

## Material Safety Data Sheet

# Chlobber

### 1. Identification of the substance/preparation and company/undertaking:

MAPP Number:	<b>MAPP 13723</b>
Trade Name:	Chlobber
<i>Recommended Uses:</i>	A contact and ingested organophosphorus insecticide and acaricide for pest control in a range of crops.
Manufacturer/Supplier:	AgChemAccess Ltd Pure House 64-66 Westwick Street Norwich NR2 4SZ United Kingdom
Telephone number:	+44 (0) 1603 624413
Fax Number:	+44 (0) 1603 616993
e-mail:	<a href="mailto:enquire@agchemaccess.com">enquire@agchemaccess.com</a>
Emergency Telephone Nos:	023 8040 7831 [AgChemAccess 24 hrs.]  0870-600-6266 [UK National Poisons Control Information Service (NPIS) Centre]  01-8379964/66 [Poisons Information Centre, Beaumont Hospital, Beaumont, Dublin 9, Ireland]

### 2. Composition/Information on Ingredients:

#### HAZARDOUS COMPONENTS:

Component	CAS Reg. No.	EINECS ELINCS No.	Conc. % w/w	Risk Phrases*	Hazard Symbol
Chlorpyrifos	002921-88-2	220-864-4	44.5	R25, R50, 53	T, N
Aromatic hydrocarbon solvent	064742-94-5	265-198-5	1-5	R51, 53 R65	Xn, N
Aromatic hydrocarbon solvent	064742-95-6	265-199-0	40-50	R10, 37 R51, 53	Xn, N
Calcium dodecyl- benzene sulphonate	26264-06-2	247-557-8	1-5	R65, 66, 67 R38, 41	Xi

Plus inert ingredients to make up the balance.

\* See Section 16 for details of risk phrases.

---

### 3. Hazards Identification

---

**Health Hazards:** Flammable. Harmful by inhalation and if swallowed. Irritating to eyes, respiratory system and skin. Harmful – may cause lung damage if swallowed.

**Environmental hazard in case of accident (spillage or leakage):** Very toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment.

---

### 4. First Aid Measures

---

**General:** Have the product container, label or Materials Safety Data Sheet with you when calling the Poisons Information Service, AgChemAccess, a physician or when going for medical treatment. Move out of contaminated area and place victim in the recovery position if necessary. Remove contaminated clothing and dispose of safely.

**Skin Contact:** Remove contaminated clothing and wash thoroughly before re-use. Wash affected area immediately with plenty of water. If skin irritation persists, call a physician.

**Eye Contact:** Rinse immediately with plenty of water for at least 15 minutes, including under eyelids. Remove contact lenses if worn. Immediate medical attention is required preferably from an ophthalmologist.

**Inhalation:** Remove patient to fresh air and seek medical advice immediately. Keep the patient warm and at rest. If breathing is irregular or has stopped, administer artificial respiration.

**Ingestion:** If swallowed, contact poison control centre or seek medical advice immediately and show product container or label. DO NOT induce vomiting. If the patient is conscious, rinse mouth with clean water and dispose of residues safely. The decision of whether or not to induce vomiting should be made by a physician.

**Note to medical staff:** This product contains solvents and a cholinesterase inhibitor. Atropine via injection is the best antidote. Oximes such as 2-PA M/protopam can be therapeutic if applied early in conjunction with atropine. If gastric lavage is performed, endotracheal and/or oesophageal control is required due to the risk of lung damage if aspired. Supportive care based on the judgement of the physician according to the symptoms displayed should be carried out.

---

### 5. Fire-fighting measures:

---

**Extinguishing Media for fires:** For small fires use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. For large fires use an alcohol-resistant foam or water spray. DO NOT use a solid water stream as this may scatter and spread the fire.

**Specific hazards during fire-fighting:** During a fire the smoke produced may contain the original product, toxic and irritating vapours, hydrogen chloride, sulphur oxides and nitrogen oxides.

**Special protective equipment for fire-fighters:** Wear full protective clothing and self-contained breathing apparatus. DO NOT breathe fumes.

**Further Information:** Contain fire-fighting water with sand or some such bunding material to prevent entry to drains or water courses. Avoid breathing smoke. Cool closed containers exposed to the fire with a water spray since rapid decomposition occurs at temperatures above 160°C.

---

## 6. Accidental release measures:

---

**Personal precautionary measures:** Wear the personal protective equipment outlined in section 8 below. Remove contaminated clothing immediately. Wash skin area with soap and water. Wash clothing before re-use.

**Environmental protection measures:** Keep the area isolated and do not allow contamination to enter drains or waterways. Prevent further leakage if safe to do so. Spillage or uncontrolled discharges into watercourses must be alerted to the National Rivers Authority or Environmental Agency (Tel: 0800 807060).

**Procedures for cleaning/absorption:** Soak up with sand or other non-combustible absorbent material using mechanical handling equipment and place in containers for disposal according to local/national regulations (see section 13). Clean contaminated floors and objects thoroughly and dispose of cleaning equipment safely. For large spillages, barricade the area and consult the manufacturer.

---

## 7. Handling and storage:

---

**Handling:** Use the personal protective equipment detailed in section 8. Avoid contact with eyes and skin. When using, do not eat, drink or smoke and wash hands and exposed skin after work. If vapours or mists are generated, use local exhaust ventilation.

**Storage:** Store in a cool dry and well-ventilated place in the original containers and protect from excessive heat or cold. Keep in an area accessible to authorised personnel only. Store away from food, drink and animal feeding stuffs.

**Additional information:** The product is stable for at least two years when stored at ambient temperatures in the unopened container. Ensure temperature does not exceed 40°C.

---

## 8. Exposure controls/Personal protection:

---

### COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

Components	Exposure limits (IHG)
Chlorpyrifos	0.1 mg/m <sup>3</sup> (skin)

**Engineering measures to reduce exposure:** Engineering controls to avoid exposure are preferable to personal protective equipment where practically feasible to use. Good general ventilation is sufficient for most operations and local exhaust ventilation is needed in some situations.

**Personal protective equipment:** Avoid contact with skin, eyes or clothing. Keep work clothes separate from other clothing. Clothing that cannot be cleaned should be burned. When using, consult the label for appropriate protective equipment. In all other situations, use the following personal protective equipment.

**Eye protection:** Eye protection is required and should comply with standard EN166. Where contact with the liquid is a risk, chemical goggles or a face shield are recommended.

**Hand protection:** Brief exposure merely requires chemical resistant gloves made from PVC or neoprene classified as meeting the EN374 standard – class 3 with a breakthrough time greater than 60 minutes (avoid gloves made of natural rubber or latex). For more prolonged or repeated exposure, select gloves of class 5 with a breakthrough time greater than 240 minutes, taking in to account the physical requirements of the job. Wash contamination from the gloves immediately and dispose of safely if perforated or

contaminated on the inside. Wash hands before eating, drinking or smoking and before using the toilet.

**Respiratory protection:** No personal respiratory protection is normally required but, if there is a risk of inhaling particles, wear a particulate filter until effective technical measures are installed. For emergency situations wear positive pressure self-contained breathing apparatus.

**Skin and body protection:** Wear suitable protective clothing based on the physical job requirements but which is impervious to this material. When finished, wash with soap and water after removing protective clothing. Decontaminate clothing before re-use or use disposable clothing. Do not eat, drink or smoke while working.

---

## 9. Physical and chemical properties:

---

Appearance:	Clear liquid.
Colour:	Pale yellow.
Flash point:	53.5°C (Pensky-Martens c.c).
Density:	1.07 g/cm <sup>3</sup> .
Oxidising properties:	Not oxidising.
Explosive properties:	Not explosive.
Viscosity, Kinematic:	2.22 mm <sup>2</sup> /s @ 40°C.
Water solubility:	Emulsifiable.
Surface tension:	30.5 mN/m @ 25°C.
Autoflammability:	>400°C (EEC A15 method).
pH:	7.0 in 1% aq. Soln.

---

## 10. Stability and reactivity:

---

**Stability:** Stable under normal storage conditions.

**Conditions to avoid:** Avoid extreme temperatures. Above 160°C rapid exothermic decomposition of chlorpyrifos occurs leading to high temperatures and violent decomposition if heat source is not removed.

**Materials to avoid:** Strong basic, acidic or oxidising materials.

**Hazardous reactions:** None known when stored or used as recommended. Combustion or thermal decomposition will result in the release of toxic and irritant vapours containing hydrogen chloride and oxides of sulphur and nitrogen.

---

## 11. Toxicological information:

---

Oral toxicity (LD <sub>50</sub> ):	135-163 mg/kg (rat)
Acute dermal toxicity (LD <sub>50</sub> ):	>2000 mg/kg (rat).
Acute inhalation toxicity (LC <sub>50</sub> ):	>0.2 mg/l over 4 hours (rat).
Skin irritation:	Mild irritant (rabbit).
Eye irritation:	Moderate irritant (rabbit).
Sensitisation:	Non-sensitising (Guinea pig skin)

Does not exhibit carcinogenic, teratogenic or mutagenic effects in animal experiments.

---

**12. Ecological information:**

---

**Ecotoxicological effects:**

Toxicity to fish (LC<sub>50</sub>): 0.007-0.051 mg/l (*Onchorhynchus mykiss* [rainbow trout]).  
Exposure time 96 hours.

Toxicity to algae (IC<sub>50</sub>): 1-10 mg/l [green algae]. Exposure time 72 hours.

Toxicity to aquatic  
Invertebrates (EC<sub>50</sub>): 1.7 µg/l (*Daphnia magna* [water flea]).  
Exposure time 48 hours.

Chlorpyrifos does not leach in soil and is therefore unlikely to contaminate groundwater.  
The half-life in soils varies between 2 – 34 days, depending upon soil type.

---

**13. Disposal considerations:**

---

**Waste from residues and unused product:** Very toxic to aquatic organisms. Do not contaminate ponds, waterways or ditches. In accordance with current regulations after consultation with a disposal site operator and/or the responsible authority, this product may be taken to a waste disposal site or an incineration plant.

**Contaminated packaging:** Empty containers and triple rinse. Dispose of empty containers according to the 'Code of Practice for the Safe Use of Pesticides on Farms and Holdings' available from HMSO. Do not re-use container for any purpose.

---

**14. Transport information:**

---

**LAND/SEA/AIR (RID / ADR / IMDG / IATA)**

Labels	UN Number	Packaging group
6.1+3	3017	III

**Description of goods:** ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE, (Chlorpyrifos 45% + aromatic hydrocarbon).

**Marine pollutant:** Yes

**Kemler code:** 63

**Tremcard Nr. CEFIC:** 61GTF2111

**Note:** Sample shipment not allowed by mail.

---

**15. Regulatory information:**

---

**Hazard symbol/** Xn HARMFUL  
**Classification :** N DANGEROUS FOR THE ENVIRONMENT

**Risk phrases (R):** R10 Flammable.  
R20/22 Harmful by inhalation and if swallowed.  
R36/37 Irritating to eyes and respiratory system.  
R38 Irritating to skin.  
R50/53 Very toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment.  
R65 Harmful; may cause lung damage if swallowed.

<b>Safety phrases:</b>	S2	Keep out of reach of children.
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S35	This material and its container must be disposed of in a safe way.
	S57	Use appropriate containment to avoid environmental contamination.
	S62	If swallowed, do not induce vomiting; seek medical advice immediately and show the container, label or this MSDS.

**Special note:** To avoid risks to man and the environment, comply with the instructions for use.

## 16. Other information:

### Health and Environmental Hazards:

Text of R phrases mentioned in Section 2.

<b>Risk phrases (R)</b>	R10	Flammable
	R25	Toxic if swallowed.
	R37/38	Irritating to respiratory system and skin.
	R41	Risk of serious damage to eyes.
	R50/53	Very toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment.
	R51/53	Toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment.
	R65	Harmful; may cause lung damage if swallowed.
	R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.	

**Date of first issue:** 4<sup>th</sup> August 2009

**Disclaimer:** The information contained in this MSDS is designed to give general health and safety guidance on the storage and transport of the substance/preparation to which it relates. Requirements arising from a Risk Assessment of the substance/preparation in a particular working environment should take precedence over any of the guidance contained in this MSDS where there is a difference in the information given. The information contained in this MSDS is accurate at the date of publication and will be updated as and when appropriate. Liability will not be accepted for any injury, loss or damage resulting from any failure to take account of information or advice contained in this MSDS.

Compiled in accordance with EC Directive 91/155/EEC and subsequent amendments EC Directives 93/112/EEC and 2001/58/EC.