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

1.1. Product identifier

Product form : Mixture

Product name : GRO STOP READY

Product code : CE 001 C0207

Type of formulation : Emulsion, oil in water (EW)

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]

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

Hazardous ingredients : Chlorpropham, 1-dodecyl-2-pyrrolidone, Benzenesulphonic acid, C-10-16 alkyl derivatives

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) : P202 - Do not handle until all safety precautions have been read and understood.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection and face protection.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P405 - Store locked up.
P501 - Dispose of contents/container to a suitable disposal site in accordance with local and national regulations.

EUH phrases : EUH208 - Contains 1-dodecyl-2-pyrrolidone(2687-96-9). May produce an allergic reaction.
EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.

2.3. Other hazards

No additional information available

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]
Chlorpropham	(CAS No.) 101-21-3 (EC no) 202-925-7 (EC index no) 006-096-00-0	< 15	Carc. 2, H351 STOT RE 2, H373 Aquatic Chronic 2, H411
1-dodecyl-2-pyrrolidone	(CAS No.) 2687-96-9 (EC no) 403-730-1 (EC index no) 613-099-00-6	< 5	Skin Corr. 1A, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Isopropylamine alkyl benzene sulphonate	(CAS No.) 68584-24-7 (EC no) 271-531-5	< 5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318

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

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	:	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.

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

Toxic to aquatic life with long lasting effects. Prevent entry to sewers and public waters. Notify 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. Do not handle until all safety precautions have been read and understood. Wear suitable protective clothing, gloves and eye or face protection. Avoid contact with eyes, skin and clothes. Do not breathe gas, fumes, vapour or spray. Opened containers must be carrefully closed and kept uprigth 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 no eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Prevent unauthorised access. Keep locked up and out of the reach of children. Keep in original containers, tightly closed. Keep away from food, drink and animal feedingstuffs. Protect against frost. Keep away from heat and direct sunlight.

7.3. Specific end use(s)

Sprout inhibitor for agricultural use. Refer to the label.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limit value is known. See section 3 "Information on ingredients".

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 : 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	:	White
Odour	:	No data available
Odour threshold	:	No data available
pH	:	7,1
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	98 °C
Flash point	:	No data available
Self ignition temperature	:	486 °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	:	1,018 g/cm^3
Solubility	:	No data available
Log Pow	:	No data available
Log Kow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	14,5 (13 - 16) mPa.s (20°C)
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

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 READY	
LD_{50} oral rat	> 2000 mg/kg
LD_{50} oral	> 2000 mg/kg
LC_{50} inhalation rat	>5,13 g/m³

Irritation : Not classified (Non irritant)

Corrosivity : Not classified

Sensitisation : Not classified (No skin sensitisation)

Repeated dose toxicity : Not classified

Carcinogenicity : Not classified

Mutagenicity : Not classified

Toxicity for reproduction : Not classified

SECTION 12: Ecological information

12.1. Toxicity

GRO STOP READY	
LC_{50} Fishes (*Cyprinus carpio*)	20,4 mg/l (96h)
EC_{50} Daphnia	4 mg/l (48h)
EC_{50} other aquatic organisms (*Selenastrum capricornutum*)	4,2 mg/l (72h)
ErC_{50} Algae (*Selenastrum capricornutum*)	7,6 mg/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_{50}lab (20 C, aerobic): 22 and 27 d (r2 >0.7).

12.3. Bioaccumulative potential

Chlorpropham (101-21-3)	
BCF Fish	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

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : 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. : 3082

UN-No.(IATA) : 3082

14.2. UN proper shipping name

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Transport document description : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, (E)

14.3. Transport hazard class(es)

Class (UN) : 9

Class (IATA) : 9 - Miscellaneous dangerous goods

Hazard labels (UN) : 9

14.4. Packing group

Packing group (UN) : III

14.5. Environmental hazards

Dangerous for the environment :

Marine pollutant

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 90

Classification code (UN) : M6

Orange plates :

Special provision (ADR) : 274, 335, 601

Transport category (ADR) : 3

Tunnel restriction code	:	E
Limited quantities (ADR)	:	5L
Excepted quantities (ADR)	:	E1
EAC code	:	•3Z

14.6.2. Transport by sea

EmS-No. (1)	:	F-A,S-F

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

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

Full text of H- and EUH-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Corr. 1A	skin corrosion/irritation Category 1A
Skin Irrit. 2	skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitisation Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life

H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects