(according to Regulation (EC) No. 1907/2006)

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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier Product Name: THEORY

1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Description: Fungucide

1.3. Details of the supplier of the safety data sheet

Company: HEKTAŞ TİC. T.A.Ş

Address: G.O.S.B. İhsan Dede Cad. 700. Sok. 41480 Gebze / KOCAELİ

Telephone: +90 262 751 14 12 E-mail: sds@hektas.com.tr

1.4. Emergency telephone number

Telephone: +90 262 751 14 12

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

Aquatic Chronic (Category 1), H410

2.2 Label elements



Warning

Hazard Statements:

H410: Very toxic to aquatic life with long-lasting effects EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

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Precautionary statements:

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P501: Dispose of contents/container to in accordance with local regulation

2.3. Other hazards: No information available.

For the classifications not written out in full in this section the full text can be found in section 16.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

3.2 Mixtures

Hazardous Component	% by Weight	CAS Number	Classification
Fludioxanil	9.0	131341-86-1	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Cyprodinil	13.5	121552-61-2	Skin Sens.; H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Filler	>50	-	-

For the classifications not written out in full in this section the full text can be found in section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.

Inhalation

Move to fresh air. Keep patient warm and at rest. If effects occur, consult a physician.

Skin contact

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison Control center or doctor for treatment advice if effects persist.

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Eye contact

Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing eyes. Call a poison control center or doctor for treatment advice if effects persist.

Ingestion

Do not induce vomiting unless told to do so by the poison control center or doctor. Never give anything by mouth to an unconscious person. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No information available.

Risks: No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media: Water spray, Carbon dioxide (CO₂), Foam, Dry chemical

5.2 Special hazards arising from the substance or mixture

In a fire, formation of carbon monooxides, carbon dioxides and nitrogen oxides can be expected.

5.3 Advice for firefighters

Special protective equipment for fire-fighters

In the event of fire and/or explosion do not breathe fumes.

Wear positive-pressure, self-contained breathing apparatus and full protective clothing.

Further information

Contain the spread of the fire-fighting media.

Do not allow run-off from fire-fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled product or contaminated surfaces.

Use personal protective equipment.

6.2. Environmental precautions

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Do not allow to get into surface water, drains and ground water.

6.3. Methods and material for containment and cleaning up

Contain spilled material if possible. Sweep or shovel into a container. Avoid formation of dust. Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling:

Avoid exposure to dust and vapors by wearing appropriate personal protective equipment. Avoid skin and eye contact.

7.2. Conditions for safe storage, including any incompatibilities

Keep out of reach of children. Store in a cool place and out of direct sunlight. Store away from sources of heat or ignition, strong alkalis, acids and water. Do not allow to become wet or overheated in storage.

Requirements for storage areas and containers: Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on common storage: Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s): No information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

8.2. Exposure controls

Personal protective equipment

Respiratory Protection: Wear respirator

Hand Protection: Wear impermeable gloves to avoid skin contact. Wash hands always before

eating, drinking, smoking or using the toilet.

Eye protection: Use chemical goggles.

Skin and body protection: protective clothing as necessary to prevent skin contact.

Hygiene measures:

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Avoid contact with skin, eyes and clothing.

Keep working clothes separately.

Wash hands before breaks and at the end of workday.

Remove soiled and/or soaked clothing immediately and clean thoroughly before using again.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Form: Viscous liquid

Colour: white-beige colored

pH (%10): 7.0 – 9.0

Melting Point: Not applicable Flash Point: Not available

Vapour Pressure: 3.9 ´ 10⁻⁴ mPa (25 °C) (fludioxonil), 5.1 10⁻¹ mPa (cyprodinil)

Density: 1.050–1.150 g/cm³ In water: Miscible in water

Kow logP = 4.12 (fludioxonil), 3.9 (pH 5.0) (cyprodinil)

9.2. Other information: No information available.

10. STABILITY AND REACTIVITY

- 10.1. Reactivity: Stable under recommended storage conditions
- **10.2.** Chemical stability: Stable under recommended storage conditions.
- **10.3. Possibility of hazardous reactions:** No hazardous reactions when stored and handled according to prescribed instructions.
- **10.4. Conditions to avoid:** Stable under recommended storage conditions.
- **10.5.** Incompatible materials: No information available.
- **10.6. Hazardous decomposition products:** carbon monoxides, carbon dioxides and nitrogen oxides can be expected

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute Oral LD₅₀ (rat) > 5000 mg/kg Acute percutaneous LD₅₀ (rat) > 2000 mg/kg Inhalation LC₅₀ rats > 2.66 mg/l/4h

Skin Irritation: Not irritant

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Eye Irritation: Moderately irritant

12. ECOLOGICAL INFORMATION

12.1. Toxicity

The product should not be allowed to reach either ground or open waters.

Active ingredient data: Fludioxanil
Rainbow throut: LC₅₀= 0.5 mg/l (96 h)
Bobwhite Quail LD₅₀ > 2000 mg/kg
Daphnia: LC₅₀ (48 h): 1.1 mg/l

Active ingredient data: Cyprodinil Rainbow throut: LC_{50} : 2.41 mg/l Bobwhite Quail $LD_{50} > 2000$ mg/kg Daphnia: LC_{50} (48 h) > 0.033 mg/l

- 12.2. Persistence and degradability: No information available
- 12.3. Bioaccumulative potential: Kow logP = 4.12 (fludioxonil), 3.9 (pH 5.0)(cyprodinil)
- 12.4. Mobility in soil: No information available
- 12.5. Results of PBT and vPvB assessment: No information available.
- 12.6. Other adverse effects: No information available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

In accordance with federal, provincial and local regulations.

14. TRANSPORT INFORMATION

UN-No **3082**

Class 9

Packaging group III

Description of the goods **ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S** (fludioxanil, cyprodinil)

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No. 1907/2006

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16. OTHER INFORMATION

H317: May cause an allergic skin reaction

H400: Very toxic to aquatic life

H410: Very toxic to aquatic life with long-lasting effects

EUH401: To avoid risks to human health and the environment, comply with the instructions

for use

The information and recommendations contained herein are provided in good faith and are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with the respect to the information herein.

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