

**SAFETY DATA SHEET**

According to EC-directive 93/112/EC

Pending

**PERMETHRIN 25/75****1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

**Product label name** Permethrin  
**Supplier** SUMITOMO CHEMICAL (UK) PLC  
Horatio House  
77-85 Fulham Palace Rd  
London W6 8JA  
United Kingdom  
Tel.: +44 208 600 7700  
**Emergency telephone** + 31 570679211 (Fax. + 31 570679801)  
Akzo Nobel Chemicals-Deventer-NL  
  
+ 44-1634280888  
Akzo Nobel Chemicals-Gillingham-GB

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

This product is to be considered as a substance in conformance to EC directives

Information on hazardous ingredients

**Chemical description** Permethrin**Composition / information on ingredients**

| Number | % w/w     | CAS-number     | Chemical name |                |
|--------|-----------|----------------|---------------|----------------|
| 1      | >93       | 52645-53-1     | Permethrin    |                |
| Number | EC-number | Annex-1 number | Symbol(s)     | Risk-phrase(s) |
| 1      | 258-067-9 | 613-058-00-2   | Xn N          | R22, R50/53    |

**3. HAZARDS IDENTIFICATION**

Harmful if swallowed.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**4. FIRST AID MEASURES****Symptoms and effects** Possible symptoms: diarrhoea, salivation, tremor, hyperexcitability and hypersensitivity. Synthetic pyrethroids can produce paresthesias.**First aid****General**

In all cases of doubt, or when symptoms persist, seek medical attention.

**Inhalation**

In case of accident by inhalation: remove casualty to fresh air and keep at rest. Obtain medical attention immediately (show this Safety Data Sheet).

**Skin**

Remove contaminated clothing. Wash immediately with soap and water. Obtain medical attention immediately (show this Safety Data Sheet).

**Eye**

Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.

**Ingestion**

Rinse mouth, give water to drink. Never induce vomiting in unconscious or confused persons. Seek medical advice.

**Advice to physician**Symptomatic treatment is advised.  
Consult National Poison Center.**5. FIRE-FIGHTING MEASURES****Extinguishing media** dry chemical powder, Carbon dioxide.  
Large fires: waterspray or foam**Unsuitable extinguishing media** waterjet.**Special exposure hazards** combustible material.**Hazardous decomposition/combustion products** May emit toxic and irritating fumes under fire conditions.**Protective equipment**

Wear self contained breathing apparatus. Wear suitable protective clothing. See also Section 8.

**Other information**

Cool closed containers with water.

Water used to extinguish a fire should not be allowed to enter the drainage system or water courses.

**SAFETY DATA SHEET**  
According to EC-directive 93/112/EC  
Pending

## **PERMETHRIN 25/75**

### **6. ACCIDENTAL RELEASE MEASURES**

|                                  |  |
|----------------------------------|--|
| <b>Personal precautions</b>      | For personal protection see Section 8.   |
| <b>Environmental precautions</b> | Do not allow to escape into sewage system or water courses.  |
| <b>Methods for cleaning up</b>   | In case of spill (liquid), soak it up immediately with suitable absorbent, such as sawdust or granular absorbent clay. Sweep up and put it into a container for disposal ( See Section 13). Rinse remnant with plenty of water. Do not allow to enter drains or water courses. |

### **7. HANDLING AND STORAGE**

|                                      |   |
|--------------------------------------|---|
| <b>Handling</b>                      | Keep away from food, drink and animal feedingstuffs. Avoid contact with skin and eyes.<br>For personal protection see Section 8.  |
| <b>Fire and explosion prevention</b> | No specific recommendations.  |
| <b>Storage requirements</b>          | Store in a dry well ventilated place away from sources of heat and direct sunlight.<br>Store at ambient temperatures. Protect from frost.<br>Keep only in the original container. |
| <b>Other information</b>             | To maintain quality: Store in polyethylene.   |

### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

|                             |   |
|-----------------------------|---|
| <b>Engineering controls</b> | Provide adequate ventilation.                               |
| <b>Exposure limits</b>      | No exposure limits have been established for this material. |
| <b>Personal protection</b>  |   |
| <b>Respiratory</b>          | at least breathing mask (Type A).                           |
| <b>Hand</b>                 | Wear suitable gloves.                                       |
| <b>Eye</b>                  | Wear safety goggles.  |
| <b>Skin and body</b>        | Wear suitable protective clothing.                          |
| <b>Other information</b>    | Laundry clothes before reuse.                               |

### **9. PHYSICAL AND CHEMICAL PROPERTIES**

|  |                                      |
|--|--------------------------------------|
| <b>Appearance</b>                                | viscous liquid / solid               |
| <b>Colour</b>                                    | yellow / brown                       |
| <b>Odour</b>                                     | faint characteristic                 |
| <b>Boiling point/range</b>                       | 200 °C                               |
| <b>Melting point/range</b>                       | 34-39 °C                             |
| <b>Flash point</b>                               | 131 °C                               |
| <b>Flammability</b>                              | not determined                       |
| <b>Autoignition temperature</b>                  | not determined                       |
| <b>Explosive properties</b>                      | not available                        |
| <b>Explosion limits</b>                          | not determined                       |
| <b>Oxidizing properties</b>                      | not relevant                         |
| <b>Vapour pressure</b>                           | 3.4 * 10 <sup>-7</sup> torr (25 °C ) |
| <b>Density</b>                                   | 1.19-1.23 g/ml (20 °C )              |
| <b>Bulk density</b>                              | not applicable                       |
| <b>Solubility in water</b>                       | Insoluble                            |
| <b>Solubility in other solvents</b>              | Soluble (in most organic solvents)   |
| <b>pH value</b>                                  | 5 - 6                                |
| <b>Partition coefficient<br/>n-octanol/water</b> | Log Pow 6.1                          |
| <b>Relative vapour density (air=1)</b>           | not determined                       |
| <b>Viscosity</b>                                 | not determined                       |

### **10. STABILITY AND REACTIVITY**

|   |   |
|---|---|
| <b>Stability</b>                            | Stable under recommended storage and handling conditions (see section 7). |
| <b>Conditions to avoid</b>                  | Avoid high temperature.   |
| <b>Materials to avoid</b>                   | none known.   |
| <b>Hazardous decomposition<br/>products</b> | Emits toxic fumes under fire conditions (See also Section 5).             |

**SAFETY DATA SHEET**

According to EC-directive 93/112/EC

Pending

**PERMETHRIN 25/75****11. TOXICOLOGICAL INFORMATION**

|                        |  |
|------------------------|--|
| <b>Name</b>            | Permethrin                                       |
| <b>Acute toxicity</b>  |  |
| <b>Oral LD50</b>       | rat: 1479-4672 mg/kg                             |
| <b>Dermal LD50</b>     | rat : > 2000 mg/kg                               |
| <b>Inhalation LC50</b> | rat (4 hours ) : 2.3 mg/l                        |
| <b>Irritation</b>      |  |
| <b>Skin</b>            | Non-irritating (rabbit)                          |
| <b>Eye</b>             | Non-irritating ( rabbit )                        |
| <b>Sensitization</b>   | Not sensitizing                                  |
| <b>Genotoxicity</b>    | Not mutagenic. Not teratogenic. not carcinogenic |

**12. ECOLOGICAL INFORMATION**

|                    |   |
|--------------------|---|
| <b>Name</b>        | Permethrin                              |
| <b>Ecotoxicity</b> |   |
| <b>fish</b>        | Acute toxicity, 96h-LC50 : 0.019 mg/l   |
| <b>daphnia</b>     | Acute toxicity, 48h-EC50 : 0.00064 mg/l |

**13. DISPOSAL CONSIDERATIONS**

|                               |  |
|-------------------------------|--|
| <b>Product</b>                | According to local regulations. For further advice contact manufacturer. |
| <b>Contaminated packaging</b> | According to local regulations.  |

**14. TRANSPORT INFORMATION***Land transport (ADR/ RID)*

|                                  |  |                                     |      |
|----------------------------------|--|-------------------------------------|------|
| <b>ADR class</b>                 | 6.1  | <b>ADR item number</b>              | 71c  |
| <b>RID class</b>                 | 6.1  | <b>RID item number</b>              | 71c  |
| <b>Hazard Identification No.</b> | 60   | <b>Substance Identification No.</b> | 3352 |
| <b>TREM-Card</b>                 | CEFIC TEC(R)- 61G43c                             | <b>UN number</b>                    | 3352 |
| <b>Proper Shipping Name</b>      | Pyrethroid pesticide, liquid, toxic (Permethrin) |                                     |      |

*Sea transport (IMDG-code/ IMO)*

|                             |  |                  |      |
|-----------------------------|--|------------------|------|
| <b>IMO/IMDG code</b>        |  | <b>Class</b>     | 6.1  |
| <b>Packing group</b>        | III  | <b>UN number</b> | 3352 |
| <b>EMS</b>                  | 6.1-04   | <b>MFAG</b>      | 510  |
| <b>Marine pollutant</b>     | yes  |                  |      |
| <b>Proper Shipping Name</b> | Pyrethroid pesticide, liquid, toxic (Permethrin) |                  |      |

*Air transport (ICAO-TI/ IATA-DGR)*

|                             |  |                      |      |
|-----------------------------|--|----------------------|------|
| <b>ICAO-TI/IATA-DGR</b>     |  | <b>UN number</b>     | 3352 |
| <b>Class</b>                | 6.1  | <b>Packing group</b> | III  |
| <b>Proper Shipping Name</b> | Pyrethroid pesticide, liquid, toxic (Permethrin) |                      |      |

**15. REGULATORY INFORMATION**

|                             |            |
|-----------------------------|------------|
| <b>Chemical description</b> | Permethrin |
|-----------------------------|------------|

Labelling according to EC directives

**EC-number** See section 2**Classification based on** Annex-1 to directive 67/548/EEC

HARMFUL (Xn)



DANGEROUS FOR THE ENVIRONMENT (N)

**Symbol(s)**

**SAFETY DATA SHEET**

According to EC-directive 93/112/EC

Pending

**PERMETHRIN 25/75**

---

|                           |  |
|---------------------------|--|
| <b>R(isk) phrase(s)</b>   | R22: Harmful if swallowed<br>R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment   |
| <b>S(afety) phrase(s)</b> | S20/21: When using do not eat, drink or smoke<br>S46: If swallowed, seek medical advice immediately and show this container or label<br>S60: This material and its container must be disposed of as hazardous waste<br>S61: Avoid release to the environment. Refer to special instructions/Safety data sheets |

---

**16. OTHER INFORMATION**

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.

**History**

|   |                                      |
|---|--------------------------------------|
| <b>Date of printing/<br/>pdf file generated</b> | 20-08-2001                           |
| <b>Revision</b>                                 | 0.00                                 |
| <b>Composed by</b>                              | Dr. D.J. Buckland      Dr. R. Martin |