

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

Product form : Mixture
Trade name : Gyo
Product code : BCP258H
Type of product : EC (Emulsifiable concentrate)

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
Use of the substance/mixture : Herbicide

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Belchim Crop Protection NV/SA
Technologielaan 7
1840 Londerzeel - Belgium
T +32 (0)52 30 09 06 - F +32 (0)52 30 11 35
info@belchim.com - www.belchim.com

1.4. Emergency telephone number

Emergency number : +32(0)14584545
24 H/7 days

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No. 1272/2008 [CLP] Mixtures/Substances: SDS EU 2015: According to Regulation (EU) 2015/830 (REACH Annex II)

Flammable liquids, Category 3	H226
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, category 1B	H317
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life with long lasting effects.

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

Hazard pictograms (CLP) :



GHS02

GHS07

GHS09

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H226 - Flammable liquid and vapour.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P280 - Wear protective gloves, protective clothing, eye protection
P302+P352 - IF ON SKIN: Wash with plenty of water
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
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
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

EUH-statements :

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

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Extra phrases

: SP1: 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)
SPe3: To protect aquatic organisms respect an unsprayed buffer zone of 12 metres to surface water bodies in line with LERAP requirements.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
pyridate (ISO); O-(6-chloro-3-phenylpyridazin-4-yl) S-octyl thiocarbonate	(CAS-No.) 55512-33-9 (EC-No.) 259-686-7 (EC Index-No.) 607-232-00-7	~ 56	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
cyclohexanone	(CAS-No.) 108-94-1 (EC-No.) 203-631-1 (EC Index-No.) 606-010-00-7 (REACH-no) 01-2119453616-35-0039	> 20	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318
Hydrocarbons Aromatic C10-C13, <1% Naphtalene	(EC-No.) 922-153-0	< 10	Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Mixture of Calcium Dodecylbenzene sulphonate		> 3	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Chronic 3, H412
Alcohol ethoxylate/propoxylate	(CAS-No.) 9038-95-3	> 3	Acute Tox. 3 (Inhalation), H331

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 exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact

: Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion

: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact

: Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact

: Eye irritation.

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 powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard

: Flammable liquid and vapour.

Hazardous decomposition products in case of fire

: Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting

: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

cyclohexanone (108-94-1)		
EU	Local name	Cyclohexanone
EU	IOELV TWA (mg/m ³)	40,8 mg/m ³
EU	IOELV TWA (ppm)	10 ppm
EU	IOELV STEL (mg/m ³)	81,6 mg/m ³
EU	IOELV STEL (ppm)	20 ppm
EU	Notes	Skin
EU	Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Personal protective equipment:

Gloves. Protective clothing. Protective goggles.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

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Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: light brown.
Odour	: slightly.
Odour threshold	: No data available
pH	: No data available
pH solution	: 5,6 (1%; 20°C)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 59 °C
Auto-ignition temperature	: > 365 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1,07 (20°C)
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 15,9 mPa·s (40°C)
Explosive properties	: None.
Oxidising properties	: None.
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Gyo	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 4000 mg/kg
LC50 inhalation rat (mg/l)	> 6,37 mg/l/4h

pyridate (ISO); O-(6-chloro-3-phenylpyridazin-4-yl) S-octyl thiocarbonate (55512-33-9)

LD50 oral rat	> 2000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 4,37 mg/l/4h

cyclohexanone (108-94-1)

LD50 oral rat	1890 mg/kg (Aqueous solution)
LD50 dermal rabbit	794 - 3160
LC50 inhalation rat (Vapours - mg/l/4h)	> 6,2 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Very toxic to aquatic life with long lasting effects.
Acute aquatic toxicity	: Very toxic to aquatic life.
Chronic aquatic toxicity	: Very toxic to aquatic life with long lasting effects.

Gyo	
LC50 fish 1	2,59 mg/l
EC50 Daphnia 1	0,04 mg/l
ErC50 (algae)	0,275 mg/l (72 H)
NOEC chronic fish	0,1 mg/l (21 d)
NOEC chronic crustacea	0,063 (21 d)

pyridate (ISO); O-(6-chloro-3-phenylpyridazin-4-yl) S-octyl thiocarbonate (55512-33-9)

LC50 fish 1	> 1 mg/l (96 H; Onchorhynchus mykiss)
EC50 Daphnia 1	≈ 0,49 mg/l (48 H; Daphnia magna)
EC50 96h algae (1)	> 0,75 mg/l > 0,75 mg/l (96 H; Anabaena flos-aquae)
NOEC chronic crustacea	0,01 mg/l (21 d)
NOEC (additional information)	daphnia

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cyclohexanone (108-94-1)	
LC50 fish 1	527 mg/l (Pimephales promelas)
EC50 Daphnia 1	820 mg/l (Daphnia magna)
EC50 72h algae (1)	32,9 mg/l (Chlamydomonas reinhardtii)

12.2. Persistence and degradability

pyridate (ISO); O-(6-chloro-3-phenylpyridazin-4-yl) S-octyl thiocarbonate (55512-33-9)	
Persistence and degradability	No supplementary information available.

cyclohexanone (108-94-1)	
Persistence and degradability	Readily biodegradable.
Biodegradation	> 90 % (28 days Oxygen consumption)

12.3. Bioaccumulative potential

pyridate (ISO); O-(6-chloro-3-phenylpyridazin-4-yl) S-octyl thiocarbonate (55512-33-9)	
BCF fish 1	≈ 116,3
Log Pow	4,01 (20°C)
Bioaccumulative potential	No.

cyclohexanone (108-94-1)	
BCF fish 1	1,38 - 2,45 (estimated)
Log Pow	0,86 (25 °C)

12.4. Mobility in soil

cyclohexanone (108-94-1)	
Log Koc	15,5

12.5. Results of PBT and vPvB assessment

Component	
pyridate (ISO); O-(6-chloro-3-phenylpyridazin-4-yl) S-octyl thiocarbonate (55512-33-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods






Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1993	1993	1993	1993	1993
14.2. UN proper shipping name				
FLAMMABLE LIQUID, N.O.S. (Cyclohexanone, Aromatic Hydrocarbons)	FLAMMABLE LIQUID, N.O.S. (Cyclohexanone, Aromatic Hydrocarbons)	Flammable liquid, n.o.s. (Cyclohexanone, Aromatic Hydrocarbons)	FLAMMABLE LIQUID, N.O.S. (Cyclohexanone, Aromatic Hydrocarbons)	FLAMMABLE LIQUID, N.O.S. (Cyclohexanone, Aromatic Hydrocarbons)
Transport document description				
UN 1993 FLAMMABLE LIQUID, N.O.S. (Cyclohexanone, Aromatic Hydrocarbons), 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 1993 FLAMMABLE LIQUID, N.O.S. (Cyclohexanone, Aromatic Hydrocarbons), 3, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 1993 Flammable liquid, n.o.s. (Cyclohexanone, Aromatic Hydrocarbons), 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1993 FLAMMABLE LIQUID, N.O.S. (Cyclohexanone, Aromatic Hydrocarbons), 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1993 FLAMMABLE LIQUID, N.O.S. (Cyclohexanone, Aromatic Hydrocarbons), 3, III, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

3	3	3	3	3
				

14.4. Packing group

III	III	III	III	III
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14.5. Environmental hazards

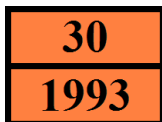
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
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No supplementary information available

14.6. Special precautions for user**Overland transport**

Special provisions (ADR) : 274, 601, 640E

Orange plates :

**Transport by sea**

No data available

Air transport

No data available

Inland waterway transport

Classification code (ADN) : F1

Number of blue cones/lights (ADN) : 0

Rail transport

No data available

14.7. Transport in bulk according to Annex II of Marpol 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**

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. pyridate (ISO); O-(6-chloro-3-phenylpyridazin-4-yl) S-octyl thiocarbonate
- 3(a) Gyo - cyclohexanone
- 3(b) Gyo - cyclohexanone - Mixture of Calcium Dodecylbenzene sulphonate - Hydrocarbons Aromatic C10-C13, <1% Naphtalene - Alcohol ethoxylate/propoxylate - pyridate (ISO); O-(6-chloro-3-phenylpyridazin-4-yl) S-octyl thiocarbonate
- 3(c) Gyo - Mixture of Calcium Dodecylbenzene sulphonate - Hydrocarbons Aromatic C10-C13, <1% Naphtalene - pyridate (ISO); O-(6-chloro-3-phenylpyridazin-4-yl) S-octyl thiocarbonate
40. cyclohexanone

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Directive 2012/18/EU (SEVESO III)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : SDS of suppliers.
 ECHA (European Chemicals Agency).
 REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H- and EUH-statements:	
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
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
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
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.
H412	Harmful to aquatic life with long lasting effects.
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]:

Flam. Liq. 3	H226	On basis of test data
Skin Irrit. 2	H315	On basis of test data
Eye Irrit. 2	H319	On basis of test data
Skin Sens. 1B	H317	On basis of test data
Aquatic Acute 1	H400	On basis of test data
Aquatic Chronic 1	H410	On basis of test data

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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