

1	Identification of the preparation and the supplying Company	Killgerm ULV 500. A ready to use insecticide for professional use. Killgerm Chemicals Ltd, Denholme Drive, Ossett, West Yorkshire, WF5 9NA. Tel: +44 (0)1924 268450 Fax: (0)1924 265033 Email: technical@Killgerm.com	
2	Hazards identification	X_n HARMFUL: N Dangerous for the environment	May cause lung damage if swallowed. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53.
3	Composition and information on ingredients	Active ingredients:- Composition:-	Tetramethrin and d-phenothrin Tetramethrin - 2.2%w/w (N.R50.R53) CAS no 7696-12-0 d-phenothrin - 4.4%w/w (N.R50.R53) CAS no 188023-86-1 Piperonyl butoxide - 9.6%w/w (N.R50/53). Odourless kerosene - 67.4%w/v (Xn R65. R66) Aromatic solvent - 3.0%w/v (Xn. R51. R53. R65. R66. R67) See paragraph 16 for full text of R-phrases.
4	First Aid measures	Ingestion: Inhalation: Skin contact: Eye contact: Advice to doctor:	DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION. Wash out mouth with water. If spontaneous vomiting has occurred keep patient at rest, ensuring airways are clear, and phone for an ambulance with oxygen facilities. Remove to fresh air. Loosen clothing at neck. Keep at rest. GET MEDICAL ATTENTION. Remove contaminated clothing. Wash off with soap and water. GET MEDICAL ATTENTION. Flush thoroughly with eye wash solution or clean water for 15 minutes. GET MEDICAL ATTENTION. Contains pyrethroids in petroleum distillates.
5	Fire-fighting measures	Extinguishers:	Use water spray, dry powder or foam. DO NOT USE WATER JET. Self-contained breathing apparatus should be worn by fire fighters. Warn those at risk that toxic fumes are evolved. Advise Environment Agency (emergency telephone number 0800 807060) or the water company if material has entered the drains.
6	Accidental release measures	Spillages (containment and disposal):	Wear appropriate PPE. Remove sources of ignition. Absorb in sand, earth or proprietary product, shovel into marked container and contact a waste disposal firm or the supplier for disposal advice. Indoors, wash area with soap and water. Outdoors, do not wash spillages or contaminated material to drains. Shovel up contaminated soil, vegetation, etc., and transfer to a marked container. Dispose of via a contractor or contact supplier for advice. Use appropriate containment to avoid environmental contamination.
7	Handling and storage	Precautions in use:	This product is subject to the Food and Environment Protection Act, 1985 and The Control of Pesticides Regulations 1986 made under it. The product must be used and stored only in accordance with the product label. Keep away from sources of ignition – No smoking Wear suitable protective clothing. Do not breathe mist. Otherwise wear respiratory protective equipment and eye protection (see HSE Guidance Booklet HS(G) 53; "The Selection, Use and Maintenance of Respiratory Protective Equipment- A Practical Guide"). WASH HANDS AND EXPOSED SKIN before meals and after use. Wash any contamination from skin or eyes immediately. AVOID EXCESSIVE CONTAMINATION OF COVERALLS AND LAUNDRY REGULARLY. DO NOT CONTAMINATE FOODSTUFFS, EATING UTENSILS OR FOOD CONTACT SURFACES. COVER WATER STORAGE TANKS before application. EXCLUDE ALL PERSONS AND ANIMALS DURING TREATMENT. DO NOT APPLY DIRECTLY TO ANIMALS. VENTILATE TREATED AREAS THOROUGHLY after application. COLLECT EGGS AND REMOVE FEED, EXPOSED WATER AND MILK BEFORE APPLICATION. HAZARDOUS TO BEES. Protect milk machinery and milk containers from contamination. REMOVE OR COVER ALL FISH TANKS AND BOWLS before application. THIS MATERIAL AND ITS CONTAINER must be disposed of in a safe way. Use appropriate containment to avoid environmental contamination. Avoid release to the environment. Read product label for other handling precautions.
		Storage and transport precautions:	Keep only in the original container. Keep container tightly closed. KEEP IN A SAFE PLACE. Keep out of reach of children. Protect from frost. When not in use, store upright with cap screwed tightly on.

8 Exposure controls and personal protection

Workplace exposure limits: Oil mist mineral, odourless kerosene. UK.EH402002. Maximum Exposure Limit: 5mg/m₃ (8 hour), 10mg/m₃ (15 mins). Distillates (petroleum) hydrotreated light_ odourless kerosene:- TWA LTEZ 1200mg/m³ (165ppm) (EH40/2002). Health and Safety Executive have advised chemical industry that Occupation Exposure Limits (in EH40/2002) can continue to be used where no relevant entry in "EH40/2005 Workplace Exposure Limits" is evident.

Personal Protection:	PPE Item	In Use	Spillage
	Respirator	Half mask respirator to EN140 plus A1P2 class filter to EN141 (minimum).	Half mask respirator to EN140 plus A1P2 class filter to EN141 (minimum).
	Gloves	Unlined synthetic rubber/PVC (300mm) (EN374:2003 J**) eg. Solvex nitrile.	Unlined synthetic rubber/PVC (300mm) (EN374:2003 J**) eg. Solvex nitrile.
	Overall	Low levels of contamination- Coverall type 5/6. High levels of contamination- Coverall type 4.	Low levels of contamination- Coverall type 5/6. High levels of contamination- Coverall type 4.
	Goggles/ Face shield	Goggles to EN166 34	Face shield to EN166 3

Environmental Exposure Controls:

Product should be used in accordance with the instructions on the label. Any spillage should be dealt with promptly, and in accordance with advice on this SDS, in order to avoid contamination of watercourses or ground.

9 Physical and chemical properties

Appearance: Straw coloured liquid.
 pH: Not applicable.
 Flash point: 67°C.
 Flammability: Flammable, will burn at room temperatures to evolve toxic combustion products.
 Bulk density: 0.840
 Solubility: Insoluble in water. Product will float on water.
 Odour: Slight kerosene odour.
 Incompatibility: Incompatible with strong oxidising agents, strong acids and strong bases.

10 Stability and reactivity

Product is stable and not a reactive substance. Toxic/hazardous fumes evolved in a fire.

11 Toxicological information

Routes of entry/symptoms of contact:

Inhalation: In normal circumstances, the low volatility of this product does not give rise to harmful concentrations. Precautions should be taken to prevent exposure to product spray/mist.
 Skin and eyes: Odourless kerosene is a moderate skin irritant. Prolonged or repeated contact can give rise to severe irritation or cause dermatitis. Irritating to eyes.
 Ingestion: The main hazard of swallowing the product arises from any consequent aspiration into the lungs which may cause chemical pneumonitis.

12 Ecological information

- Preparation is classified as (N) Dangerous for the environment. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- The active ingredients & piperonyl butoxide giving rise to this classification are rapidly degraded in air, water and on contact with soils and organic matter. Odourless kerosene is highly volatile and will rapidly evaporate and degrade in air. The product is essentially insoluble in water (it will float on the top of water). It is readily and rapidly biodegradable. No acute toxicity to aquatic organisms is expected at the maximum water solubility (<0.10%w/w) of odourless kerosene. Long-term adverse effects to aquatic organisms are not expected. The aromatic solvent is also highly volatile and will rapidly evaporate to the air if released. It does not biodegrade rapidly but will degrade in air and is expected to be removed in a wastewater treatment facility. Long-term adverse effects to aquatic organisms are possible if continuous exposure is maintained.
- Adverse environmental effects arising as a consequence of use of ULV 500 (in situations for which it is approved and as indicated on the label) have not occurred and none are expected.

13 Disposal considerations

Empty containers: Do not re-use – empty completely. Dispose of as controlled waste. Ensure containers are empty. Treat as non-hazardous waste. Use EWC (European Waste Catalogue) code 15 01 02 on duty of care transfer notes. If containers are not emptied, treat packaging as hazardous waste, use EWC code 15 01 10*.
 Unused/recovered materials: Do not dispose in domestic waste. Dispose of as controlled waste. Treat as hazardous waste. Use EWC code 16 03 05*.
 Contaminated PPE/ wipes/ contaminated boxes/ spill control material: Treat as controlled waste. For low levels of contamination, treat as non-hazardous waste. Use EWC code 15 02 03. For heavily contaminated items treat as hazardous waste and use EWC code 15 02 02*. Contact supplier for advice on disposal matters.

14	Transport information	UN No 3082. Class 9. Packing Group III. Marine Pollutant. Environmentally hazardous substance
15	Regulatory information	<ul style="list-style-type: none">• This product has been classified in accordance with The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002: CHIP 3. These implement the Dangerous Preparations Directive- 99/45/EC. This Safety Data Sheet complies with CHIP 3 requirements and the Safety Data Sheets Directive 91/155/EEC (as amended by Directives 93/112/EC and 2001/58/EC).• Restricted to professional users. To avoid risks to man and the environment, comply with the instructions for use.• Symbols : Xn – Harmful N - Dangerous for the environment.• R-phrases : R65. R51. R53• S-phrases : S23, S24, S57, S61, S62. This product is approved under The Control of Pesticides Regulations 1986. HSE no. 4647.

16	Other information	<p>Text of R-phrases (Ingredients – Section 2) and S-phrases.</p> <p>R50- Very toxic to aquatic organisms. R51- Toxic to aquatic organisms. R53- 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 or dizziness. S23- Do not breathe spray. S24- Avoid contact with skin. S57- Use appropriate containment to avoid environmental contamination. S61- Avoid release to the environment. Refer to special instructions/ safety data sheet. S62- If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. Use only in accordance with label instructions. Observe statutory conditions of use on the label. Always read the label. Use pesticides safely. The information on this data sheet should be considered when undertaking a risk assessment under the COSHH regulations. This data sheet does not constitute a COSHH assessment. The information contained in this data sheet does not constitute the user's own assessment of workplace risks as required by legislation. The information contained within this data sheet is strictly for general guidance only and should not be relied upon over and above this. This data sheet is intended to provide general health and safety guidance on the handling, storage and transportation of the preparation. The information provided in this data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted by Killgerm Chemicals Limited for any loss, injury or damage arising from any failure to comply with the information and advice contained within this data sheet and/or failure to comply with the manufacturer's guidelines, product label data and any associated technical usage literature. Re-issued July 2009 to incorporate the REACH requirement changes to safety data sheets.</p>
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