

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

1.1. Product identifier

Product form : Substance
Trade name : Gro Stop Solid
EC no : 202-925-7
CAS No. : 101-21-3
Product code : CE 001 C0069

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

1.2.1. Relevant identified uses

Main use category : Plant protection product for professional use. Agriculture.
Use of the substance/mixture : Herbicide. Growth regulator.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

CERTIS UK
Suite 5, 3 Riverside
Granta Park
Great Abington
Cambridgeshire CB21 6AD
United Kingdom
Tel: +44 (0)845 373 0305
Fax: +44 (0)1223 891210
Email: certis@certiseurope.co.uk
Website: www.certiseurope.co.uk

1.4. Emergency telephone number

Emergency number : Certis Carechem24 multilingual 24 hours emergency number: +44 (0) 870 190 6777.
For advice on medical emergencies, fires, spillages or chemical hazards only –phone: 0870 190 6777.
For further advice for medical professionals - The National Poisons Information Service:
Tel: 0870 600 6266 (UK only) or Dublin Tel: 0035 3 137 99 64/379966.
For further advice for veterinary surgeons: 020 7635 9195.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture



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

Carc. 2 H351
STOT RE 2 H373
Aquatic Chronic 2 H411

Full text of H-phrases: see section 16

2.2. Label elements

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

Hazard pictograms (CLP)	:	 
		GHS08 GHS09
Signal word (CLP)	:	Warning
Hazard statements (CLP)	:	H351 - Suspected of causing cancer. H373 - May cause damage to organs through prolonged or repeated exposure. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	:	P201 - Obtain special instructions before use. P260 - Do not breathe dust. P273 - Avoid release to the environment. P308+P313 - IF exposed or concerned: Get medical advice/attention. P405 - Store locked up. 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 phrases	:	EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.

2.3. Other hazards

The product is a (week) cholinesterase inhibitor.

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Chlorpropham (Main constituent)	(CAS No.) 101-21-3 (EC no) 202-925-7 (EC index no) 006-096-00-0	> 98	Carc. 2, H351 STOT RE 2, H373 Aquatic Chronic 2, H411

Full text of H- and EUH-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	:	In the event of any complaints or symptoms, avoid further exposure.
First-aid measures after inhalation	:	IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist call a doctor.
First-aid measures after skin contact	:	IF ON SKIN: Wash with plenty of soap and water. Remove contaminated clothing and shoes. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.
First-aid measures after ingestion	:	IF SWALLOWED: Immediately call a POISON CENTER or doctor. Never give anything by mouth to an unconscious person.

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

Symptoms/injuries after skin contact	: Slightly irritating to skin.
Symptoms/injuries after eye contact	: Slightly irritating to eye.
Symptoms/injuries after inhalation	: Irritating to respiratory system.
Symptoms/injuries after ingestion	: Irritation of the gastro intestinal tracts.

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	: Water spray. Dry chemical powder. Alcohol resistant foam. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	: Jet of water.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Combustion or thermal decomposition may generate toxic vapours: chlorine compounds, nitrogen oxides, carbon monoxide, hydrocarbons.
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5.3. Advice for firefighters

Firefighting instructions	: Exercise caution when fighting any chemical fire. Fight fire from safe distance and protected location. Do not breathe fumes. Cool closed containers exposed to fire with water spray. If possible, take the containers out of dangerous zone. Contain fire-fighting water with dikes or absorbents to prevent migration and entry into sewers or streams.
Protection during firefighting	: Wear suitable protective clothing, gloves, eye/face protection and respiratory protection. Wear a self-contained breathing apparatus.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Protective equipment	: Wear suitable protective clothing, gloves and eye or face protection.
Emergency procedures	: Evacuate area. Ensure adequate ventilation. Avoid direct contact with the substance. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

6.2. Environmental precautions

Prevent entry to sewers and public waters.
Notify the authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

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

Once absorbed collect spilled material with shovels, buckets and place in closed containers and label properly.

Remove as chemical waste, according to national or local legislation.

In the event of major spillage: contact an expert.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Additional hazards when processed : Suspected of causing cancer.

May cause damage to organs.

The product is a (week) cholinesterase inhibitor.

Precautions for safe handling : Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Ensure adequate ventilation.

Do not breathe dust.

Avoid dust formation.

Wear rubber gloves, protective clothing and equipment to prevent longterm and repeated contact with the skin.

Hygiene measures : Always wash your hands immediately after handling this product, and once again before leaving the workplace.

Contaminated work clothing should not be allowed out of the workplace.

Do no eat, drink or smoke when using this product.

Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep in original containers, tightly closed.

Store in dry, well-ventilated area.

Keep away from food, drink and animal feedingstuffs.

Keep out of the reach of children.

Keep locked up.

Store at temperatures not exceeding 150 °C.

Incompatible products : Strong acids, strong bases.

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

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment : Protective clothing. Protective goggles. Gloves. Dust/aerosol mask.



Hand protection : Wear impervious gloves resistant to chemical. Nitrile rubber.

Eye protection : Safety goggles or a face shield.

Skin and body protection : Protective clothing with long sleeves waterproof and resistant to chemicals. Rubber boots.

Respiratory protection : Wear appropriate respirator for dust / organic vapors.

Hygiene measures : Remove and wash contaminated clothing before re-use.
 Do not eat, drink or smoke while handling the product.
 Clean gloves with soap and water before removing.
 Wash hands and face with soap and water before eating, drinking smoking and immediately after handling product.
 Clean equipment, premises and work clothes regularly.
 Work clothing should remain on the work area and stored separately from street clothes.

Environmental exposure controls : Discharge into the environment must be avoided.
 Do not contaminate surface and groundwater.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Low melting solid/viscous liquid.
Colour	: Yellow-brown or yellowish.
Odour	: Faint characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 36 – 49 °C
Freezing point	: No data available
Boiling point	: 256 - 258 °C
Flash point	: No data available
Self ignition temperature	: 465 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: +/- 1,8 x 10 ⁻⁴
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1290 kg/m ³
Solubility in water	: +/- 11 g/l
Log Pow at 20 °C	: +/- 3.8
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No explosive properties.
Oxidising properties	: No oxidising properties.
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No thermal decomposition if used according to specifications.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

Not if use and storage under normal recommended conditions.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Decomposes on exposure to temperature rise: release of irritant gases/vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Chlorpropham (101-21-3)	
LD ₅₀ oral rat	4200 mg/kg
LD ₅₀ dermal rabbit	> 2000 mg/kg
LC ₅₀ inhalation rat	> 0.5 mg/l/4h (aerosol)

Skin corrosion/irritation : Slight skin irritant.

Serious eye damage/irritation : Slightly irritant to eyes.

Respiratory or skin sensitisation : Irritant to respiratory system.
No sensitization to skin.

Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer.

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : May cause eye/skin irritation. Gastrointestinal irritation. Respiratory tract irritation.

Specific target organ toxicity (repeated exposure) : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Chlorpropham (101-21-3)	
LC ₅₀ Fish (<i>Oncorhynchus mykiss</i>)	7.5 mg/l
LC ₅₀ Fish (<i>Cyprinus carpio</i>)	5.3 mg/l
EC ₅₀ Daphnia	2.6 - 4 mg/l
EbC ₅₀ Algae (<i>Navicula pelliculosa</i>)	1.0 mg/l
EbC ₅₀ Algae (<i>Selenastrum capricornutum</i>)	1.1 mg/l
LD ₅₀ Birds	2000 mg/kg
LD ₅₀ Bee	466 µg/bee

12.2. Persistence and degradability

Chlorpropham (101-21-3)	
Persistence and degradability	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. In soil DT ₅₀ lab (20 °C, aerobic): 22 days and 27 days (r ² >0.7). Hydrolytic degradation: >1 (20 °C, pH: 4,7,9)

12.3. Bioaccumulative potential

Chlorpropham (101-21-3)	
BCF	144 l/kg ww
Log Pow	+/- 3.8

12.4. Mobility in soil

Chlorpropham (101-21-3)

Mobility in soil	Solubility in water: +/- 11 g/l Stability in soil: Koc = 260, 280, 480 l/kg
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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

Waste treatment methods : Apply triple washing procedure of the empty container and place the rinse water in the tank or container where the mixture is prepared.

Handle empty containers and waste as established by the competent authorities.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

UN-No. : 3077

14.2. UN proper shipping name

Transport document description : UN 3077 (3077 Environmentally hazardous, solid, n.o.s (Chlorpropham), 9, III

14.3. Transport hazard class(es)

Class (UN) : 9

14.4. Packing group

Packing group (UN) : III

14.5. Environmental hazards

Dangerous for the environment :



Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

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

No REACH Annex XVII restrictions

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Source of information : Safety Data Sheet of Chlorpropham of MAX (RUDONG) CHEMICALS CO., LTD.

Indication of changes:

Change date	Previous Version	Section	Changed Item	Change	Comments
07/01/2013	2.0	14.2	Transport document description	removed	The word liquid was removed.
10/07/2013	3.0	4, 4.3, 5.1, 5.2, 5.3, 5.3, 6.1, 6.3, 13		Modified	
25/11/2014	4.0	8		Update	
		9	Physical state, color	Modified	
			Melting point, Self ignition temperature, Vapor pressure, Log Pow.	Added	
11	LD50 oral rat. Skin, eye irritation	Modified.			

Full text of H- and EUH-phrases:

Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Carc. 2	Carcinogenicity Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects

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.