

SAFETY DATA SHEET

PALAMO

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

PALAMO

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

Agricultural use. Herbicide (SC).

1.3. Safety data sheet supplier's information

Supplier

ISB GLOBE TARIM A.Ş.
Güzeloba 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	Acute Toc.4- H302, Skin Sens.1- H317
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

Attention

Contents

Pendimethalin, Clomazone

Hazard statements

H302	Harmful if swallowed
H317	It may cause allergic skin reactions.
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.

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Precautionary Statements

P102	Keep out of reach of children.
P273	Avoid release to the environment.
P301+P312	IF SWALLOWED: If you feel unwell, call the NATIONAL POISON CONTROL CENTER ON 114 or a doctor/...
P280	Wear protective clothing, gloves, eye and face protection.
P302+P252	IF IN SKIN CONTACT: Wash with plenty of water/soap.
P333+P313	If skin irritation or itching occurs: Get medical advice/attention.
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)
Pendimethalin (ISO)	254-938-2	40487-42-1	25-35%	Acute Tox. 4- H302 Skin Sensitive. 1- H317 Aquatic Acute 1- H400 (M=1) Aquatic Chronic 1- H410 (M=1)
Clomazone (ISO)	---	81777-89-1	5-15%	Acute Tox. 4- H302 Acute Tox. 4- H332 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).

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

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.

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.

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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.
Swallowing	: Weakness. Nausea, vomiting.
Skin Contact	: Allergic skin reactions may develop in sensitive people.
Contact with Eyes	: Mild irritation, 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.

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. such as sand, soil, sawdust, diatomaceous earth, kaolin or absorbent tape

Prevent its spread with non-flammable absorbers. 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.

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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.

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.

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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

Provisions within the framework of current legislation regarding the protection of the environment must be fully fulfilled.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information about basic physical and chemical properties

physical state	Liquid.
Appearance	Suspension concentrate.
Colour	Looking from yellow to orange.
Smell	Odorless.
odor threshold	No available information.
PH value	(%1): 6-9
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	No available information.
Decomposition Temperature	>300̊
Flammability (solid, gas)	No available information.
vapor pressure	There is no.
vapor density	No available information.
Relative Density	1.17g/cm3
Intensity	No available information.
Resolution	No available information.
Viscosity, kinematics	No available information.
Viscosity, dynamic	No available information.
Explosion characteristics	No available information.
Oxidizing properties	There is no.
Particle characteristics	Not applicable.

9.2. Other informations

Corrosiveness	Not detected.
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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. Thermal decomposition may occur above 300°C.

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	1287 mg/kg	It is harmful if swallowed.
ATEmixture, Inhalation	95.73 mg/l	Does not meet classification criteria based on available data.

pendimethalin

ATE, Oral	500mg/kg	
LD50, Dermal, Rat	>5000 mg/kg	Notes: (OECD Test Guide 402)

clomazone

ATE, Oral	500 mg/kg
ATE, Inhalation, Steam	11 mg/l / 4 hours

Skin corrosion/irritation

Does not meet classification criteria based on available data.

Eye damage/irritation

Does not meet classification criteria based on available data.

Skin or respiratory sensitization

It may cause allergic skin reactions.

Germ Cell Mutagenicity (in vitro – in vivo)

Does not meet classification criteria based on available data.

Carcinogenicity

Does not meet classification criteria based on available data.

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accordance with the provisions of the "TR Ministry of Environment and Urbanization, KKDyK Regulation, Annex-2", dated 23 June 2017,
numbered 30105.

Reproductive toxicity (Fertility – Development)

Does not meet classification criteria based on available data.

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

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

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- Product**Toxicity to fish**

LC50 – 34 ppm, Mysidopsis bahia

LC50 – 19 mg/l, Rainbow trout

Toxicity to Daphnia and other aquatic invertebrates EC50 – 5.2 mg/l 48 hours,

Daphnia magna

Toxicity to aquatic plants EC50 – 2.1

ppm, Algae

Toxicity to birds

LD50 – >5620 ppm, Bobwhite quail

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 suitable

information available.

12.5. The results of the PBT and vPvB assessment do not

contain any components evaluated as PBT and vPvB.

12.6. Other adverse effects No

information available.

13 DISPOSAL INFORMATION**13.1. Waste treatment 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.

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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)	3082
UN No. (IMDG)	3082
UN No. (ICAO)	3082

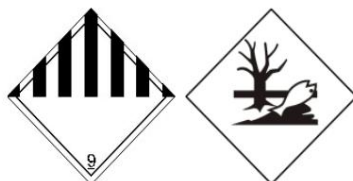
14.2. Proper shipping name Proper shipping name

ENVIRONMENTALLY HARMFUL SUBSTANCE, LIQUID, BBB (Pendimetalin, Clomazone)

14.3. Transport hazard class(es)

ADR/RID/ADN Class	9
ADR/RID classification code	M6
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	
IMDG Packaging group	III
ICAO Packaging group	III

14.5.Environmental damages

Environmentally harmful substance/Marine pollutant
Yes.

14.6. Special precautions for the user

Limited Quantity	5L
EMS	FA, S.F.
ADR shipping category	3
Emergency action code Hazard	•3Z
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 (KKDyK), dated 23 June 2017, numbered 30105.

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- 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.

EC₅₀: Effective Concentration of the substance causing 50% maximal response.

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

Acute Tox. 4- H302 : Calculation method

Skin Sens.1- H317 : Calculation method

Aquatic Chronic 1- H410 : Calculation method

All Hazard Statements

H302 Harmful if swallowed.

H317 May cause allergic skin reactions.

H332 Harmful if inhaled.

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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

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Editor's note

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