#### MATERIAL SAFETY DATA SHEET NIMROD 25 EC

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name	: NIMROD 25 EC	
Chemical name of active ingredient(s)	: Bupirimate.	
Code no.	: R-10828.DPD (730206)	
Supplier	: Makhteshim Agan (UK) Limited Unit 16, Thatcham Business Village Colthrop Way Thatcham Berkshire RG19 4LW Tel No: 01635 860555 Fax No: 01635 861555	
Emergency telephone number	: National Chemical Emergency Centre <u>Tel</u> : 01865 407333	

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation	: Preparation	on.			
Information on hazardo	us ingredients *				
Common name	CAS No.	%	EC Number	Symbol	<b>R-Phrases</b>
Bupirimate	41483-43-6	25	255-391-2	Xi, N	R43-51/53
n-Butanol	71-36-3	30	200-751-6	Xn	R10-22-37/38-
					41-67
Nonyl-phenol ethoxylate	9016-45-9	4	-	Xi	R36-53
Kerosene	64742-47-8	10	265-149-8	Xn	R65
CaABS/n-butanol	-	3	-	Xi	R10-38-41-67
Solvesso 150	64742-94-5	Approx. 20	265-198-5	Xn	R65

\* Occupational Exposure Limit(s), if available, are listed in section 8

#### 3. HAZARDS IDENTIFICATION

Physical/chemical hazards	: Flammable.
Human health hazards	: Harmful by inhalation.
Environmental hazards	Irritating to skin. Harmful: may cause lung damage if swallowed. : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### 4. FIRST-AID MEASURES

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<u>First-aid measures</u>	
Inhalation	<ul> <li>Remove victim to fresh air. Keep victim warm and at rest. Consult a doctor in the event of any complaints.</li> </ul>
Ingestion	: Wash out mouth with water. Do not induce vomiting. Immediately consult a doctor.
Skin contact	: Remove contaminated clothing. Wash off with plenty of water and soap. Consult a doctor in the event of any complaints.

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## Eye contact: Immediately wash out with plenty of water with the eyelid held wide open,<br/>for at least 15 minutes. Immediately consult an eye specialist.Notes to a physician: Treat symptomatically and give supportive therapy; administer activated<br/>charcoal.

#### 5. FIRE-FIGHTING MEASURES

Extinguishing media	
Suitable	: Flammable.
	In case of a small fire: foam, dry chemical, or carbon dioxide. In case of a large fire: water spray, fog or alcohol resistant foam.
Special fire-fighting procedures	: Fight fires from a protected location. Dike fire control water for later disposal.
Hazardous thermal (de)composition products	: Emits toxic and irritating fumes: CO, CO <sub>2</sub> , NOx, SOx.
Protection of fire-fighters	: Wear suitable protective clothing. Self-contained breathing apparatus.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	: Wear suitable protective clothing and chemical resistant gloves. Wear eye/face protection. Respiratory protection for large spills.
Environmental precautions	: Do not discharge into drains or the environment. If the product has contaminated surface water, inform the appropriate authorities. Dispose of this material and its container at hazardous or special waste collection point.
Methods for cleaning up	: Absorb in sand or other inert material. Use appropriate containment to avoid environmental contamination. In the event of major spillage: Collect and contain as much free liquid as possible. Dike spills using absorbent or impervious materials such as sand or clay for later disposal.

#### 7. HANDLING AND STORAGE

Handling	: Avoid contact with skin and eyes. Do not breathe fumes/spray mist. When using do not eat, drink or smoke. Wash hands after working with the product.
Storage	: Keep only in the original container. Keep container tightly closed. Keep in a cool, dry, well ventilated place away from sources of ignition and heat. Keep away from food, drink and animal feedingstuffs. Protect from frost.
Packaging materials Suitable	: Metal drums or Coextruded polyethylene bottles.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures	: Facilities storing or utilizing this material should be equipped with an
Hygiene measures	eyewash facility and safety shower. : Wash hands thoroughly after handling. Wash clothing separately before re-use.

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Occupational Exposure		
Limits		
<u>Common name</u>	: Solvesso 150	
TLV (USA)	: Not available.	
	OEL = 50  ppm.	
<u>Common name</u>	: Bupirimate	
	: 8 hour TWA 10 mg/m <sup>3</sup> .	
<u>Common name</u>	: n-Butanol	
	: 15 minute STEL 50 ppm	
	154 mg/m <sup>3</sup>	
Personal protective		
<u>equipment</u>		
Respiratory system	: During spraying wear suitable respiratory equipment.	
Skin and body	: Wear suitable protective clothing and chemical resistant boots.	
Hands	: Wear suitable gloves.	
Eyes	: Safety goggles or face shield.	
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#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Clear Liquid.
Colour	: Amber/orange.
Odour	: Aromatic.
Boiling point	: 128º C
Density	<b>:</b> 0.92 g/cm <sup>3</sup> .
рН	: 7.22 (1% dispersion).
Flash point	: 40°C (Closed cup).
Autoignition temperature	: 340° C.
Explosion properties	: Not explosive.
Oxidation properties	: Not applicable.

#### 10. STABILITY AND REACTIVITY

Stability	: Stable under normal conditions.
Hazardous reactions	: None known.
Hazardous decomposition	: Emits toxic and irritating fumes : CO, CO <sub>2</sub> , NOx, SOx.
products	

#### 11. TOXICOLOGICAL INFORMATION

Acute toxicity - Oral Acute toxicity - Dermal Acute toxicity - Inhalation Skin irritation Eye irritation Sensitization Carcinogenicity Mutagenicity	<ul> <li>: LD<sub>50</sub> &gt; 4000 mg/kg (rat).</li> <li>: LD<sub>50</sub> &gt; 3000 mg/kg (rat).</li> <li>: LC<sub>50</sub> &gt; 3.18 mg/l, 4 hours, rat.</li> <li>: Irritating to skin (rabbit).</li> <li>: Not irritating (rabbit).</li> <li>: Guinea pig maximization test: Non sensitizer.</li> <li>: Not carcinogenic.</li> <li>: Not mutagenic.</li> </ul>
Mutagenicity	: Not mutagenic.
Reproduction toxicity	: Not teratogenic in animal experiments.

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#### 12. ECOLOGICAL INFORMATION

Ecotoxicity	: Birds: LD <sub>50</sub> > 5000 mg/kg (quail) - Bupirimate Technical.
	Fish: $LC_{50} = 6.2 \text{ mg/l}$ , 96 hours (rainbow trout).
	Daphnia: LC <sub>50</sub> = 11.9 mg/l, 48 hours.
	Algae: ErC <sub>50</sub> = 7.5 mg/l, EbC <sub>50</sub> = 4.9 mg/l 72 hours.
	Bees: $LD_{50} > 100 \ \mu g/bee$ .
	Oral LD <sub>50</sub> > 105.8 μg/bee.

#### 13. DISPOSAL CONSIDERATIONS

<u>Methods of disposal</u> : Disposal according to the local legislation.

#### 14. TRANSPORT INFORMATION

International transport regu		
UN number	: 1993	
<u>Land - Road/Railway</u>		
Proper shipping name	<ul> <li>Flammable liquid, N.O.S., (Contains aliphatic alcohols and benzenoid hydrocarbons).</li> </ul>	
ADR/RID Class	: 3	
ADR/RID Item number	: 31º(c)	
Packing group	: III	
Hazard Identification	: 30	
Number		
Inland waterways		
<u>Sea</u>		
Proper shipping name	<ul> <li>Flammable liquid, N.O.S., (Contains aliphatic alcohols and benzenoid hydrocarbons).</li> </ul>	
IMDG Class	: 3.3	
IMDG Page number	: 3345	
Packing group	: 111	
Emergency Schedules	: 3-07	
(EmS)		
Air		
Proper shipping name	<ul> <li>Flammable liquid, N.O.S., (Contains aliphatic alcohols and benzenoid hydrocarbons).</li> </ul>	
UN/ID Number	: 1993	

#### National transport regulations

No additional national transport regulations are known to the supplier

#### 15. REGULATORY INFORMATION

Classification

: This product is provisionally labelled by the supplier in accordance with the suppliers understanding of the EU regulations:

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Hazard symbol(s)	: Xn, N	
		Y J
		EROUS FOR THE ONMENT
Risk phrases	: R10: Flammable. R20: Harmful by inhalation. R38: Irritating to skin. R65: Harmful: may cause lung damage if swallowed. R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.	
Safety phrases	<ul> <li>S2: Keep out of the reach of children.</li> <li>S13: Keep away from food, drink and animal feedingstuffs.</li> <li>S20/21: When using do not eat, drink or smoke.</li> <li>S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.</li> <li>S38: In case of insufficient ventilation, wear suitable respiratory equipment.</li> <li>S61: Avoid release to the environment. Refer to special instructions/Safety data sheets.</li> <li>S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.</li> </ul>	

# 16. OTHER INFORMATION Recommended use : Fungicide. Text of R-phrases in section 2 R10: Flammable R22: Harmful if swallowed

R22:	Harmful if swallowed
R37/R38	: Irritating to respiratory system and skin
R41:	Risk of serious damage to eyes
R43:	May cause sensitization by skin contact
R51/53:	Toxic to aquatic organisms, may cause long-term adverse
effects in	the aquatic environment
R65:	Harmful: may cause lung damage if swallowed
R67:	Vapours may cause drowsiness and dizziness

The information contained in the Safety Data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein.

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#### <u>HISTORY</u>

Date of printing	: 01/07/2004
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Date of issue	: 01/07/2004
Version	: 008.00.00

The version-number is made up of three parts; part 1 is a general information code, part 2 a country-specific code and part 3 a language-specific code