1.5 mg/l, 4 hours

cymoxanil

ATE, Oral 500mg/kg

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Skin corrosion/irritation

Causes skin irritation.

Eye damage/irritation

Causes serious eye damage.

Skin or respiratory sensitization May cause allergic skin reactions.

Germ Cell Mutagenicity (in vitro – in vivo)

Does not meet classification criteria based on available data.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity (Fertility – Development)

Suspected of harming fertility. Suspected of causing harm to the unborn child.

Specific target organ toxicity - single exposure Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: Based on available data, the classification criteria are not met.

12 ECOLOGICAL INFORMATION

12.1. toxicity

Long-lasting, very toxic to the aquatic environment, may cause long-term adverse effects in the aquatic environment.

Ecotoxicity- Cymoxanil

Toxicity to fish

LC50 – 81 mg/l, 96 hours, Cyprinus carpio (Carp)

LC50 – 61 mg/l, 96 hours, Rainbow trout

LC50 – 29 mg/l, Bluegill

Toxicity to Daphnia and other aquatic invertebrates

EC50 – 131.7 mg/l 48 hours, Daphnia magna (Daphnia)

Toxicity to birds LC50 – >5620

mg/kg, 8 days Bobwhite quail (Colinus virginianus), Anas Platyrhynchos (Mall duck)

LD50 oral – > 85.29 µg/bee, Apis Mellifera (Honey bee)

LD50 dermal – > 100 µg/bee, Apis Mellifera (Honey bee)

LC50 – > 1000 mg/kg, Eisenia Fetida (Worm)

12.2. Persistence and degradability

There is no available information on the biodegradability of the product.

12.3. Bioaccumulation potential

There is no information available on the bioaccumulation potential of the product.

12.4. Mobility in soil No

information available.

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12.5. Results of PBT and vPvB assessment

It does not contain any components considered PBT and vPvB.

12.6. Other adverse effects

No available information.

13 DISPOSAL INFORMATION

13.1. Waste processing methods

Dispose of empty packaging, rubbish and waste in accordance with local authorities' regulations.

The environmental officer will be informed about all large spills.

Empty containers should be given to local recovery facilities for recovery or disposal.

Waste code: 02 01 08 - Agricultural waste containing hazardous substances.

14 TRANSPORTATION INFORMATION

General This mixture may be classified as hazardous. However, packaging is limited/excepted quantities
Please follow the relevant regulation for such cases.

14.1. UN Number

| | |
|----------------------|------|
| UN No. (ADR/RID/ADN) | 3077 |
| UN No. (IMDG) | 3077 |
| UN No. (ICAO) | 3077 |

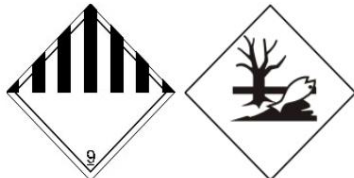
14.2. Proper shipping name Proper shipping name

ENVIRONMENTALLY HARMFUL SUBSTANCE, SOLID, BBB (Fluazinam, Simoxanil)

14.3. Transport hazard class(es)

| | |
|-----------------------------|---|
| ADR/RID/ADN Class | 9 |
| ADR/RID classification code | M7 |
| ADR/RID/ADN Class | Class 9: Miscellaneous dangerous substances and objects |
| ADR Label No. | 9 |
| IMDG Class | 9 |
| ICAO Class | 9 |

Transportation Labels



14.4. Packing group

| | |
|-------------------------------|-----|
| ADR/RID/ADN Packing group III | III |
| IMDG Packaging group | III |
| ICAO Packaging group | III |

14.5. Environmental damages

Environmentally harmful substance/Marine pollutant
Yes.

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14.6. Special precautions for the user

| | |
|------------------------------|----------|
| Limited Quantity | 5KG |
| EMS | FA, S.F. |
| ADR shipping category | 3 |
| Emergency action code Hazard | 2Z |
| Identification No. (ADR) | 90 |

14.7. Public Transport according to MARPOL 73/78 Annex II and IBC Code

Not applicable.

15 REGULATORY INFORMATION

15.1. Specific safety, health and environmental legislation for the substance or mixture

National Legislation

- TR Ministry of Environment and Urbanization, Regulation on Registration, Evaluation, Permit and Restriction of Chemicals (KKDÿK), dated 23 June 2017, numbered 30105.
- TR Ministry of Environment and Urbanization, Regulation on Classification, Labeling and Packaging of Substances and Mixtures, dated 11 December 2013, No. 28848.
- TR Ministry of Agriculture and Rural Affairs, Regulation on Classification, Packaging and Labeling of Plant Protection Products, dated 25 March 2011, No. 27885.
- Republic of Turkey Ministry of Food, Agriculture and Livestock, Regulation on Amending the Regulation on Classification, Packaging and Labeling of Plant Protection Products, dated October 28, 2016, numbered 29871.
- TR Ministry of Labor and Social Security, Regulation on Health and Safety Measures in Working with Chemical Substances, dated 12 August 2013, numbered 28733.
- TR Ministry of Labor and Social Security, Regulation on the Use of Personal Protective Equipment in Workplaces, dated July 2, 2013, numbered 28695.
- TR Ministry of Labor and Social Security, Occupational Health and Safety Law No. 6331, dated 30 June 2012.
- TR Ministry of Environment and Urbanization, Waste Management Regulation No. 29314, dated April 2, 2015.

Seveso (Regulation on the Prevention of Major Industrial Accidents and Reducing Their Effects)

E1 Lower level: 100 tons Upper level: 200 tons

Restrictions (Regulation 30105 KKDÿK, ANNEX-17)

There are no known restrictions on the use of this product.

15.2. Chemical safety assessment

There is no Chemical Safety Assessment application for this substance/mixture.

16 OTHER INFORMATION

Abbreviations used in the safety data sheet ADR:

European Agreement Concerning the International Carriage of Dangerous Goods by Road.

ADN: European Agreement Concerning the International Transport of Dangerous Goods by Intracontinental Waterways.

RID: European Agreement Concerning the International Carriage of Dangerous Goods by Rail.

IATA: International Air Transport Association.

ICAO-TI: Technical Specification for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Dangerous Goods.

TWA: Time weighted average

ATE: Estimated acute toxicity value

EC No: European Community number

CAS: Chemical Theories Service.

LD50: Dose of substance that causes 50% (half) death in the test animal group (Median Lethal Dose).

LC50: The concentration of the substance that causes 50% (half) death in the test animal group.

ECÿÿ: Effective Concentration of the substance causing 50% maximal response.

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PBT: Persistent, Bioaccumulative and Toxic substance.
vPvB: Very Persistent, Very Bioaccumulative.
DNEL: Derived No Effect Level
PNEC: Estimated No Effect Concentration
STOT: Specific Target Organ Toxicity

Justification for classification

Skin Irritation 2- H315: Calculation method
Skin Sens.1- H317 : Calculation method
Eye Damage. 1- H318: Calculation method
Acute Tox. 4- H332: Calculation method
Urm. Sys.Tok. 2- H361fd: Calculation method
STOT Again. 2- H373: Calculation method
Aquatic Chronic 1- H410 : Calculation method

All Hazard Statements

H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause allergic skin reactions.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H361fd Suspected of damaging fertility. Suspected of causing harm to the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Information sources

This SDS has been prepared based on the information received from the product owner company.
ECHA – www.echa.europa.eu

Statement about the revision

This SDS is the first publication.

Edited by

Büyra Tarakçy / CRAD - Chemical Evaluation Specialist
Certificate No.: KDU-A-0-0056 Document Date: 25.10.2019 Validity Date: 25.10.2024
gbf@crad.com.tr Tel.:+90 216 3354600

Editor's note

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WITH RESERVATION

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