

**Trade name:** MOCAP 15G**Product no.:** AC 040 C1141/UK**Current version :** 1.1.0, issued: 13.08.2019**Replaced version:** 1.0.2, issued: 23.07.2019**Region:** GB**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name

**MOCAP 15G****1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses of the substance or mixture**

Plant protection product

Insecticide

nematicide

**Uses advised against**

No data available.

**1.3 Details of the supplier of the safety data sheet****Address**

Certis Europe (GB)

Suite 5, 3 Riverside

Granta Park - Great Abington

Cambridgeshire CB21 6AD

United Kingdom

Telephone no. +44 (0) 1223 894 261

Fax no. +44 (0)1223 891210

e-mail info@certiseurope.co.uk - www.certiseurope.co.uk

**Advice on Safety Data Sheet**

certis@certiseurope.co.uk

**1.4 Emergency telephone number**

Carechem 24 GB +44 870 190 6777

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Acute Tox. 1; H310

Acute Tox. 3; H301

Aquatic Chronic 1; H410

Skin Sens. 1; H317

**Classification information**

Classification and labelling are based on toxicological studies performed on the product (mixture).

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)****Hazard pictograms**

GHS06



GHS09

**Signal word**

Danger

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ethoprophos

**Hazard statement(s)**

H301 Toxic if swallowed.  
 H310 Fatal in contact with skin.  
 H317 May cause an allergic skin reaction.  
 H410 Very toxic to aquatic life with long lasting effects.

**Hazard statements (EU)**

EUH070 Toxic by eye contact.  
 EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

**Precautionary statement(s)**

P260 Do not breathe dust.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
 P302+P352 IF ON SKIN: Wash with plenty of water.  
 P363 Wash contaminated clothing before reuse.  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P501 Dispose of contents/ container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed empty clean containers which can be disposed of as non-hazardous waste.

**2.3 Other hazards**

PBT assessment

The components of this product are not considered to be a PBT.

vPvB assessment

The components of this product are not considered to be a vPvB.

**SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable. The product is not a substance.

**3.2 Mixtures****Chemical characterization**

solid plant protection formulation

**Hazardous ingredients**

No	Substance name	Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration %
1	ethoprophos	pls. refer to footnote (1)	
	13194-48-4 236-152-1 015-107-00-8 -	Acute Tox. 1; H310 Acute Tox. 2*; H330 Acute Tox. 3*; H301 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Skin Sens. 1; H317	>= 10.00 - < 25.00 %b.w.

Full Text for all H-phrases and EUH-phrases: pls. see section 16

(\*, \*\*, \*\*\*, \*\*\*\*) Detailed explanation pls. refer to CLP regulation No. 1272/2008, annex VI, 1.2

(1) Aberrant from/in addition to the classification set out in Annex VI, this substance is classified according to European Regulation (EC) No 1272/2008 (CLP), Article 4 (3), paragraph 2.

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	-	-	-	M = 10

**SECTION 4: First aid measures****4.1 Description of first aid measures****General information**

**Trade name:** MOCAP 15G**Product no.:** AC 040 C1141/UK**Current version :** 1.1.0, issued: 13.08.2019**Replaced version:** 1.0.2, issued: 23.07.2019**Region:** GB

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In case of allergic symptoms, especially respiratory tract related, seek medical help immediately. In case of accident or if you feel unwell, seek medical advice immediately.

**After inhalation**

Remove affected person from the immediate area. Ensure supply of fresh air. Irregular breathing/no breathing: artificial respiration. Do not use mouth-to-mouth or mouth-to-nose resuscitation.

**After skin contact**

Wash immediately with plenty of water for several minutes. Call a doctor immediately.

**After eye contact**

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Call a doctor immediately.

**After ingestion**

Call a doctor immediately and show label or packaging. Rinse out mouth and give plenty of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting. In case of vomiting keep head of person in face-down position to prevent penetration of vomitus into the trachea.

**4.2 Most important symptoms and effects, both acute and delayed****Symptoms**

May cause an allergic skin reaction. Dermatitis. Rash. This product is a Cholinesterase Inhibitor. Preexisting skin or respiratory disorders may be aggravated by exposure to components of this product. Preexisting conditions which lower cholinesterase levels increase vulnerability to cholinesterase depression. these include: (for plasma) chronic alcoholism; malnutrition; dermatomyositis; existing toxicity from exposure to carbon disulfide; benzalkonium salts, organic mercury compounds, ciguatoxins or solanines; and (for RBC) hemolytic anemia.

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

Treat symptomatically. This product is an Organophosphate (OP) Insecticide. Do not handle the patient without the following protective equipment in place: chemical resistant gloves and apron (preferably nitrile). Remove contaminated clothing and do not reuse without thorough cleaning with detergent and hot water. Dispose of heavily contaminated clothing, including shoes, as a hazardous waste. Do not wait for laboratory confirmation to treat patients with strong clinical evidence of poisoning. In the USA and other countries, contact your local or national poison control center for more information. Establish airway and oxygenation. IV Atropine sulfate is the antidote of choice against parasympathetic nervous stimulation. If there are signs of parasympathetic stimulation, Atropine Sulfate should be injected at 10 minutes intervals in doses of 1 to 2 milligrams until complete atropinization has occurred. Pralidoxime chloride (2-PAM chloride) may also be used as an effective antidote in addition to and while maintaining full atropinization. In adults, an initial dose of 1 gram of 2-PAM should be injected, preferably as an infusion, in 250 cc of saline over a 15 to 20 minute period. If this is not practical, 2-PAM may be administered slowly by intravenous injection as a 5% solution in water over not less than 2 minutes. After about an hour, a second dose of 1 gram of 2-PAM will be indicated if muscle weakness has not been relieved. For infants and children, the dose of 2-PAM is 0.25 grams. Avoid morphine, aminophylline, phenothiazine, reserpine, furosemide and ethacrynic acid. Clear chest by postural drainage. Oxygen administration may be necessary. Observe patient continuously for 48 hours. Repeated exposure to cholinesterase inhibitors may, without warning, cause prolonged susceptibility to very small doses of any cholinesterase inhibitor. Allow no further exposure until time for cholinesterase regeneration has been attained as determined by a blood test. Bathe and shampoo contaminated skin and hair. If ingested, empty stomach; activated charcoal is useful to further limit absorption. If victim is alert, Syrup of Ipecac (2 tablespoons in adults, 1 tablespoon in small children) is indicated. If symptoms such as loss of gag reflex, convulsions, or unconsciousness occur before emesis, gastric lavage should be considered following intubation with a cuffed endotracheal tube.

**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing media**

Carbon dioxide; Extinguishing powder; Water spray jet; Foam

**Unsuitable extinguishing media**

High power water jet

**5.2 Special hazards arising from the substance or mixture**

In the event of fire, the following can be released: Carbon dioxide (CO<sub>2</sub>); Carbon monoxide (CO)

**5.3 Advice for firefighters**

**Trade name:** MOCAP 15G**Product no.:** AC 040 C1141/UK**Current version :** 1.1.0, issued: 13.08.2019**Replaced version:** 1.0.2, issued: 23.07.2019**Region:** GB

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus. Run-off water from fire fighting must not be discharged into drains or enter surface water. Wear protective clothing. Cool endangered containers with water spray jet.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Evacuate all unprotected personnel from the danger zone. Keep people away and stay on the upwind side. Avoid contact with skin, eyes and clothing. Personal protection by wearing close-fitting protective clothing and breathing apparatus.

#### For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge uncontrolled into the subsoil/soil.

### 6.3 Methods and material for containment and cleaning up

Take up mechanically. When picked up, treat material as prescribed under heading "Disposal considerations". Avoid raising dust. The product is immiscible with water and will sediment in water systems. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas. Shovel up and place in a container for salvage or disposal. Clean surface thoroughly to remove residual contamination.

### 6.4 Reference to other sections

No data available.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Advice on safe handling

No special measures necessary if stored and handled as prescribed. Do not inhale dust. Provide good ventilation at the work area (local exhaust ventilation, if necessary).

#### General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Provide eye wash fountain in work area. Do not inhale dust/fumes/aerosols.

#### Advice on protection against fire and explosion

No special measures necessary.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight.

#### Requirements for storage rooms and vessels

Store product in closed containers.

#### Incompatible products

Do not store together with foodstuffs. Substances to be avoided, pls. See chapter 10.

### 7.3 Specific end use(s)

#### Industry solution

Always read the label and product information before use.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

No parameters available for monitoring.

### 8.2 Exposure controls

#### Appropriate engineering controls

No data available.

#### Personal protective equipment

**Trade name:** MOCAP 15G**Product no.:** AC 040 C1141/UK**Current version :** 1.1.0, issued: 13.08.2019**Replaced version:** 1.0.2, issued: 23.07.2019**Region:** GB**Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust, vapour and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Respirator FFP2 (EN 149)

**Eye / face protection**

Tightly fitting safety glasses (EN 166). Face shield

**Hand protection**

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material nitrile rubber

**Other**

Normal chemical work clothing.

**Environmental exposure controls**

No data available.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

<b>Form/Colour</b>			
granules			
grey			
<b>Odour</b>			
weak			
<b>Odour threshold</b>			
No data available			
<b>pH value</b>			
No data available			
<b>Boiling point / boiling range</b>			
Value	86	- 91	°C
Reference pressure		0.2	mm Hg
Source	Manufacturer		
<b>Melting point / melting range</b>			
No data available			
<b>Decomposition point / decomposition range</b>			
Value		203	°C
Source	Manufacturer		
<b>Flash point</b>			
No data available			
<b>Auto-ignition temperature</b>			
No data available			
<b>Oxidising properties</b>			
No data available			
<b>Explosive properties</b>			
No data available			
<b>Flammability (solid, gas)</b>			
No data available			
<b>Lower flammability or explosive limits</b>			

**Trade name:** MOCAP 15G**Product no.:** AC 040 C1141/UK**Current version :** 1.1.0, issued: 13.08.2019**Replaced version:** 1.0.2, issued: 23.07.2019**Region:** GB

No data available

**Upper flammability or explosive limits**

No data available

**Vapour pressure**

No data available

**Vapour density**

Source

Manufacturer

Comments

Heavier than air.

**Evaporation rate**

No data available

**Relative density**

No data available

**Density**

Value

appr. 1.094 g/cm<sup>3</sup>

Source

Manufacturer

**Solubility in water**

Source

Manufacturer

Comments

insoluble

**Solubility(ies)**

No data available

**Soluble in**

aromatic and aliphatic solvents; Alcohols; Ketones; Ether; esters; Chlorinated hydrocarbons; vegetable oils

**Partition coefficient: n-octanol/water**

No	Substance name	CAS no.	EC no.
1	ethoprophos	13194-48-4	236-152-1
log Pow		2.99	

**Viscosity**

No data available

**9.2 Other information****Other information**

No data available.

**SECTION 10: Stability and reactivity****10.1 Reactivity**

The product is stable under normal storage and handling conditions.

**10.2 Chemical stability**

Stable under recommended storage and handling conditions (See section 7).

**10.3 Possibility of hazardous reactions**

Dangerous reactions are not to be expected when handling product according to its intended use.

**10.4 Conditions to avoid**

Heat

**10.5 Incompatible materials**

Alkali metal; Isocyanates

**10.6 Hazardous decomposition products**

Upon decomposition this product emits acrid dense smoke with carbon dioxide, carbon monoxide, water and other products of combustion.

**SECTION 11: Toxicological information**

**Trade name:** MOCAP 15G**Product no.:** AC 040 C1141/UK**Current version :** 1.1.0, issued: 13.08.2019**Replaced version:** 1.0.2, issued: 23.07.2019**Region:** GB**11.1 Information on toxicological effects**

Acute oral toxicity			
No	Product Name		
1	MOCAP 15G		
LD50		300	mg/kg
Species	rat		
Source	Manufacturer		

Acute dermal toxicity			
No	Product Name		
1	MOCAP 15G		
LD50		41.4	mg/kg
Species	rabbit		
Source	Manufacturer		

Acute inhalational toxicity			
No	Product Name		
1	MOCAP 15G		
LC50		> 5.1	mg/m <sup>3</sup>
State of aggregation	Dust/mist		
Species	rat		
Source	Manufacturer		

Skin corrosion/irritation			
No	Product Name		
1	MOCAP 15G		
Source	Manufacturer		
Evaluation	non-irritant		

Serious eye damage/irritation			
No	Product Name		
1	MOCAP 15G		
No data available			
Source	Manufacturer		
Comments	It can be assumed that the product is also toxic in contact with the eyes.		

Respiratory or skin sensitisation			
No	Product Name		
1	MOCAP 15G		
Route of exposure	Skin		
Source	Manufacturer		
Evaluation	Sensitisation possible.		

Germ cell mutagenicity			
No data available			

Reproduction toxicity			
No data available			

Carcinogenicity			
No data available			

STOT - single exposure			
No data available			

STOT - repeated exposure			
No data available			

Aspiration hazard			
No data available			

**SECTION 12: Ecological information**

**Trade name:** MOCAP 15G**Product no.:** AC 040 C1141/UK**Current version :** 1.1.0, issued: 13.08.2019**Replaced version:** 1.0.2, issued: 23.07.2019**Region:** GB**12.1 Toxicity**

Toxicity to fish (acute)			
No	Substance name	CAS no.	EC no.
1	ethoprophos	13194-48-4	236-152-1
LC50		0.3	mg/l
Duration of exposure		96	h
Species		Lepomis macrochirus	
Source		Manufacturer	

Toxicity to fish (chronic)			
No	Substance name	CAS no.	EC no.
1	ethoprophos	13194-48-4	236-152-1
NOEC		0.064	mg/l
Duration of exposure		21	day(s)
Species		Oncorhynchus mykiss	
Source		Manufacturer	

Toxicity to Daphnia (acute)			
No	Substance name	CAS no.	EC no.
1	ethoprophos	13194-48-4	236-152-1
EC50		0.2	mg/l
Duration of exposure		48	h
Species		Daphnia magna	
Source		Manufacturer	

Toxicity to Daphnia (chronic)			
No	Substance name	CAS no.	EC no.
1	ethoprophos	13194-48-4	236-152-1
NOEC		0.002	mg/l
Species		Daphnia magna	
Source		Manufacturer	

Toxicity to algae (acute)			
No	Substance name	CAS no.	EC no.
1	ethoprophos	13194-48-4	236-152-1
EC50		2.4	mg/l
Duration of exposure		120	h
Species		Algae	
Source		Manufacturer	

Toxicity to algae (chronic)			
No data available			

Bacteria toxicity			
No data available			

**12.2 Persistence and degradability**

No data available.

**12.3 Bioaccumulative potential**

Partition coefficient: n-octanol/water			
No	Substance name	CAS no.	EC no.
1	ethoprophos	13194-48-4	236-152-1
log Pow		2.99	

**12.4 Mobility in soil**

No data available.

**12.5 Results of PBT and vPvB assessment**

Results of PBT and vPvB assessment	
PBT assessment	The components of this product are not considered to be a PBT.
vPvB assessment	The components of this product are not considered to be a vPvB.

**12.6 Other adverse effects**



**Trade name:** MOCAP 15G**Product no.:** AC 040 C1141/UK**Current version :** 1.1.0, issued: 13.08.2019**Replaced version:** 1.0.2, issued: 23.07.2019**Region:** GB

No data available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

#### Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

## SECTION 14: Transport information

### 14.1 Transport ADR/RID/ADN

Class	6.1
Classification code	T7
Packing group	I
Hazard identification no.	66
UN number	UN2783
Proper shipping name	ORGANOPHOSPHORUS PESTICIDE, SOLID, TOXIC
Technical name	ethoprophos
Tunnel restriction code	C/E
Label	6.1

### 14.2 Transport IMDG

Class	6.1
Packing group	I
UN number	UN2783
Proper shipping name	ORGANOPHOSPHORUS PESTICIDE, SOLID, TOXIC
Technical name	ethoprophos
EmS	F-A, S-A
Label	6.1

### 14.3 Transport ICAO-TI / IATA

Class	6.1
Packing group	I
UN number	UN2783
Proper shipping name	Organophosphorus pesticide, solid, toxic
Technical name	ethoprophos
Label	6.1

### 14.4 Other information

No data available.

### 14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

### 14.6 Special precautions for user

No data available.

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

## SECTION 15: Regulatory information

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

#### EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
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**Trade name:** MOCAP 15G**Product no.:** AC 040 C1141/UK**Current version :** 1.1.0, issued: 13.08.2019**Replaced version:** 1.0.2, issued: 23.07.2019**Region:** GB

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

**REACH candidate list of substances of very high concern (SVHC) for authorisation**

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

**Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances requiring authorisation as listed on Annex XVII of the REACH regulation (EC) 1907/2006.

**Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances**

This product is subject to Part I of Annex I, risk category: E1, H1

If the properties of the substance/product give rise to more than one classification, for the purposes of 2012/18/UE, the lowest qualifying quantities set out in Part 1 and Part 2 of Annex I shall apply.

**Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market**

Regulation (EU) No 547/2011 implementing Regulation (EC) No 1107/2009 as regards labelling requirements for plant protection products

Annex II

RSh1 Toxic by eye contact.

## 15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

## SECTION 16: Other information

**Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

**Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)**

H330 Fatal if inhaled.

H400 Very toxic to aquatic life.

**Department issuing safety data sheet**

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This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

**Alterations/supplements:**

Alterations to the previous edition are marked in the left-hand margin.

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