SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Trade name : PROPLANT
Product code : CA701339
Synonyms : Propamocarb hydrochloride 722 g/L SL

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

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : Agriculture
Pesticide
Use of the substance/mixture : Fungicide

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Arysta LifeScience Benelux
Rue de Renory 26/1
B-4102 Ougrée - Belgium
T +32 (0)4 385 97 11 - F +32 (0)4 385 97 49
sdsin@arysta.com - http://www.arystalifescience.com

1.4. Emergency telephone number

Emergency number : Europe/Rest of the world (English): +44(0)1235 239670
112 (European Emergency Number)
USA: +1 215 207 0061 or 001866 928 0789
Australia: +61 2801 44558
People's Republic of China: + 86 10 5100 3039
New Zealand: +64 9929 1483

Country	Organisation/Company	Address	Emergency number	Comment
	WHO	http://www.who.int/gho/phe/chemical_safety/poisons_centres/en/index.html		
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital, Guy's & St Thomas' Hospital Trust	Dudley Road B18 7QH Birmingham	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)	
United Kingdom	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Wolfson Unit	Penarth CF64 2XX Cardiff	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)	
United Kingdom	NPIS Edinburgh (Scottish Poisons Information Bureau) Royal Infirmary of Edinburgh, Centre Hospitalier Universitaire Bab el Oued	51 Little France Crescent EH16 4SA Edinburgh	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Centre Hospitalier Universitaire de Constantine	Avonley Road SE14 5ER London	0870 243 2241	
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Sensitisation — Skin, Category 1 H317 Calculation method

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

CLP Signal word : Warning

Hazardous ingredients : Propamocarb HCl

Hazard statements (CLP) : H317 - May cause an allergic skin reaction

Precautionary statements (CLP) : P102 - Keep out of reach of children
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P261 - Avoid breathing spray
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves, eye protection
P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste

EUH-statements : EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

Extra phrases : SP 1 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)

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Propamocarb HCl	(CAS No) 25606-41-1 (EC no) 247-125-9	69 - 73	Skin Sens. 1, H317

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 : IF INHALED: if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. If breathing stops, give artificial respiration. In all cases of doubt, or when symptoms persist, seek medical attention.

First-aid measures after skin contact : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water, also under the eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice and attention.

First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Get immediate medical advice and attention.

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

No additional information available

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 : AFFF foam. dry chemical powder. Carbon dioxide (CO2). Water fog.

Unsuitable extinguishing media : High volume water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non flammable.

5.3. Advice for firefighters

Precautionary measures fire : No open flames. No smoking.

Firefighting instructions : Evacuate and limit access. Use a water spray to cool exposed surfaces and to protect fire-fighters.

Protection during firefighting : Wear suitable protective clothing. In case of inadequate ventilation wear respiratory protection.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Clean up even minor leaks or spills, if possible, without unnecessary risk.

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. In case of insufficient ventilation, wear suitable respiratory equipment.

Emergency procedures : Evacuate the danger area. Provide adequate ventilation to minimize dust and/or vapour concentrations. Consult an expert. Eliminate every possible source of ignition.

6.1.2. For emergency responders

Protective equipment : Wear self-contained breathing apparatus, rubber boots and thick rubber gloves.

6.2. Environmental precautions

Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Prevent liquid from entering sewers, watercourses, underground or low areas. Impound and recover large spill by mixing it with inert granular solids.

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it.

Other information : Avoid spilling the product, as this might cause falls.

6.4. Reference to other sections

Exposure controls/personal protection. Disposal considerations.

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. Do not allow to enter into surface water or drains.

Handling temperature : Store at room temperature

Hygiene measures : Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it 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 equipment.

Storage conditions : Keep out of direct sunlight.

Incompatible products : Strong acids. Strong bases. Strong oxidizing agents.

Maximum storage period : 2 year(s)

Storage temperature : > -10 °C

Storage area : Keep container tightly closed and in well ventilated place. Install a retention tank.

Packaging materials : Keep only in the original container. Keep locked up and out of reach of children.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment	:	Gloves. Gas mask. Safety glasses.
Hand protection	:	Wear suitable gloves resistant to chemical penetration. Nitrile rubber gloves. Wear suitable gloves resistant to chemical penetration
Eye protection	:	Face shield. Chemical goggles or safety glasses
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	:	Notify authorities if product enters sewers or public waters.
Other information	:	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

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)
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No flash point - measurement carried out until boiling temperature.
Auto-ignition temperature	:	> 400 °C
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	1.08 g/ml (20°C)
Solubility	:	Soluble in water.
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.
Oxidising properties	:	No data available
Explosive limits	:	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 of use.

10.3. Possibility of hazardous reactions

None under normal conditions. For further information, refer to section 10 : "Stability and Reactivity".

10.4. Conditions to avoid

Keep out of direct sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

When heated to decomposition, emits dangerous fumes. Carbon dioxide (CO2). Carbon monoxide. Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

PROPLANT	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.01 mg/l/4h

Propamocarb HCl (25606-41-1)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5 mg/l/4h

Skin corrosion/irritation : Not classified.
pH: 5.33 (1%, 25°C)

Serious eye damage/irritation : Not classified
pH: 5.33 (1%, 25°C)

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

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

PROPLANT	
LC50 fish 1	> 140 mg/l (96h Salmo gairdneri)
EC50 Daphnia 1	> 140 mg/l (48h Daphnia magna)
ErC50 (algae)	182 mg/l (72h Selenastrum capricornutum)
ErC50 (other aquatic plants)	5940 mg/l (Lemna Gibba)

Propamocarb HCl (25606-41-1)	
LC50 fish 1	> 92 mg/l (96h Lepomis macrochirus)
EC50 Daphnia 1	> 100 mg/l (48h Daphnia magna)
ErC50 (algae)	> 85 mg/l (72h Pseudokirchneriella subcapitata)
NOEC chronic fish	6.3 mg/l (32d Pimephales promelas)
NOEC chronic crustacea	12.3 mg/l (21d Daphnia magna)
EbC50, Lemna gibba, Chronic	> 18 mg/l (14 days)

12.2. Persistence and degradability

Propamocarb HCl (25606-41-1)	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

Propamocarb HCl (25606-41-1)	
BCF fish 1	3.2 - 4.7 mg/g
Log Pow	-1.36
Bioaccumulative potential	There is no bioaccumulation.

12.4. Mobility in soil

PROPLANT	
Surface tension	70.2 mN/m (20°C)

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

Additional information : Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Notify authorities if product enters sewers or public waters.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Not regulated

- Transport by sea

Not regulated

- Air transport

Not regulated

- Inland waterway transport

Not regulated

- Rail transport

Not regulated

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:
12.1 Ecotoxicity. Precautionary statements (CLP).

Full text of H- and EUH-statements:

Skin Sens. 1	Sensitisation — Skin, Category 1
H317	May cause an allergic skin reaction
EUH401	To avoid risks to human health and the environment, comply with the instructions for use

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Skin Sens. 1	H317	Calculation method

SDS EU (REACH Annex II)

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