

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : PROPLANT™ TURF AND ORNAMENTAL FUNGICIDE
Other means of identification : EPA Reg. No. 55260-9

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

Recommended use : Fungicide

1.3. Details of the supplier of the safety data sheet

Arysta LifeScience North America LLC
15401 Weston Parkway, Suite 150
Cary, NC 27513 – USA

Arysta LifeScience Benelux
RUE DE RENORY, 26/1
BE-4102 OUGRÉE
BELGIUM

1.4. Emergency telephone number

Emergency number : Exposure Calls (PROSAR): +1-866-303-6952 or +1-651-603-3432 (international)
Spill Calls (CHEMTREC) (Contract # CCN1779): +1-800-424-9300 or +1-703-527-3887 (international)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Sens. 1 H317
Full text of H statements : see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H317 - May cause an allergic skin reaction
Precautionary statements (GHS-US) : P261 - Avoid breathing vapours
P272 - Contaminated work clothing must not be allowed out of the workplace
P280 - Wear protective gloves, eye protection
P302+P352 - If on skin: Wash with plenty of soap, water
P321 - Specific treatment (see First aid measures on this label)
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P363 - Wash contaminated clothing before reuse
P501 - Dispose of contents/container to National regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

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3.2. Mixture

| Name | Product identifier | % (w/w) | GHS-US classification |
|---------------------------|---------------------|---------|-----------------------|
| Propamocarb hydrochloride | (CAS No) 25606-41-1 | 64 - 68 | Skin Sens. 1, H317 |

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|---|
| First-aid measures general | : If medical advice is needed, have product container or label at hand. |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. Artificial respiration and/or oxygen if necessary. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. |
| First-aid measures after skin contact | : Wash skin with mild soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. |
| First-aid measures after eye contact | : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention. |
| First-aid measures after ingestion | : Do NOT induce vomiting. Rinse mouth. Get immediate medical advice/attention. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|--------------------------------------|--|
| Symptoms/injuries after skin contact | : May cause an allergic skin reaction. |
|--------------------------------------|--|

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|--------------------------------|--|
| Suitable extinguishing media | : Carbon dioxide. Foam. Dry powder. Water fog. |
| Unsuitable extinguishing media | : Do not use a heavy water stream. |

5.2. Special hazards arising from the substance or mixture

| | |
|-------------|---|
| Fire hazard | : Not flammable. |
| Reactivity | : When exposed to heat, may decompose liberating hazardous gases. |

5.3. Advice for firefighters

| | |
|--------------------------------|--|
| Firefighting instructions | : Eliminate all ignition sources if safe to do so. Evacuate area. Use water spray or fog for cooling exposed containers. Do not allow run-off from fire fighting to enter drains or water courses. |
| Protection during firefighting | : Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing. Use chemically protective clothing. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|------------------|---|
| General measures | : Avoid all eye and skin contact and do not breathe vapour and mist. Evacuate area. |
|------------------|---|

6.1.1. For non-emergency personnel

| | |
|----------------------|-------------------------|
| Protective equipment | : Refer to section 8.2. |
|----------------------|-------------------------|

6.1.2. For emergency responders

| | |
|----------------------|---|
| Protective equipment | : Refer to section 8.2. |
| Emergency procedures | : Ventilate area. Stop leak if safe to do so. |

6.2. Environmental precautions

Do not discharge into drains or the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

| | |
|-------------------------|--|
| For containment | : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. |
| Methods for cleaning up | : Impound and recover large spill by mixing it with inert granular solids. Collect spillage. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). |
| Other information | : Spilled material may present a slipping hazard. |

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Handle in accordance with good industrial hygiene and safety procedures. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Hygiene measures : Do not eat, drink or smoke when using this product. Remove contaminated clothes. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ground well. Use explosion-proof Machinery, mechanical appliances, electrical/electronic articles equipment.
- Storage conditions : Protect from sunlight. Keep container tightly closed. Keep only in the original container. Store locked up.
- Incompatible products : Strong acids. Strong bases. Strong oxidizers.
- Maximum storage period : 2 year
- Storage temperature : > -10 °C
- Heat and ignition sources : Keep away from heat, sparks and flame.
- Prohibitions on mixed storage : Incompatible materials.
- Storage area : Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| PROPLANT™ TURF AND ORNAMENTAL FUNGICIDE | |
|---|----------------|
| ACGIH | Not applicable |
| OSHA | Not applicable |
| Propamocarb hydrochloride (25606-41-1) | |
| ACGIH | Not applicable |
| OSHA | Not applicable |

8.2. Exposure controls

- Appropriate engineering controls : Avoid splashing. Use only in well ventilated areas. Emergency safety showers should be available in the immediate vicinity of any potential exposure. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.
- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Wear suitable gloves resistant to chemical penetration. nitrile rubber gloves.
- Eye protection : Chemical goggles or safety glasses. Face shield.
- Skin and body protection : Skin protection appropriate to the conditions of use should be provided.
- Respiratory protection : In case of inadequate ventilation wear respiratory protection.
- Environmental exposure controls : Prevent leakage or spillage. Prevent contaminated water run-off.
- Other information : Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Colour : Colourless light yellow
- Odour : Fruity
- Odour threshold : No data available
- pH : 5.33 (1%, 25 °C)
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Relative evaporation rate (butyl acetate=1) : No data available

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| | |
|----------------------------------|---------------------|
| Flammability (solid, gas) | : No data available |
| Explosive limits | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Vapour pressure | : No data available |
| Relative density | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Density | : 1.08 g/ml @ 20 °C |
| Solubility | : Soluble in water. |
| Log Pow | : No data available |
| Log Kow | : No data available |
| Auto-ignition temperature | : > 400 °C |
| Decomposition temperature | : No data available |
| Viscosity | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

When exposed to heat, may decompose liberating hazardous gases.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Heat. Open flame. Sparks.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂). Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|---------------------------|------------------------------------|
| Likely routes of exposure | : Inhalation; Skin and eye contact |
| Acute toxicity | : Not classified |

| PROPLANT™ TURF AND ORNAMENTAL FUNGICIDE | |
|---|----------------|
| LD50 oral rat | > 2000 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |
| LC50 inhalation rat (mg/l) | > 5.01 mg/l/4h |

| Propamocarb hydrochloride (25606-41-1) | |
|--|--------------|
| LD50 oral rat | > 2 g/kg |
| LD50 dermal rabbit | > 2000 mg/kg |
| LC50 inhalation rat (mg/l) | > 5 mg/l/4h |

| | |
|--|--|
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitisation | : May cause an allergic skin reaction. |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity (single exposure) | : Not classified |

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| | |
|--|--|
| Specific target organ toxicity (repeated exposure) | : Not classified |
| Aspiration hazard | : Not classified |
| Symptoms/injuries after skin contact | : May cause an allergic skin reaction. |

SECTION 12: Ecological information

12.1. Toxicity

| PROPLANT™ TURF AND ORNAMENTAL FUNGICIDE | |
|---|---|
| LC50 fish 1 | > 140 mg/l 96 h Oncorhynchus mykiss |
| EC50 Daphnia 1 | > 140 mg/l 48 h |
| ErC50 (algae) | 182 mg/l 72 h Selenastrum capricornutum |
| ErC50 (other aquatic plants) | 5940 mg/l Lemna Gibba |

| Propamocarb hydrochloride (25606-41-1) | |
|--|---|
| LC50 fish 1 | > 100 mg/kg 96 h |
| EC50 Daphnia 1 | > 100 mg/l 48 h |
| LC50 fish 2 | 99 mg/l oncorhynchus mykiss |
| ErC50 (algae) | 176 mg/l 72 h |
| ErC50 (other aquatic plants) | > 85 mg/l 72h Pseudokirchneriella sibcapitata |

12.2. Persistence and degradability

| PROPLANT™ TURF AND ORNAMENTAL FUNGICIDE | |
|---|------------------|
| Persistence and degradability | Not established. |

12.3. Bioaccumulative potential

| PROPLANT™ TURF AND ORNAMENTAL FUNGICIDE | |
|---|------------------|
| Bioaccumulative potential | Not established. |

12.4. Mobility in soil

| PROPLANT™ TURF AND ORNAMENTAL FUNGICIDE | |
|---|-------------------|
| Surface tension | 70.2 mN/m @ 20 °C |

12.5. Other adverse effects

Other information : No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|---------------------------------|---|
| Sewage disposal recommendations | : Do not dispose of waste into sewer. |
| Waste disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations. |
| Additional information | : Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads). Notify authorities if product enters sewers or public waters. |

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Additional information

Other information : No supplementary information available.

Transport by sea

IMDG

| | |
|-----------------------------------|------------------|
| Transport hazard class(es) (IMDG) | : Not applicable |
| Marine pollutant | : No |

Air transport

IATA

| | |
|-----------------------------------|------------------|
| Transport hazard class(es) (IATA) | : Not applicable |
| Marine pollutant | : No |

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SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Propamocarb hydrochloride (25606-41-1)

EPA TSCA Regulatory Flag

Exempt from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide

15.2. International regulations

CANADA

Propamocarb hydrochloride (25606-41-1)

Listed on the Canadian DSL (Domestic Substances List) inventory

EU-Regulations

Propamocarb hydrochloride (25606-41-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Data sources

: ACGIH (American Conference of Government Industrial Hygienists).
European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>.
Kriester Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.
Manufacturer Information.
TSCA Chemical Substance Inventory. Accessed at <http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html>.
National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition.
OSHA 29CFR 1910.1200 Hazard Communication Standard.

Other information

: None.

Full text of H-statements:

H317

May cause an allergic skin reaction

Abbreviations and acronyms:

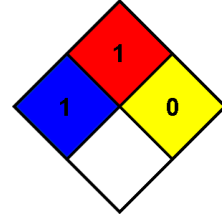
| | |
|--|---|
| | ATE: Acute Toxicity Estimate |
| | CAS (Chemical Abstracts Service) number |
| | EC50: Environmental Concentration associated with a response by 50% of the test population. |
| | GHS: Globally Harmonized System (of Classification and Labeling of Chemicals). |
| | LD50: Lethal Dose for 50% of the test population |
| | OSHA: Occupational Safety & Health Administration |
| | STEL: Short Term Exposure Limits |
| | TSCA: Toxic Substances Control Act |
| | TWA: Time Weighted Average |

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- NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
- NFPA fire hazard : 1 - Must be preheated before ignition can occur.
- NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product