



## SAFETY DATA SHEET

Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals,  
23 June 2017 Friday, No: 30105 and in accordance with EU Regulation No 1272/2008.

### PERMOKILL EW

Edit Number: 1.0  
Preparation Date: 09.12.2021

Page No: 1/18  
GBF Code: 737001  
Publication Date: 09.12.2021

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/DISTRIBUTOR

### 1.1 Substance / Mixture Identification

**Trade Name:** PERMOKILL EW  
**Product GBF Code:** 737001  
**Product Description:** Mixture – Biocidal Product

### 1.2 Identified Uses and Uses Advised Against for the Substance or Mixture

#### 1.2.1 Identified Uses:

Used as a biocidal product.

#### 1.2.2 Uses Advised Against:

No information

### 1.3 Supplier Information for the Safety Data Sheet

#### 1.3.1 Information of the Licensed Company

**Company Name:**  
DELTA PEST CONTROL AND ENVIRONMENTAL HEALTH SERVICES,  
DISINFECTION, LANDSCAPE CLEANING, BIOCIDAL WHOLESALE TRADE  
[www.deltailaclama.com.tr](http://www.deltailaclama.com.tr)

**Address:**  
1832 STREET NO:28/A BAHÇELİEVLER, KARŞIYAKA / IZMIR

**Phone:** +90 (232) 999 34 48

**Fax:** +90 (232) 999 34 48

**E-mail Address Providing Information About Safety Data Sheet:**  
info@deltailaclama.com.tr

#### 1.3.2 Manufacturer Company Information

**Company Name:**  
ALBA CHEMICAL PRODUCTS INDUSTRY AND TRADE INC.

**Address:**  
Toybelen Neighborhood, 1174 Street No: 4, Internal Door: 5, İlkadım / Samsun

**Phone:** +90 (362) 504 00 04

### 1.4 Emergency Contact Numbers

**Company Consultation Line:** +90 (232) 999 34 48  
**Emergency Medical Center:** 112  
**Ministry of Health National Poison Advice Center (UZEM):** 114  
**Fire Department:** 110

## PERMOKILL EW

Edit Number: 1.0  
Preparation Date: 09.12.2021Page No: 2/18  
GBF Code: 737001  
Publication Date: 09.12.2021**2. IDENTIFICATION OF HAZARDS****2. IDENTIFICATION OF HAZARDS****2.1 Classification of the Substance or Mixture:****2.1.1 Hazard Classification (RG - 23.06.2017 - 30105)**According to local regulation<sup>3</sup> KKDİK and EU directives 1272/2008/EC [CLP2/GHS3], classified as hazardous.

- Acute Tox. 4; H302
- Acute Tox. 4; H312
- Skin Irrit. 2; H315
- Skin Sens. 1; H317
- Eye Irrit. 2; H319
- Acute Tox. 4; H332

**2.2 Label Elements****2.2.1 Labelling (RG<sup>6</sup> - 23.06.2017 - 30105)****Product Identification****Hazard-determining components for label:**

- Xylene
- Permethrin
- Tetramethrin
- Isodecyl alcohol ethoxylate
- 1,2-benzisothiazol-3(2H)-one

**Hazard Pictograms**

- GHS07

**Signal Word**

- WARNING

**Hazard Statements**

- **H302:** Harmful if swallowed
- **H312:** Harmful in contact with skin
- **H315:** Causes skin irritation
- **H317:** May cause allergic skin reactions
- **H319:** Causes serious eye irritation
- **H332:** Harmful if inhaled



## SAFETY DATA SHEET

Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals,  
23 June 2017 Friday, No: 30105 and in accordance with EU Regulation No 1272/2008.

### PERMOKILL EW

Edit Number: 1.0  
Preparation Date: 09.12.2021

Page No: 3/18  
GBF Code: 737001  
Publication Date: 09.12.2021

---

#### Precautionary Statements

##### General:

—

##### Prevention:

- **P261:** Avoid breathing dust/fume/gas/mist/vapors/spray.
- **P264:** Wash hands thoroughly with water after handling.
- **P270:** Do not eat, drink or smoke when using this product.
- **P271:** Use only outdoors or in a well-ventilated area.
- **P272:** Contaminated work clothing should not be allowed out of the workplace.
- **P280:** Wear protective gloves/protective clothing/eye protection/face protection.

##### Response:

- **P301+P312: IF SWALLOWED:** If you feel unwell, call the NATIONAL POISON CONSULTATION CENTER at 114 or consult a doctor/physician.
- **P302+P352: IF ON SKIN:** Wash with plenty of soap and water.
- **P304+P340: IF INHALED:** Remove person to fresh air and keep comfortable for breathing.
- **P305+P351+P338: IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- **P312:** If you feel unwell, call the NATIONAL POISON CONSULTATION CENTER at 114 or consult a doctor/physician.
- **P321:** Specific treatment required (see label).
- **P322:** Specific measures (see label).
- **P330:** Rinse mouth.
- **P333+P313:** If skin irritation or rash occurs: Get medical advice/attention.
- **P337+P313:** If eye irritation persists: Get medical advice/attention.
- **P363:** Wash contaminated clothing before reuse.

##### Storage:

—

##### Disposal:

- **P501:** Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Additional Hazard Information Statements:

—

#### 2.3 Other Hazards

No information available.



## SAFETY DATA SHEET

Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals,  
23 June 2017 Friday, No: 30105 and in accordance with EU Regulation No 1272/2008.

### PERMOKILL EW

Edit Number: 1.0  
Preparation Date: 09.12.2021

Page No: 4/18  
GBF Code: 737001  
Publication Date: 09.12.2021

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### 3.1 Substances

##### Hazardous substances contained:

Substance or Compound	EC No	CAS No	Content (%) (w/w)	Classification KKDİK <sup>6</sup> / CLP
Deionized Water	231-791-2	7732-18-5	58.40%	Not classified as hazardous
Xylene	215-535-7	1330-20-7	15.00%	Flammable Liquid 3; H226 Acute Tox. 4; H312 Skin Irrit. 2; H315 Acute Tox. 4; H332
Permethrin	258-067-9	52645-53-1	12.00%	Acute Tox. 4; H302 Skin Sens. 1; H317 Acute Tox. 4; H332 Aquatic Acute 1; H400 Aquatic Chronic 1; H410
Ethanol, 2,2',2''-nitrilotris-, compd. with $\alpha$ -[2,4,6-tris(1-phenylethyl)phenyl]- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl) phosphate	600-650-0	105362-40-1	2.80%	Not classified as hazardous
Tristyrylphenol	615-190-6	70880-56-7	2.80%	Not classified as hazardous
Mono Propylene Glycol	200-338-0	57-55-6	2.10%	Not classified as hazardous
Tetramethrin	231-711-6	7696-12-0	2.00%	Acute Tox. 4; H302 Aquatic Acute 1; H400 Aquatic Chronic 1; H410
Piperonyl Butoxide	200-076-7	51-03-6	3.00%	Aquatic Acute 1; H400 Aquatic Chronic 1; H410
Isodecyl alcohol ethoxylate	616-607-4	78330-20-8	1.40%	Acute Tox. 4; H302 Eye Dam. 1; H318
Xanthan Gum	234-394-2	11138-66-2	0.20%	Not classified as hazardous

**PERMOKILL EW**

 Edit Number: 1.0  
 Preparation Date: 09.12.2021

 Page No: 5/18  
 GBF Code: 737001  
 Publication Date: 09.12.2021

<b>Polydimethylsiloxane</b>	687-578-3	63148-62-9	0.20	Not classified as hazardous
<b>1,2-benzisothiazol-3(2H)-one</b>	220-120-9	2634-33-5	0.10	Acute Tox. 4; H302 Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Dam. 1; H318 Aquatic Acute 1; H400

**Notes: NOT C**
**Xylene**

Some organic substances are placed on the market in specific isomeric form or as a mixture of several isomers. In such cases, the supplier must state on the label whether the substance is a specific isomer or an isomer mixture.

**M-Factor:**

- **Permethrin**
  - M = 1000
- **Tetramethrin**
  - M = 100
  - M(Chronic) = 100

**Specific Concentration Limits:**

- **1,2-benzisothiazol-3(2H)-one**
  - Skin Sens. 1; H317: C ≥ 0.05%

**3.1.1 Additional Warnings**

All hazard description statements related to this subject are given in section 16.

**4. FIRST AID MEASURES**
**4.1 Description of First Aid Measures**
**4.1.1 General**

In case of emergency, consult a doctor by showing this safety data sheet.

**4.1.2 Inhalation**

- Inhalation exposure is not expected.
- If breathing difficulty occurs, give oxygen. Keep airways open.
- Move the conscious person into a comfortable position.
- Seek medical attention immediately.


**4.1.3 Skin Contact**

- Remove contaminated clothing immediately and wash skin thoroughly with plenty of water for at least 15 minutes.
- Wash your contaminated clothing before reuse.
- If skin irritation persists, consult a doctor.



## PERMOKILL EW

Edit Number: 1.0  
Preparation Date: 09.12.2021Page No: 6/18  
GBF Code: 737001  
Publication Date: 09.12.2021**4.1.4 Eye Contact:**

Wash eyes immediately with clean water for at least 15 minutes.  
Ensure that the eye is well rinsed on all sides by keeping the eyelids open and lifting both upper and lower eyelids at intervals.  
Remove contact lenses if present. Do not rub the eye.  
Seek medical attention immediately.

**4.1.5 Ingestion:**

Do not induce vomiting. If the patient vomits, keep the airway open.  
If the victim is conscious, give a small amount of water.  
If the product has been ingested, move the person to fresh air and place in a resting position.  
Seek medical attention immediately.

**4.2 Important Symptoms and Effects, Both Acute and Delayed:**

**Eyes:** Causes serious eye irritation.  
**Skin:** Causes skin irritation.  
**Inhalation:** Harmful if inhaled.  
**Ingestion:** Harmful if swallowed.  
**Delayed/Long-Term Effects:** None known.  
**Signs of Poisoning:** Upper respiratory tract irritation, nausea, vomiting.

**4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed:**

Treat according to symptoms.

**5. FIRE-FIGHTING MEASURES****5.1 Extinguishing Media:****Suitable Extinguishing Media:**

Use extinguishing agents suitable for the surrounding environment.  
Use dry chemical powder, foam, carbon dioxide (CO<sub>2</sub>), or water.

**Unsuitable Extinguishing Media:**

None

**5.2 Special Hazards Arising From the Substance or Mixture:****Fire-related Hazards:**

In case of fire, toxic gases such as carbon dioxide (CO<sub>2</sub>) and carbon monoxide (CO) may be released.

**Explosion-related Hazards:**

Heating, expansion, or decomposition may cause containers to rupture violently.

**5.3 Advice for Fire-Fighting Personnel:****Use of Protective Equipment:**

Personnel engaged in fire-fighting must use respiratory protection equipment and chemical-resistant protective clothing.

**Fire-Fighting Instructions:**

Cool tanks and product containers with spray water.  
If possible, fight the fire from a protected area.

**Personal Protective Equipment for Fire-Fighters:**

Personnel involved in fire-fighting must use self-contained breathing apparatus (SCBA), NIOSH-approved positive pressure tank, and full protective suits.



## SAFETY DATA SHEET

Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals,  
23 June 2017 Friday, No: 30105 and in accordance with EU Regulation No 1272/2008.

### PERMOKILL EW

Edit Number: 1.0  
Preparation Date: 09.12.2021

Page No: 7/18  
GBF Code: 737001  
Publication Date: 09.12.2021

#### 5.4 Other Information:

Avoid polluting the environment by using excessive amounts of extinguishing agents.  
Do not allow fire-fighting residues to enter the sewer system or surface waters.

### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Apply personal protective measures as detailed in Section 8 for exposure control.  
Avoid eye contact.

##### 6.1.1 For Non-Emergency Personnel:

- **Protective Equipment:**  
Use appropriate protective equipment to prevent contamination of skin, eyes, and clothing.  
Refer to Section 8 of this form.
- **Emergency Procedures:**  
Consult an expert for emergency procedures.  
Evacuate the spill area.  
Use personal protective equipment.  
Ensure adequate ventilation.  
Do not touch the product until all safety measures are fully understood and applied.

##### 6.1.2 For Emergency Responders:

- **Protective Equipment:**  
Wear suitable protective clothing, rubber boots, durable rubber gloves, and eye/face protective equipment.
- **Emergency Procedures:**  
Equip yourself with protective devices.  
Keep unauthorized persons away.  
Ensure good ventilation.  
Remove unrelated personnel from the area and evacuate.

#### 6.2 Environmental Precautions:

Improper discharge into the environment may lead to soil and water contamination.  
Prevent contamination of sewers/surface water/groundwater.  
In case of contamination, inform the relevant authorities immediately.

#### 6.3 Methods and Materials for Containment and Cleaning Up

##### 6.3.1 Recommendations for Containment:

The spilled product must be collected by trained personnel.  
Isolate the area where the material is spilled.



## SAFETY DATA SHEET

Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals,  
23 June 2017 Friday, No: 30105 and in accordance with EU Regulation No 1272/2008.

### PERMOKILL EW

Edit Number: 1.0  
Preparation Date: 09.12.2021

Page No: 8/18  
GBF Code: 737001  
Publication Date: 09.12.2021

#### 6.3.2 Recommendations for Cleaning Spills

Absorb the spill with an inert binding material (sand, sawdust, soil).  
Collect the spilled material in sealed containers and dispose of it properly.  
Dispose of the spill in accordance with local regulations.

#### 6.4 References to Other Sections:

Obtain safety handling information from Section 7.  
Obtain information on personal protective equipment from Section 8.  
Obtain disposal information from Section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for Safe Handling:

To ensure health, safety, and environmental protection, work practices and organizational safety measures must be implemented in workplaces dealing with hazardous chemicals, in accordance with the provisions of the Regulation on Health and Safety Precautions in Working with Chemical Substances published in the Official Gazette dated 12.08.2013 No. 28733, Article 7; and the Regulation on Health and Safety Measures in Working with Carcinogenic and Mutagenic Substances published in the Official Gazette dated 6.8.2013 No. 28730, Article 7.

During the use of chemicals, avoid ingestion, eye and skin contact by complying with industry-standard hygiene practices.  
Wash your hands thoroughly with water and soap after handling.  
Ensure there is adequate ventilation in the workplace.  
Avoid contamination of your clothes, skin, and eyes.  
Work only in well-ventilated areas.  
Prohibit smoking, eating, and drinking in areas where the product is used.

#### 7.1.1 General Recommendations for Safe Handling:

##### 7.1.1.1 Warnings for Safe Handling:

Keep fire-fighting equipment ready and accessible.

##### 7.1.1.2 Environmental Warnings:

Prevent contamination of sewage systems/surface waters/groundwater.  
In case of contamination, inform the relevant authorities immediately.

#### 7.1.2 Recommendations on General Occupational Hygiene:

Avoid ingestion, eye and skin contact when using chemicals.  
Follow proper hygiene standards used in industrial settings.  
Wash hands thoroughly with water and soap after use.  
Avoid eye contact.  
Ensure good ventilation at the workplace.



## SAFETY DATA SHEET

Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals,  
23 June 2017 Friday, No: 30105 and in accordance with EU Regulation No 1272/2008.

### PERMOKILL EW

Edit Number: 1.0  
Preparation Date: 09.12.2021

Page No: 9/18  
GBF Code: 737001  
Publication Date: 09.12.2021

---

#### **Smoking, eating, or drinking is prohibited in the application area.**

Contaminated clothing and protective equipment must be removed before entering food areas.

#### **7.2 Conditions for Safe Storage, Including Any Incompatibilities**

##### **7.2.1 Storage Conditions:**

- Storage areas should be regularly cleaned, ventilation systems, temperature and humidity controls should be maintained consistently.
- Keep away from food, beverages, and animal feed areas.
- Follow general regulations used in chemical storage.
- The warehouse where substances are kept should be regularly cleaned and well-ventilated.
- Store in tightly closed original packaging, in a dry, cool place.
- Protect from direct sunlight.
- Store in places inaccessible to children.

##### **7.2.2 Incompatible Materials:**

No information available.

##### **7.3 Specific End Use(s):**

No information available.

## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

### **8.1 Control Parameters**

#### **8.1.1 Occupational Exposure Limit Values:**

##### **8.1.1.1 According to the Regulation on Health and Safety Measures in Working with Chemical Substances:**

No information available.

##### **8.1.1.2 According to the Regulation on Health and Safety Measures in Working with Carcinogenic and Mutagenic Substances:**

No information available.

##### **8.1.1.3 Other Occupational Exposure Limits:**

No information available.

##### **8.1.1.4 Biological Limit Values under the Regulation on Health and Safety in Working with Chemical Substances:**

No information available.

##### **8.1.1.5 Other Biological Limit Values:**

No information available.

#### **8.1.2 In cases where the substance or mixture is used as intended and causes the formation of airborne pollutants, the valid occupational exposure and/or biological limit values should be applied:**

No information available.



## SAFETY DATA SHEET

Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals,  
23 June 2017 Friday, No: 30105 and in accordance with EU Regulation No 1272/2008.

### PERMOKILL EW

Edit Number: 1.0  
Preparation Date: 09.12.2021

Page No: 10/18  
GBF Code: 737001  
Publication Date: 09.12.2021

---

#### 8.1.3

When determining risk management measures related to specific uses using control banding, if the information is insufficient to ensure effective risk management, the relevance and limitations of control band recommendations must be taken into account.

**No information available.**

#### 8.2 Exposure Controls

The equipment and protection methods to be used where personal protection is necessary are defined in accordance with the “Regulation on the Use of Personal Protective Equipment in Workplaces” dated 02.07.2013 and numbered 28695 and the “Regulation on Personal Protective Equipment” dated 29/11/2006 and numbered 26361.

Use personal protective equipment that complies with these regulations and conditions.

##### 8.2.1 Appropriate Engineering Controls

If there is a risk of exceeding occupational exposure limits, the employer must take action in accordance with:

- “Regulation on Health and Safety Measures in Working with Carcinogenic and Mutagenic Substances” (RG–06.08.2013–28730)
- “Regulation on Health and Safety Measures in Working with Chemical Substances” (RG–12.08.2013–28733)

Ensure that work environment assessments related to the product or mixture are conducted to evaluate risks to workers' safety and health.

The guidance provided here is general. Workplace-specific applications and material handling practices may vary and should be tailored accordingly.

Ensure that the working environment is well-ventilated and cleaned to prevent exceeding exposure limits.

Install appropriate NIOSH<sup>7</sup> and CEN<sup>8</sup> filter systems where needed.

Design the working area to prevent environmental contamination by the product.

Refer to Section 7 for more.

##### 8.2.2 Personal Protective Measures (Personal Protective Equipment)

Use protective equipment that complies with EN and NIOSH standards.

###### 8.2.2.1 General Protection and Hygiene Measures

- Personnel responsible for handling, maintenance, and disposal of this substance must be trained.
- Follow general safety rules when working with chemical substances.
- Use only in well-ventilated areas.
- Avoid contact with eyes and skin.
- Keep away from food, beverages, and animal feed.
- Remove contaminated clothing immediately.
- Do not take contaminated work clothes outside the workplace.
- Wash your hands after use and before breaks.
- Do not eat or drink any food products while using this substance.

**PERMOKILL EW**

Edit Number: 1.0  
Preparation Date: 09.12.2021

Page No: 11/18  
GBF Code: 737001  
Publication Date: 09.12.2021

**8.2.2.2 Eye/Face Protection**

Make sure that the eye wash station and safety shower are easily accessible.  
In areas with high splash risk, use well-fitting safety goggles with side protection that meet NIOSH (USA) or EN (EU) standards.  
Do not use contact lenses.



**8.2.2.3 Skin Protection**

**8.2.2.3.1 Hand Protection**

Under normal conditions, hand protection must be used.  
Use protective gloves when necessary. (EN 374)  
Check glove permeation time with the supplier.  
Use clean gloves.



**8.2.2.3.2 Body Protection**

Under normal conditions, body protection is required.  
Wear tight-fitting protective clothing resistant to chemicals, dust, and liquids, with long sleeves and long pants.



- Provide an eye wash station.
- Ensure the safety shower is easily accessible.

**8.2.2.4 Respiratory Protection**

Under normal conditions, respiratory protection must be used.  
If necessary, use respiratory protection in compliance with regulations and standards.  
Use tested and approved respiratory devices and equipment according to standards from authorities such as NIOSH (USA) or CEN (EU).



**8.2.2.5 Heat Hazards**

When specifying protective equipment for materials that cause thermal damage, pay special attention to the structure of the protective equipment.

**8.2.3 Environmental Exposure Controls**

Environmental protection obligations must be fully met in accordance with current legal regulations.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on Basic Physical and Chemical Properties**

Property	Description
Appearance	Viscous Flowing Liquid
Color	White
Odor	Characteristic
pH (10% solution)	5.5–7.5
Melting/Freezing Point Range (°C)	Not Available
Initial Boiling Point and Boiling Range (°C) (1.013 hPa)	Not Available
Flash Point (°C)	Not Applicable



## SAFETY DATA SHEET

Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals,  
23 June 2017 Friday, No: 30105 and in accordance with EU Regulation No 1272/2008.

### PERMOKILL EW

Edit Number: 1.0  
Preparation Date: 09.12.2021

Page No: 12/18  
GBF Code: 737001  
Publication Date: 09.12.2021

Property	Description
Density (g/cm <sup>3</sup> )	1.0 ± 0.05
Evaporation Density (Air=1)	Not Available
Flammability	The product is not flammable.
Explosiveness	Does not exhibit explosive properties.
Oxidizing Properties	Does not exhibit oxidizing properties.
Initial Boiling Point and Boiling Range (°C) (1.013 hPa)	Not Available
Flash Point (°C)	Not Applicable
Compatibility	Not Available
Fat Solubility (specify solvent-fat)	Not Available
Water Solubility	Not Available
Solvent/Alcohol Solubility (specify solvent)	Not Available
Explosiveness	Does not exhibit explosive properties.
Oxidizing Properties	Does not exhibit oxidizing properties.

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable under recommended handling and storage conditions.

### 10.2 Chemical Stability

Stable under recommended handling and storage conditions.

### 10.3 Possibility of Hazardous Reactions

No possibility of hazardous reactions.

### 10.4 Conditions to Avoid

No hazardous reaction under normal conditions.

### 10.5 Incompatible Materials

No incompatible materials known.

### 10.6 Hazardous Decomposition Products

In case of fire, toxic gases such as carbon dioxide (CO<sub>2</sub>) and carbon monoxide (CO) may be released.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on Toxic Effects

This section includes toxicological information relevant to the classification of the substance or mixture. "Not Available" means there is no confirmed data from research studies.

#### 11.1.1 Acute Toxicity

##### Permethrin – CAS No: 52645-53-1

- LD<sub>50</sub> (Oral, Rat): 383 mg/kg
- LD<sub>50</sub> (Dermal, Rabbit): 2000 mg/kg
- LC<sub>50</sub> (Inhalation, Rat): 485 mg/m<sup>3</sup>

##### Tetramethrin – CAS No: 7696-12-0

- LD<sub>50</sub> (Oral, Rat): 5000 mg/kg
- LD<sub>50</sub> (Dermal, Rat): 2000 mg/kg



## SAFETY DATA SHEET

Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals,  
23 June 2017 Friday, No: 30105 and in accordance with EU Regulation No 1272/2008.

### PERMOKILL EW

Edit Number: 1.0  
Preparation Date: 09.12.2021

Page No: 13/18  
GBF Code: 737001  
Publication Date: 09.12.2021

#### Piperonyl Butoxide CAS No: 51-03-6

- LD<sub>50</sub> (Oral, Mouse): 2000 mg/kg
- LD<sub>50</sub> (Oral, Rat): 5000 mg/kg
- LD<sub>50</sub> (Dermal, Rat): 2000 mg/kg
- LC<sub>50</sub> (Inhalation, Rat): 5.9 mg/L (4 hours)

#### 11.1.2 Skin Corrosion/Irritation

- Causes skin irritation.

#### Permethrin CAS No: 52645-53-1

- Skin – Rabbit: Causes slight skin irritation.

#### 11.1.3 Serious Eye Damage/Irritation

- Causes serious eye irritation.

#### 11.1.4 Respiratory or Skin Sensitization

- May cause allergic skin reactions.

#### 11.1.5 Germ Cell Mutagenicity

- Does not contain any germ cell mutagenic substances.

#### 11.1.6 Carcinogenicity

As stated in 29 CFR 1910.1200, this product is not listed as a carcinogenic substance by NTP<sup>9</sup>, IARC<sup>10</sup>, or OSHA<sup>11</sup>.

#### 11.1.7 Reproductive Toxicity

- This product does not contain substances with reproductive toxicity.

#### 11.1.8 Specific Target Organ Toxicity – Single Exposure (STOT-SE)

- No information indicating the presence of substances with STOT-SE effect.

#### 11.1.9 Specific Target Organ Toxicity – Repeated Exposure (STOT-RE)

- No information indicating the presence of substances with STOT-RE effect.

#### 11.2 Aspiration Hazard

- No information available.

#### 11.3 Information on Likely Routes of Exposure

Eye Contact	Causes serious eye irritation.
Skin Contact	Causes skin irritation.
Inhalation	Harmful if inhaled.
Ingestion	Harmful if swallowed.

**Target Organs:** No information available.

**Medical Symptoms:** No information available.

**Medical Advice:** No information available.

#### 11.4 Delayed and Immediate Effects as well as Short and Long-Term Exposure Effects

- No information available.

#### 11.5 Other Information

- No information available.

## PERMOKILL EW

Edit Number: 1.0  
Preparation Date: 09.12.2021Page No: 14/18  
GBF Code: 737001  
Publication Date: 09.12.2021**12. ECOLOGICAL INFORMATION****12.1 Toxicity****Permethrin – CAS No: 52645-53-1**

- Fish Toxicity: LOEC – *Salmo salar* (Atlantic salmon) – 0.009 mg/l – 96.0 h
- Fish Toxicity: LC50 – *Pimephales promelas* (Fathead minnow) – 0.016 mg/l – 96.0 h
- Toxicity to daphnia and other aquatic invertebrates: EC50 – *Daphnia magna* – 0.32 µg/l – 48 h
- Algae Toxicity: Growth inhibition (EC50) – *Skeletonema costatum* – 0.068 mg/l – 96 h

**Tetramethrin – CAS No: 7696-12-0**

- EC50 (48 h), *Daphnia*: 0.15 µg/l
- LC50 (96 h), Rainbow trout: 0.96 µg/l

**Piperonyl Butoxide – CAS No: 51-03-6**

- Fish Toxicity: LC50 – 3.94 mg a.s./L (96 h), *Cyprinodon variegatus*
- Fish Toxicity: LC50 – 5.37 mg a.s./L (96 h), *Lepomis macrochirus*
- Invertebrate Toxicity: EC50 – 0.51 mg a.s./L (48 h), *Daphnia magna*
- Invertebrate Toxicity: EC50 – 0.216 mg AquaPy/L (48 h), *Daphnia magna*
- Algae Toxicity: ErC50 – 3.89 mg a.s./L (72 h), *Selenastrum capricornutum*

**12.2 Persistence and Degradability**

Parameter	Value
Persistence Potential in Relevant Environment	Not Available
Degradability Potential via Oxidation or Hydrolysis	Not Available
Half-life Related to Decomposition	Not Available
Effects on Wastewater Treatment Plants	Not Available

**12.3 Bioaccumulative Potential**

No test results available regarding bioaccumulation potential for this product.

**Bioaccumulation in biological environment:**

- **Permethrin – CAS No: 52645-53-1**
  - *Oncorhynchus mykiss* (Rainbow trout) – 24 h – 0.73 µg/l

**Log Kow or BCF value:**

- **Permethrin – CAS No: 52645-53-1**
  - BCF: 3.620

**12.4 Mobility in Soil**

When determining environmental mobility, the chemical and physical properties of the product should be taken into account (see Section 9).



## SAFETY DATA SHEET

Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals,  
23 June 2017 Friday, No: 30105 and in accordance with EU Regulation No 1272/2008.

### PERMOKILL EW

Edit Number: 1.0  
Preparation Date: 09.12.2021

Page No: 15/18  
GBF Code: 737001  
Publication Date: 09.12.2021

#### 12.5 PBT and vPvB Assessment Results:

According to Annex XIV of Regulation EC 1907/2006 related to REACH, this product does **not contain any substance** that meets the criteria of PBT (Persistent / Bioaccumulative / Toxic) or vPvB (very Persistent / very Bioaccumulative).

#### 12.6 Other Adverse Effects:

No information available.

### 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste Treatment Methods:

Wastes and used packaging must be disposed of in accordance with official regulations. Prevent contamination of surface and groundwater, drinking water sources, stagnant and flowing waters, and sewer systems. Do not dispose of the product without checking disposal regulations.

#### 13.2 Safe Disposal:

Chemical residues, process waste, or other alterations of this product must be evaluated based on the safety data sheet information and disposed of according to official regulations to prevent misuse or environmental harm. Do not dispose of product waste together with household garbage. Inform the relevant authorities in such cases.

#### 13.3 European Waste Catalogue (EWC) and Hazardous Waste List Code:

Waste identity numbers and waste descriptions must be assigned in accordance with EWC codes specific to the industry and processes.

### 14. TRANSPORT INFORMATION

Mode of Transport	ADR <sup>14</sup> / RID <sup>15</sup> (Road)	ADNR <sup>16</sup> (Inland Waterways)	IMDG <sup>17</sup> (Sea)	ICAO <sup>18</sup> / IATA <sup>19</sup> (Air)
14.1. UN Number	–	–	–	–
14.2. Proper Shipping Name	The product is not classified as hazardous for transport.			
Symbol	–	–	–	–
14.3. Transport Hazard Class	–	–	–	–
14.4. Packaging Group	–	–	–	–
Classification Code	–	–	–	–
Labeling No	–	–	–	–
Hazard Identification No (HIN No)	–	–	–	–
Tunnel Restriction Code	–	–	–	–
Limited Quantities (LQ)	–	–	–	–
EMS	–	–	–	–



## SAFETY DATA SHEET

Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals,  
23 June 2017 Friday, No: 30105 and in accordance with EU Regulation No 1272/2008.

### PERMOKILL EW

Edit Number: 1.0  
Preparation Date: 09.12.2021

Page No: 16/18  
GBF Code: 737001  
Publication Date: 09.12.2021

#### 14.5. ENVIRONMENTAL HAZARDS – MARINE POLLUTION

**Marine Pollutant:** NONE

#### 14.6. SPECIAL PRECAUTIONS FOR USERS

Not applicable

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

### 15. REGULATORY INFORMATION

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

The product has been classified and labeled in accordance with the “Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals” and as stipulated in the “EU regulation”.

- To apply the provisions in this safety data sheet, check the following regulations or other relevant national measures if applicable:
  - Regulation on Restrictions Relating to the Production, Market Placement, and Use of Certain Hazardous Substances, Preparations and Goods
  - Occupational Health and Safety Regulation
  - Regulation on Health and Safety Precautions for Working with Carcinogenic and Mutagenic Substances
  - Regulation on Health and Safety Precautions for Working with Chemical Substances
  - Regulation on the Use of Personal Protective Equipment at Workplaces
  - Regulation on the Control of Hazardous Wastes
  - European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR), 2015
  - Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals, dated 23 June 2017, No: 30105
  - Biocidal Products Regulation, dated 31 December 2009, No: 27449

#### 15.2 Chemical Safety Assessment

A chemical safety assessment is not required for this product.

#### 16. OTHER INFORMATION

This section covers other information related to the preparation of this safety data sheet. It includes details not covered under sections 1 to 15, including revision history and additional non-classification information.

#### 16.1 Legal Instruments

This document has been prepared in accordance with Directive 1272/2008/EC, ISO 11014:2009, the Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals dated 23 June 2017, No: 30105, and has been verified and approved by a certified expert authorized to issue safety data sheets.



## SAFETY DATA SHEET

Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals,  
23 June 2017 Friday, No: 30105 and in accordance with EU Regulation No 1272/2008.

### PERMOKILL EW

Edit Number: 1.0  
Preparation Date: 09.12.2021

Page No: 17/18  
GBF Code: 737001  
Publication Date: 09.12.2021

#### 16.2 Prepared/Edited/Published/Provided by:

##### Prepared by / Published by / Provided by:

DELTA PEST CONTROL AND ENVIRONMENTAL HEALTH SERVICES  
DISINFECTION LANDSCAPING CLEANING BIOCIDAL WHOLESALE TRADE  
On behalf of: AYANSAN CHEMICAL CONSULTANCY PLASTIC IND. AND TRADE CO. LTD.

##### Chemical Safety and Licensing Consultant:

Prepared by Burak AYAN – [burakayan@ayansan.com](mailto:burakayan@ayansan.com)

##### Certified Chemical Safety Assessor:

Certificate No: KDU 01.03.10  
Certificate Date: 05.10.2019

##### Contact:

[info@ayansan.com](mailto:info@ayansan.com) – [www.ayansan.com](http://www.ayansan.com) – +90 212 485 50 59

##### Information Regarding the Safety Data Sheet Provided by:

DELTA PEST CONTROL AND ENVIRONMENTAL HEALTH SERVICES  
DISINFECTION LANDSCAPING CLEANING BIOCIDAL WHOLESALE TRADE  
[info@deltailaclama.com.tr](mailto:info@deltailaclama.com.tr)

#### 16.3 Revision Date:

9 December 2021

#### 16.4 Revision Number:

1.0

#### 16.5 List of Relevant Hazard Classifications and Phrases:

- **H226** – Flammable liquid and vapor.
- **H302** – Harmful if swallowed.
- **H312** – Harmful in contact with skin.
- **H315** – Causes skin irritation.
- **H317** – May cause an allergic skin reaction.
- **H318** – Causes serious eye damage.
- **H319** – Causes serious eye irritation.
- **H332** – Harmful if inhaled.
- **H400** – Very toxic to aquatic life.
- **H410** – Very toxic to aquatic life with long-lasting effects.

#### 16.6 Notes on Classification Methods for Hazards:

(In the case of mixtures, indicates which assessment methods defined in Article 11 were used for classification.)

→ No application required.

#### 16.7 Main Literature References and Information Sources:

- It is recommended that safety data sheets and product labels be read and used clearly and effectively for workers' education in order to ensure the protection of human health and the environment and to build a general culture of safety.
- Key references used in preparing this safety data sheet include:
  - The safety data sheet prepared by the manufacturer for the product
  - The Regulation on Health and Safety Precautions for Working with Carcinogenic and Mutagenic Substances
  - Relevant legal regulations and annexes



## SAFETY DATA SHEET

Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals,  
23 June 2017 Friday, No: 30105 and in accordance with EU Regulation No 1272/2008.

### PERMOKILL EW

Edit Number: 1.0  
Preparation Date: 09.12.2021

Page No: 18/18  
GBF Code: 737001  
Publication Date: 09.12.2021

#### UN ADR, IMDG, IATA lists, ECHA and relevant EU directives,

Other supporting sources.

- The information provided in this Safety Data Sheet has been prepared to the best of current knowledge as of the date of preparation.
- This information is accurate and reliable to the best knowledge and belief of the company as of the stated date.
- The information provided is intended to serve as a guide for safe handling, use, processing, storage, transport, disposal, and waste management.
- Unless otherwise specified in the document, this information is valid only for the substance identified and may not be valid if used in combination with other materials or in any process not mentioned.
- Always follow the guidance provided in the Safety Data Sheet when using the product.
- **The fact that this Safety Data Sheet complies with the applicable safety regulations does not constitute a guarantee of product properties.**
- **This document does not constitute a legally valid contractual relationship or product warranty.**

1. **GBF:** Safety Data Sheet
2. **CLP:** EU Regulation No. 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures
3. **GHS:** Global Harmonized System
4. **ELINCS:** European List of Notified Chemical Substances
5. **CAS:** Chemical Abstracts Service registry number
6. **KKDIK:** Regulation on the Registration, Evaluation, Authorization, and Restriction of Chemicals (Turkey), 23 June 2017, No. 30105
7. **NIOSH:** The National Institute for Occupational Safety and Health (USA)
8. **CEN:** European Committee for Standardization
9. **NTP:** National Toxicology Program (USA)
10. **IARC:** International Agency for Research on Cancer
11. **OSHA:** Occupational Safety and Health Association (USA)
12. **REACH:** Registration, Evaluation, Authorisation and Restriction of Chemicals
13. **EWC:** European Waste Catalogue
14. **ADR:** European Agreement concerning the International Carriage of Dangerous Goods by Road
15. **RID:** Regulations concerning the International Carriage of Dangerous Goods by Rail
16. **ADNR:** European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
17. **IMDG:** International Maritime Code for Dangerous Goods
18. **ICAO:** International Civil Aviation Organization
19. **IATA:** International Air Transport Association