

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Mixture
Product name : GRO-STOP 100
Product code : CE 001 C0206
Type of formulation : Hot fogging concentrate (HN)
Active Ingredient : Chlorpropham

1.2. Relevant identified uses of the substance or mixture and uses advised against**2.1. Relevant identified uses**

Main use category : Plant protection product for professional use. Agriculture.
Use of the substance/mixture : Sprout inhibitor.

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]**

Skin Irrit. 2 H315
Eye Irrit. 2 H319
Carc. 2 H351
STOT RE 2 H373
Aquatic Chronic 3 H412

Full text of H-phrases: see section 16.

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

Hazard pictograms (CLP)	:	 
		GHS07 GHS08
Signal word (CLP)	:	Warning.
Hazardous ingredients	:	Chlorpropham, Dichloromethane
Hazard statements (CLP)	:	H315 - Causes skin irritation. H319 - Causes serious eye irritation. H351 - Suspected of causing cancer. H373 - May cause damage to organs through prolonged or repeated exposure. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	:	P201 - Obtain special instructions before use. P262 - Do not get in eyes, on skin, or on clothing. P280 - Wear protective gloves/protective clothing/eye protection/face protection. 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.

SECTION 3: Composition/information on ingredients
3.1. Substances

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Dichloromethane	(CAS No.) 75-09-2 (EC no) 200-838-9 (EC index no) 602-004-00-3	>= 50	Carc. 2, H351
Chlorpropham	(CAS No.) 101-21-3 (EC no) 202-925-7 (EC index no) 006-096-00-0	10 - 25	Carc. 2, H351 STOT RE 2, H373 Aquatic Chronic 2, H411

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

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	: Can enter the body by ingestion or (less) inhalation and through the skin. Limited evidence of a carcinogenic effect.
Symptoms/injuries after inhalation	: Dizziness, drowsiness, headache, nausea, unconsciousness.
Symptoms/injuries after skin contact	: Redness.
Symptoms/injuries after eye contact	: Redness, pain.
Symptoms/injuries after ingestion	: Abdominal pain, chest pain. See also inhalation.

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

Product is a (weak) cholinesterase inhibitor.

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

See sections 7-8-13.

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

Precautions for safe handling : Read label before use.

Obtain special instructions before use.

Use only outdoors or in a well-ventilated area.

Do not breathe gas, fumes, vapour or spray.

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

Wear suitable protective clothing, gloves, eye/face protection and respiratory protection.

Avoid contact with eyes, skin, nose and mouth.

Opened containers must be carefully closed and kept upright to avoid leakage.

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 not 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 a well-ventilated room.

Keep in original containers, tightly closed.

Keep locked up.

Keep out of the reach of children.

Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

Sprout inhibitor.

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 chemical resistant 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 : 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 or smoking.
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	: Liquid
Colour	: Translucent pale yellow.
Odour	: Characteristic.
Odour threshold	: No data available
pH	: It is not a miscible product.
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: +/- 40 °C
Flash point	: No data available
Self ignition temperature	: > 600 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.2891 g/cm ³
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: 0.61 mm ² /sec
Viscosity, dynamic	: No data available
Explosive properties	: No explosive properties.

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

The product is stable at normal handling and storage conditions.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

Is not explosive and does not exhibit oxidant properties.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Combustion or thermal decomposition may generate toxic vapours: chlorine compounds, nitrogen oxides, carbon monoxide, hydrocarbons.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

GRO-STOP 100	
LD ₅₀ oral rat	> 2000 mg/kg
LD ₅₀ dermal rat	> 4000 mg/kg
LC ₅₀ inhalation rat	> 6.49 g/m ³

Skin corrosion/irritation : Causes skin irritation (Mildly irritating)

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Mild sensitising properties.

Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer.

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : May cause respiratory irritation. May cause drowsiness or dizziness.

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

GRO-STOP 100	
LC ₅₀ Fishes (<i>Oncorhynchus mykiss</i>)	42.54 mg/l (33µl/l) - 96h
EC ₅₀ (<i>Daphnia magna</i>)	17.27 mg/l (13.4 µl/l) – 48h
EC ₅₀ (<i>Selenastrum capricornutum</i>)	5.8 mg/l (5.8 µl/l) - 72h

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 _{50lab} (20 °C, aerobic): 22 and 27 d (r2 >0.7).

12.3. Bioaccumulative potential

Chlorpropham (101-21-3)	
BCF fish 2	144 l/kg
Log Pow	ca 3.8

12.4. Mobility in soil

Chlorpropham (101-21-3)	
Mobility in soil	Adsorption coefficient Koc = 260, 280, 480 l/kg

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

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

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 / IMDG / IATA / ADN

14.1. UN number

UN-No. : 1593

14.2. UN proper shipping name

Proper Shipping Name : Dichloromethane

Transport document description : UN 1593 Dichloromethane, 6.1, III, (E)

14.3. Transport hazard class(es)

Class (UN) : 6.1

14.4. Packing group

Packing group (UN) : III

14.5. Environmental hazards

Marine pollutant :

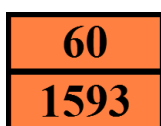


Dangerous for the environment.

14.6. Special precautions for user
14.6.1. Overland transport

Hazard identification number (Kemler No.) : 60

Orange plates :



Special provision (ADR) : 516

Transport category (ADR) : 2

Tunnel restriction code : E

Limited quantities (ADR) : 5L

Excepted quantities (ADR) : E1

EAC code : •2Z

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

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

Contains no REACH candidate substance

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

A chemical safety assessment is not required for this product. The mixture is assessed under the provisions of Regulation (EC) 1107/2009.

SECTION 16: Other information

Indication of changes:

Change date	Previous Version	Section	Changed Item	Change	Comments
19/06/2013	3.0	9.1	Density: 1.289 g/l	Removed	<u>Version 4.0.</u> Desnsity was changed according to RAF sheet 0006.2 of Formulation & QC Manager (24-04-2013)
10/07/2013	4.0	2.1 2.2	Classification and Label elements according to DSD	Modified	<u>Version 5.0.</u> Classification according to Authorisation UK document Number: 0530 of 2013
		13	Waste treatment methods	Modified	
		14	Transport information	Modified	<u>Version 5.0.</u> Transport information was updated according to ras transport review (08/07/2013)
19/09	6.0	2	R48/22 S13, S20/21, S27,S45, S57	Added	
30/9/2013	6.1	2	R38 S1/S2	Added	
26/03/2014	6.2	2	H335, H336, P271	Removed	Annex VI (Dichloromethane)
			P202, P306+P360	Added	
21/05/2014	6.3	2.2	CLP label elements: P202, P260, P273	Removed	
			P201, P262, P306+P360, P405	Added	
		14	UN 3082	Removed	Dichloromethane has its own UN number (by ras.-16.05.2014)
			UN 1593	Added	
13/11/2014	6.4	12	EC ₅₀ (<i>Daphnia magna</i>): 17.27 g/l	Modified	
26/01/2015	6.5	14	PESTICIDE, LIQUID, TOXIC, N.O.S	Delated	RA UK (E. Smith) request

Full text of H- and EUH-phrases:

Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Skin Irrit. 2	skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapour
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
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
H412	Harmful to aquatic life with long lasting effects