Abate®
First line of defense against mosquito and insect-borne diseases
Effectively combating mosquitoes and insect pests before they reach maturity, Abate® larval control products have provided superior performance in the fight against malaria, dengue fever, Guinea worm and other insect-borne diseases for over 40 years.

Abate® at a glance

- Short circuits the cycle of insect-borne disease
- Fast and effective control of insect larvae at low doses
- Long-lasting residual action protects for several weeks
- Recommended by the WHO for treatment of drinking water containers
- The original temephos larvicide
- Easy to apply at low doses

Abate can be used on all types of standing water and with a wide range of application equipment.
Abate® 500E

Important Note
This is not a product label. It is intended as a guide only. Always read the product label and product information before use. Use Abate® 500E only as directed on the label.

Abate® 500E is for use by professional pest controllers only.

Active Material
Temephos (organophosphate)

Formulation
Abate® 500E is an emulsifiable liquid concentrate containing 500g of active ingredient per liter.

Where to apply
Abate 500E is designed to treat standing water, ponds, lakes, woodland pools, catchbasins, marshes, swamps, polluted water or areas with recurring mosquito populations.

Application
Dilute Abate® 500E at the recommended rates below and spray evenly across the surface of the water to be treated.

Dilution Rates
For large-scale treatment with a knapsack sprayer, dilute the recommended rate per hectare in 50-100 litres of water.
For aerial spraying, dilute the recommended rate per hectare in 20-30 litres of water.
For spot spray application, dilute the recommended rate per 100m$^2$ in 1 litre of water.

<table>
<thead>
<tr>
<th>Type of water to be treated</th>
<th>Dosage rate</th>
</tr>
</thead>
</table>
| Clean water  
  i.e. ponds, pools, lakes                  | 100-150ml per hectare  
  (or 1-1.5ml per 100m$^2$)                 |
| Moderately polluted water  
  i.e. marshes, swamps                          | 200-250 ml per hectare  
  (or 2-2.5ml per 100m$^2$)                  |
| Highly polluted water  
  i.e. cesspools, drains                       | 400-500ml per hectare  
  (or 4-5ml per 100m$^2$)                    |

Note: The dosage may be varied within the recommended rates depending on depth of water, organic matter content and amount of vegetation.

How to apply
Handheld pressure spray or backpack sprayer, hydraulic spraying equipment, aircraft application.

When to apply
For the most effective control, apply Abate 500E when insects are in an early larval stage.
**Important Note**
This is not a product label. It is intended as a guide only. Always read the product label and product information before use. Use Abate® 1SG only as directed on the label.

**Active Material**
Temephos (organophosphate)

**Formulation**
Abate® 1SG is a formulation containing 1% active ingredient on sand granules.

**Where to apply**
Standing water, shallow ponds, lakes, woodland pools, tidal waters, marshes, swamps, drains, cesspits and other water with high organic content. The 1SG formulation is particularly suitable for use in swamps or marshes, because the sand granules fall through the overhead vegetation into the water. Abate® 1SG may also be applied as a spot treatment to catch basins and similar areas where mosquitoes breed.

Abate® 1SG may be used to control Aedes aegypti in drinking water in cisterns and small containers.

**Application**
Spread the Abate® 1SG granules evenly across the surface of the water to be treated at the recommended rates below:

<table>
<thead>
<tr>
<th>Type of water to be treated</th>
<th>Dosage rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small drinking water containers or cisterns</td>
<td>Apply 1g per 10 liters of contained water (equivalent to 1mg active ingredient per liter or 1ppm)</td>
</tr>
<tr>
<td>Clean water i.e. standing water, shallow ponds, lakes, woodland pools</td>
<td>Apply 0.5-1g per 1m² (or 5-10kg per hectare)</td>
</tr>
<tr>
<td>Moderately polluted water i.e. tidal waters, marshes, swamps</td>
<td>Apply 1-2g per 1m² (or 10-20kg per hectare)</td>
</tr>
<tr>
<td>Highly polluted water i.e. drains, cesspits and other water with high organic matter content</td>
<td>Apply 2-5g per 1m² (or 20-50kg per hectare)</td>
</tr>
</tbody>
</table>

*Note: The dosage may be varied within the recommended rates depending on depth of water, organic matter content and amount of vegetation.*

**How to apply**
Abate® 1SG larvicide granules can be spread using hand-operated seed/fertilizer spreaders, adapted motorized backpack sprayers, or fixed / rotary wing aircraft.

**When to apply**
For the most effective control, apply Abate® 1SG when insects are in an early larval stage.
Every year, millions of people are infected and thousands die from insect-transmitted diseases. These debilitating diseases remain a threat to more than half the world’s population and are one of the biggest barriers to development and prosperity in all parts of the globe.

Abate® larvicides control insect pests at the larval stage before they develop into mature adults, preventing them from breeding and spreading disease through new generations of insects and short-circuiting the cycle of disease transmission to humans.

Based on the powerful active ingredient temephos, Abate® larvicides come in two formulations to effectively manage a broad spectrum of nuisance and disease-causing insects in different environments.

Treating standing water with a larvicide such as Abate® is one of the easiest and most effective ways to control mosquitoes and other insects in a community and can enhance the effectiveness of other disease control methods. The residual action of Abate® continues to prevent insect populations from returning for several weeks.

Abate® is based on non-pyrethroid chemistry and may also help prevent or limit the chance of resistance compromising a long-term vector-control campaign.

Abate® is the original temephos larvicide brought to market by BASF’s own research scientists. WHO approvals for temephos are all based on original studies done with Abate®. The active ingredient in Abate® is also recommended by the WHO to prevent disease-carrying insects breeding in drinking water containers.

Abate® acts by ingestion or contact. It inhibits an enzyme that is important to the normal function of the insect larvae's nervous system, killing the insect larvae before they mature and preventing new generations of disease-carrying insects from developing.

Water tanks, old tires, construction sites and garden ornaments are ideal breeding sites for disease-carrying insects and can all be treated with Abate.
Important

Keep out of reach of children, uninformed persons and animals. Store in a cool, dry place, away from food and feed. Avoid contact with the skin, eyes and clothing. Do not inhale dust. May be harmful if swallowed or absorbed through the skin. May cause eye and skin irritation. Remove contaminated clothing and wash hands after use. If difficulties or poisoning occur, contact a doctor or Poisons Information Centre. Show container, label and/or safety data sheet to the physician. For full health, safety and environmental precautions as well as storage and disposal information, please refer to the product label. Use Abate® only as directed on the product label.

The information submitted in this publication is based on current BASF knowledge and experience. In view of the many factors that may affect its application, this data does not relieve the user from carrying out their own tests. The data does not imply assurance of certain properties or of suitability for a specific purpose. It is the responsibility of the user to ensure that any proprietary rights and existing laws and legislation are observed.

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