



DHM Agrochemicals

CLAW 100

A systemic foliar applied herbicide for the post-emergence control of annual and perennial grass weeds in oilseed rape, swedes, turnips, linseed, combining peas, field beans French dwarf beans, Navy beans, broad beans, potatoes Sugar beet, fodder beet, carrots and bulb onions.

An emulsifiable concentrate containing 100 g/l (9.7% w.w) propaquizafop. Also contains propylene carbonate and hydrocarbons, C10-C13, aromatics, <1% naphthalene.



Danger

May be fatal if swallowed and enters airways.
Causes serious eye irritation.
Toxic to aquatic life with long lasting effects.
Repeated exposure may cause skin dryness or cracking.
Contains propaquizafop. May produce an allergic reaction.

Keep out of reach of children.
Avoid breathing vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: immediately call a poison centre or doctor/physician.
IF IN EYES: rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
Do NOT induce vomiting.
Dispose of contents/container to a licensed waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste.

To avoid risk to human health and the environment, comply with the instructions for use.

PCS No. 05874

Other specific restrictions:

To avoid the build up of resistance do not apply products containing or ACCase inhibitor herbicide more than twice to any crop. In addition, do not use this product in mixture or sequence with any other product containing propaquizafop.
READ THE LABEL BEFORE USE, USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE.

For advice on medical emergencies, fires or major spills telephone Irish Poisons Centre number (01)809 2566

IMPORTANT INFORMATION
FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL AND HORTICULTURAL HERBICIDE

Crops/Situations	Maximum individual dose (litres product/ha)	Maximum number of applications	Latest time of application (metres)	Aquatic buffer zone distance
Oilseed rape (winter)	1.5	One per crop	Before flower buds visible stage and 90 days before harvest	5
Oilseed rape (spring)	1.5	One per crop	Before eight fully expanded leaves stage and 90 days before harvest	5
Field bean	1.5	One per crop	Before flower bud visible stage and 7 weeks before harvest	5
Broad bean, French dwarf bean, Navy bean	1.5	One per crop	Before flower buds visible stage and 7 weeks before harvest	5
Linseed	1.5	One per crop	Before flower buds visible stage and 16 weeks before harvest	5
Sugar beet, fodder beet	1.5	One per crop	60 days before harvest	5
Swede, turnip	1.5	One per crop	30 days before harvest	5
Potato (main crop) Potato (early)	1.5	One per crop	30 days before harvest	5
Carrot	1.5	One per crop	30 days before harvest	5
Bulb onion	1.5	One per crop	30 days before harvest	5
Combining pea	1.5	One per crop	7 weeks before harvest	5

ULBDHCLAWFR5L (12/17)

DHM Agrochemicals
Castle Lodge, Kilgobbin Road, Dublin 18
Telephone: 01 295 2377

Contents: **5 litres e**

Reproductive toxicity	
Chemical name	
Propaquizafop :	Not toxic for the reproductive system
STOT - single exposure	
Chemical name	
Propaquizafop :	Not available
STOT - repeated exposure	
Chemical name	
Propaquizafop :	Not available
Aspiration hazard	
Chemical name	
Propaquizafop :	Not available

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Acute toxicity

Aquatic toxicity	Values	Species	Method	Remarks
Fish 96-hour LC50 mg/l :	6.53	Rainbow trout	OECD 203	
Crustacea 48-hour EC50 mg/l :	12.9	Daphnia magna	OECD 202	
Algae 72-hour EC50 mg/l :	2.99	D. Subspicatus	OECD 201	Biomass
Other plants EC50 mg/l :				Not available
Terrestrial toxicity				
Birds oral LD50 mg/kg				
Chemical name				
Propaquizafop :	> 2000	Bobwhite quail	EPA-FIFRA 71-1	
Bees oral LD50 mcg/bee				
Chemical name				
Propaquizafop :	---			Not toxic to bees

12.2. Persistence and degradability

Abiotic degradation	Values	Method	Remarks
Water DT50 days			
Chemical name			
Propaquizafop :	32	EPA-FIFRA 161-2, 161-3	pH 7, 25°C
Soil DT50 days			
Chemical name			
Propaquizafop :	---		No data available
Biodegradation			
Chemical name			
Propaquizafop :	Not readily biodegradable	OECD 301 B	

12.3. Bioaccumulative potential

Partition coefficient	Values	Method	Remarks
(n-octanol/water) Log Pow			
Chemical name			
Propaquizafop :	4.78	OECD 117	25°C
Bioconcentration factor (BCF)			
Chemical name			
Propaquizafop :	---		Low

12.4. Mobility in soil

Adsorption/desorption Values Method Remarks

Chemical name

Propaquizafop : --- OECD 106 No data available

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Improper disposal or reuse of this container may be dangerous and illegal.

Other information

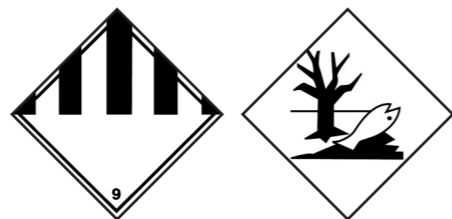
Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORTATION INFORMATION

IMDG/IMO

14.1 UN/ID No.	3082
14.2 Proper shipping name	
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Propaquizafop Hydrocarbons, C10-13, aromatics, <1% naphthalene)	
14.3 Hazard class	9
14.4 Packing group	III
14.5 Marine pollutant	Yes
14.6 Special precautions for user	
RID/ADR	
14.1 UN/ID No.	3082
14.2 Proper shipping name	
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Propaquizafop Hydrocarbons, C10-13, aromatics, <1% naphthalene)	
14.3 Hazard class	9
14.4 Packing group	III
14.5 Environmental hazard	Yes
14.6 Special precautions for user	
ICAO/IATA	
14.1 UN/ID No.	3082
14.2 Proper shipping name	
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Propaquizafop Hydrocarbons, C10-13, aromatics, <1% naphthalene)	

14.3 Hazard class
14.4 Packing group
14.5 Environmental hazard
14.6 Special precautions for user
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code



Section 15: REGULATORY INFORMATION

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

15.2. Chemical safety assessment

A chemical safety assessment according to regulation (EC) No. 1907/2006 is not required. A risk assessment was performed according to directive (EC) No. 91/414 or according to regulation (EC) No. 1107/2009.

Section 16: OTHER INFORMATION

Full text of R-phrases referred to under Sections 2 and 3.

R66 - Repeated exposure may cause skin dryness or cracking
R65 - Harmful: may cause lung damage if swallowed
R41 - Risk of serious damage to eyes
R22 - Harmful if swallowed
R43 - May cause sensitisation by skin contact
R36 - Irritating to eyes
R51/53 - Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment
R50/53 - Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment

Full text of H-Statements referred to under Sections 2 and 3.

H319 - Causes serious eye irritation
H317 - May cause an allergic skin reaction
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H302 - Harmful if swallowed
H318 - Causes serious eye damage
H304 - May be fatal if swallowed and enters airways
H411 - Toxic to aquatic life with long lasting effects
EUH066 - Repeated exposure may cause skin dryness or cracking

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

SHAKE WELL BEFORE USE

PROTECT FROM FROST

9
III
Yes

Not applicable

CLAW 100

A systemic foliar applied herbicide for the post-emergence control of annual and perennial grass weeds in oilseed rape, swedes, turnips, linseed, combining peas, field beans, French dwarf beans, Navy beans, broad beans, potatoes, sugar beet, fodder beet, carrots and bulb onions. An emulsifiable concentrate containing 100 g/l (9.7% w/w) propaquizafop. Also contains propylene carbonate and hydrocarbons, C10-C13, aromatics, <1% naphthalene.



Danger

May be fatal if swallowed and enters airways. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.

Repeated exposure may cause skin dryness or cracking. Contains propaquizafop. May produce an allergic reaction.

Keep out of reach of children.

Avoid breathing vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: immediately call a poison centre or doctor/physician.

IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Do NOT induce vomiting.

Dispose of contents/container to a licensed waste disposal contractor or collection site except for triple rinsed, empty containers which can be disposed of as non-hazardous waste

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

PCS No: 05874

IMPORTANT INFORMATION

FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL AND HORTICULTURAL HERBICIDE

Crops/situations	Maximum individual dose (litres product/ha)	Maximum number of applications	Latest time of application	Aquatic buffer zone distance (metres)
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Broad bean, French dwarf bean, Navy bean	1.5	One per crop	Before flower buds visible stage and 7 weeks before harvest	5
Linseed	1.5	One per crop	Before flower buds visible stage and 16 weeks before harvest	5
Sugar beet, fodder beet	1.5	One per crop	60 days before harvest	5
Swede, turnip	1.5	One per crop	30 days before harvest	5
Potato (maincrop), potato (early)	1.5	One per crop	30 days before harvest	5
Carrot	1.5	One per crop	30 days before harvest	5
Bulb onion	1.5	One per crop	30 days before harvest	5
Combining pea	1.5	One per crop	7 weeks before harvest	5

Other specific restrictions:

To avoid the build up of resistance do not apply products containing an ACCase inhibitor herbicide more than twice to any crop. In addition, do not use this product in mixture or sequence with any other product containing propaquizafop.

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE.

SAFETY PRECAUTIONS

Operator Protection

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES, RUBBER BOOTS AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND RUBBER BOOTS when applying by hand-held equipment.

TAKE OFF IMMEDIATELY all contaminated clothing.

WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves.

WASH HANDS AND EXPOSED SKIN before eating and drinking and after work.

WHEN USING, DO NOT EAT, DRINK OR SMOKE.

Environmental Protection

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. To protect aquatic organisms respect an unsprayed buffer zone of 5m to surface water bodies.

Storage and Disposal

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank and dispose of safely. DO NOT RE-USE CONTAINER FOR ANY PURPOSE.

DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product. CLAW® is a systemic foliar applied herbicide for the post-emergence control of annual and perennial grass weeds in oilseed rape, swedes, turnips, linseed, combining peas, field beans, dwarf French bean and Navy beans, broad beans, potatoes, sugar beet, fodder beet, carrots and bulb onions. Weeds must be emerged at the time of application.

RESTRICTIONS OR WARNINGS

CLAW is foliar acting and the dose is therefore independent of soil type.

Avoid overlaps. Avoid spray drift onto neighbouring crops, especially cereal crops.

Peas and beans If CLAW is applied during periods of high temperatures and/or low soil moisture content chlorotic spotting of the crop may result, particularly on combining peas and field beans, but there is no adverse effect on subsequent growth or yield of combining peas.

Carrots and onions Crop effects can occur when the couch dose is applied at early growth stages in carrots and onions.

Potatoes CLAW must not be applied to seed crops. Crops suffering from frost damage should not be treated.

Qualified minor use recommendation

CLAW can also be used on dwarf French beans, broad beans and Navy beans as a qualified minor use recommendation as crop safety on these crops is based on limited evidence.

Resistance warning

This product contains propaquizafop which is an ACCase inhibitor, also classified by the Herbicide Resistance Action Committee as 'Group A'. Use only as part of a resistance management strategy that includes cultural methods of control and does not use ACCase inhibitors as the sole chemical method of grass weed control. Applying a second product containing an ACCase inhibitor to a crop will increase the risk of resistance development, only use a second ACCase inhibitor to control different weeds at a different timing. Strains of some annual grasses (e.g. wild oats and Italian ryegrass) have developed resistance to herbicides which may lead to poor control. A strategy for preventing and managing such resistance should be adopted. Guidelines have been produced by the Weed Resistance Action Group and copies are available from the HGCA, CPA, your distributor, crop advisor or product manufacturer.

Specifically:

- To reduce the risk of developing resistance applications should be made to young, actively growing weeds.
- Use crop rotation and other cultural control measures to prevent and manage herbicide resistant grass weeds.
- Always follow WRAG guidelines for preventing and managing herbicide resistant grass weeds.
- Do not use CLAW or any other ACCase inhibitor as the sole means of grass weed control in successive crops.
- Use grass weed herbicides with different modes of action throughout the cropping rotation.
- Use tank/product mixes or sequences of herbicides with different modes of action within individual crops, or successive crops.
- Monitor weed control effectiveness and investigate any odd patches of poor grass weed control. If unexplained, contact your agronomist who may consider a resistance test appropriate.

DHM Agrochemicals
Castle Lodge Kilgobbin Road, Dublin 18
Telephone: 01 295 2377

WEED CONTROL

Speed of kill will be more rapid when weeds are growing actively under warm conditions with adequate moisture. Treatment under cool conditions will give slower activity. In poor conditions use the higher dose. Weeds germinating after application will NOT be controlled. Broad-leaved weeds will NOT be controlled.

The following weeds are controlled up to growth stages indicated at the dose indicated.

Weed	Weed growth stage	Dose ⁽¹⁾ litre product/ha
Volunteer barley	Optimum: 2 leaves unfolded to end of tillering. Latest: Stem erect	0.5 – 1.0
Volunteer wheat and rye	Optimum: 2 leaves unfolded to end of tillering. Latest: Stem erect	0.7 – 1.0
Wild oats	Optimum: 2 leaves unfolded to early tillering. Latest: Stem erect	0.7 – 1.0
Barley cover crops ⁽²⁾	Optimum: 2 leaves unfolded to stem erect. Latest: 2nd node detectable	1.0 – 1.2
Ryegrass (from seed)	Optimum: 2 leaves unfolded to early tillering.	1.2 – 1.5
Common couch	3 leaves unfolded (when majority of shoots have emerged and are approximately 15 cm tall)	1.5
Sterile brome (Bromus sterilis)	Optimum: 2 expanded leaves to fully tillered.	0.7 – 1.0

Notes:

(1) Use highest dose specified if weeds are beyond optimum growth stage or under the following conditions:

- Poor growing conditions, e.g. cool temperatures, dry soil
- Overwintered weeds
- Severe weed infestations especially in non-competitive crops e.g. sugar beet, bulb onions and thin crops of oilseed rape

(2) Barley cover crops: spray when risk of wind blow has passed and before there is serious competition with the crop. Use the higher dose of 1.2 L/ha if spraying is late.

Annual Meadowgrass

Growth will be checked at doses of 0.7 – 1.0 L/ha and severely checked at 1.5 L/ha. These effects will be reduced if annual meadowgrass is beyond 3 leaves unfolded stage at spraying.

Blackgrass

CLAW can contribute to the control of blackgrass as part of a herbicide resistance management strategy, involving mixtures and sequences with herbicides of alternative modes of action. Where resistant biotypes are present control from CLAW will be unacceptable.

CROP SPECIFIC INFORMATION

CLAW may be applied to the following crops as indicated:

Crop	Optimum time to commence spraying when crop is at the following GS	Latest application timing (PHI – Pre-Harvest Interval)
Oilseed rape, winter	Expanded cotyledons*	Before flower buds visible stage (PHI = 90 days)
Oilseed rape, spring	Expanded cotyledons*	Before 8 fully expanded leaves stage (PHI = 90 days)
Swedes, turnips	2 pairs of leaves	Before weeds are covered by the crop (PHI = 30 days)
Linseed	3 leaves	Before flower buds visible stage (PHI = 16 weeks)
Peas, combining	2 pairs of leaves (3rd node)	At flower buds visible stage (PHI = 7 weeks)
Field beans, winter and spring	2 pairs of leaves	Before flower bud visible stage (PHI = 7 weeks)
Broad bean, French dwarf bean and Navy bean	2 pairs of leaves	Before flower bud visible stage (PHI = 7 weeks)
Potatoes (Do not treat seed crops)	15-20 cm high	Before weeds are covered by the crop (PHI = 30 days)
Sugar beet, fodder beet	2 true leaves	Before weeds are covered by the crop (PHI = 60 days)
Carrots	1 true leaf	PHI = 30 days
Onions, bulb	Immediately post crook	PHI = 30 days

*1.5 L/ha (the common couch dose) must not be applied to crops of winter and spring oilseed rape before the 5 leaf stage of the crop.

FOLLOWING CROPS

If a crop treated with CLAW should fail for any reason, or after normal harvest, the minimum intervals listed must be observed before replanting any of the following crops:

Winter wheat, winter barley	2 weeks
Peas, field beans, maize and winter oilseed rape	4 weeks
Winter oats	16 weeks
Ryegrass	8 weeks

MIXING AND SPRAYING

CLAW should be applied as a FINE or MEDIUM spray (as defined by BCPC) in 100-200 litres water per hectare.

Good spray cover is essential for good results.

Use the higher spray volume in dense crop or weed situations.

Half fill the spray tank with clean water and begin agitation. Add required quantity of CLAW to the tank and complete the filling. Continue agitation until spraying is completed. Spray immediately after mixing.

On emptying the container, RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of container safely. Sprayers should be thoroughly cleaned before use and filters and nozzles checked for damage and blockage.

CLAW may be applied by tractor mounted/drawn sprayer. The sprayer should be calibrated to apply 200-250 L/ha as a FINE or MEDIUM spray (as defined by BCPC).

For knapsack sprayers:

Half fill the sprayer tank with clean water. Add the measured amount of product, with rinsings, to the sprayer tank and fit the tank lid. Gently shake the sprayer, by rocking, to ensure thorough mixing. Top up the tank with water to the correct level. Refit the tank lid and again gently shake the sprayer, by rocking, to ensure thorough mixing.

When used at a walking speed of 1 m/sec to apply a swath of 1 m width, most knapsack sprayers fitted with a Lurmark AN 2.0 or similar nozzle deliver approximately 200 L/ha spray volume (or 10 L per 500 m²).

Table for product amounts applied through a knapsack sprayer

Rate of product L/ha	Amount product (ml) per L water applied at 200 L/ha water volume
0.5	2.5
0.7	3.5
1.0	5.0
1.2	6.0
1.5	7.5

CONDITIONS OF SUPPLY

All products supplied by us are of high grade and conform to specification at the time of delivery, but, as we cannot exercise control over their subsequent storage, handling, mixing or use or the weather conditions before, during and after application which may affect the performance of the products, all conditions and warranties, statutory or otherwise, as to the quality or fitness for any purpose of our products are excluded and no responsibility or liability will be accepted by us or our re-sellers for any failure in performance, damage or injury to person or property whatsoever arising from the storage, handling, application or use of the products. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in the use of such products.

Marketed by: DHM Agrochemicals, Castle Lodge Kilgobbin Road, Dublin 18

Telephone: 01 295 2377

This Safety Data Sheet does not form part of the approved label. Following the instructions on the pesticide Product Label for the specified uses should ensure that the product is used safely and efficaciously for those uses.

SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) Annex II

Revision Date 07-Nov-2013 Version 1

Product No. HRB00865-44 H-0198-29933/29933/AG-P6-100 EC

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Claw

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

Recommended use Herbicide

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet Supplier address

DHM Agrochemicals

Castle Lodge Kilgobbin Road, Dublin 18

Telephone: 01 295 2377

1.4. Emergency telephone number

Emergency telephone National Chemical Emergency Centre (UK): Tel: 01865 407333 (24 hours)

Section 2: HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

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

Aspiration hazard Category 1 - (H304)

Serious eye damage/eye irritation Category 2 - (H319)

Hazardous to the aquatic environment - Chronic hazard Category 2 - (H411)

Classification according to Directive 67/548/EEC or 1999/45/EC

Full text of R-phrases: see Section 16. Xi;R36 - R66 - N;R51/53

2.2. Label elements

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

Hazard pictograms



Signal word Danger

Hazard statements

H304 - May be fatal if swallowed and enters airways.

H319 - Causes serious eye irritation.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

P102 - Keep out of reach of children.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P331 - Do NOT induce vomiting.

P501 - Dispose of contents/container to an approved waste disposal plant.

EU specific hazard statements

EUH066 - Repeated exposure may cause skin dryness or cracking.

EUH208 - Contains Propaquizafop. May produce an allergic reaction.

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

Additional phrases for PPP

SP1 - Do not contaminate water with the product or its container.

2.3. Other hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	Weight-%	CAS No.	EC No.	Index No.	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Classification according to 67/548/EEC	M Factor	REACH Registration Number
Propaquizafop	7-12	111479-05-1	-	-	Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	Xi; R43 N; R50-53		-
Propylene carbonate	4-7	108-32-7	203-572-1	607-194-00-1	Eye Irrit. 2 (H319)	Xi; R36		01-21195372 32-48-0000
A fatty alcohol polyglycol ether	34-38	9043-30-5	-	-	Acute Tox. 4 (H302) Eye Dam. 1 (H318)	Xn; R22 Xi; R41		-
Hydrocarbons, C10-C13, aromatics, <1% naphthalene	40-45	N/A	922-153-0	-	Asp. Tox. 1 (H304) Aquatic Chronic 2 (H411) (EUH066)	Xn; R65 R66 N; R51/53		01- 21194510 97-39-0005

Full text of R-phrases: see Section 16. Full text of H- and EUH-phrases: see Section 16.

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection!

Inhalation

Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Ingestion

Do NOT induce vomiting. Immediate medical attention is required. Rinse mouth.

Self-protection of the first aider

Use personal protective equipment as required.

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

Symptoms None known

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

Note to physicians Treat symptomatically.

Section 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

No information available.

5.2. Special hazards arising from the substance or mixture

No specific hazard known.

5.3. Advice for firefighters In the event of fire, wear self-contained breathing apparatus. In the event of fire and/or explosion do not breathe fumes.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Use personal protective equipment as required. Avoid contact with eyes and skin. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

Other information See also Sections 8 and 13.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling

Use personal protective equipment as required. Use only with adequate ventilation. Use with local exhaust ventilation. Do not breathe dust/fume/gas/mist/vapours/spray.

General hygiene considerations

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labelled containers.

7.3. Specific end use(s)

Risk Management Methods (RMM)

The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

8.2. Exposure controls

Engineering controls

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection

Tight sealing safety goggles.

Body protection

Suitable protective clothing, apron, gloves made of plastic or rubber.

General hygiene considerations

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended.

Environmental exposure controls

Do not allow into any sewer, on the ground or into any body of water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Property	Values	Method	Remarks
Appearance			
Physical state :	Liquid		
Colour :	Amber		
Odour :	Aromatic		
Odour threshold :	No data available		
pH :	4.2 - 5.2	CIPAC MT 75.3	
Melting point/freezing point °C :	---		Not applicable
Boiling point/boiling range °C :	No data available		
Flash point °C :	102.6	CIPAC MT 12	
Evaporation rate :	Not applicable		
Flammability (solid, gas) :	Not applicable for liquids		
Upper/lower flammability or : explosive limits	No data available		
Vapour pressure :	---		Not applicable
Vapour density :	No data available		
Relative density :	1.043	CIPAC MT 3.3	20°C
Solubility(ies) :	---		Not applicable
Partition coefficient :			See Section 12 for more information

(n-octanol/water) Log Pow			
Autoignition temperature °C :	354	EEC A.15	
Decomposition temperature °C :	No data available		
Kinematic viscosity mm ² /s 40°C :	16.2	OECD 114	
Explosive properties :	Not explosive	EEC A.14	
Oxidising properties :	Not oxidising		
9.2. Other information			
Bulk density g/ml :	---		Not applicable
Surface tension mN/m :	26.9	EEC A.5	25°C

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Not available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Heat, flames and sparks.

10.5. Incompatible materials

No information available

10.6. Hazardous decomposition products

Chemical name

Propaquizafop Carbon oxides, Nitrogen oxides (NOx).

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Acute toxicity	Values	Species	Method	Remarks
Oral LD50 mg/kg :	> 2000	Rat	OECD 423	
Dermal LD50 mg/kg :	> 2000	Rat	OECD 402	
Inhalation LC50 mg/l/4h :	> 5.15	Rat	OECD 403	
Skin corrosion/irritation :	Non-irritating to the skin	Rabbit	OECD 404	
Serious eye damage				
/eye irritation :	Irritating to eyes	Rabbit	OECD 405	
Respiratory/skin sensitisation :	Not a skin sensitiser	Guinea pig	OECD 406	
Chronic toxicity				
Germ cell mutagenicity				
Chemical name				
Propaquizafop :	Not classified			
Carcinogenicity				
Chemical name				
Propaquizafop :	Not carcinogenic			