



**FORM  
FOR NOTIFICATION OF FINAL REGULATORY ACTION  
TO BAN OR SEVERELY RESTRICT A CHEMICAL**

IMPORTANT: See instructions before filling in the form

COUNTRY: Thailand

**PART I : PROPERTIES, IDENTIFICATION AND USES**

|                                |   |   |
|--------------------------------|---|---|
| <b>1. IDENTITY OF CHEMICAL</b> |   |   |
| 1.1                            | Common name   | azinphos-ethyl.   |
| 1.2                            | Chemical name according to an internationally recognized nomenclature (e.g. IUPAC), where such nomenclature exists  | S-(3, 4-dihydro-4-oxobenzo [d ]-[1,2,3]-triazin-3-ylmethyl O,O-diethyl phosphorodithioate |
| 1.3                            | Trade names and names of Preparations   | Azinugec E, Cotnion- Ethyl, Gusathion A.  |
| 1.4                            | Code numbers  |   |
| 1.4.1                          | CAS number  | CAS RN [2642-71-9]  |
| 1.4.2                          | Harmonized System customs code  |   |
| 1.4.3                          | Other numbers (specify the numbering system)  | EEC no. 220-147-6   |
| 1.5                            | Indication regarding previous notification on this chemical, if any   |   |
| 1.5.1                          | <input checked="" type="checkbox"/> This is a first time notification of final regulatory action on this chemical   |   |
| 1.5.2                          | <input type="checkbox"/> This is a modification of a previous notification of final regulatory action on this chemical.<br>The sections modified are: _____ |   |
|                                | <input type="checkbox"/> This notification replaces all previously submitted notifications on this chemical.  |   |
|                                | Date of issue of the previous notification: _____   |   |

**PLEASE RETURN THE COMPLETED FORM TO:**

Interim Secretariat for the Rotterdam Convention  
Plant Protection Service  
Plant Production and Protection Division, FAO  
Viale delle Terme di Caracalla  
00100 Rome, Italy

Tel: (+39 06) 5705 3441  
Fax: (+39 06) 5705 6347  
E-mail: pic@fao.org

OR

Interim Secretariat for the Rotterdam Convention  
UNEP Chemicals

11 - 13, Chemin des Anémones  
CH - 1219 Châtelaine, Geneva, Switzerland

Tel: (+4122) 917 8183  
Fax: (+4122) 797 3460  
E-mail: pic@unep.ch

| 1.6 Information on hazard classification where the chemical is subject to classification requirements |                      |
|---|----------------------|
| International classification systems  | Hazard class         |
| WHO (Technical product)   | Ib                   |
|   |                      |
|   |                      |
|   |                      |
| Other classification systems  | Hazard class         |
| EPA (formulation)   | I                    |
|   |                      |
| EC risk   | T+ (R 28) ; T (R 24) |
|   |                      |
|   |                      |

| 1.7 Use or uses of the chemical |   |
|---------------------------------|---|
| 1.7.1                           | <input checked="" type="checkbox"/> Pesticide   |
|                                 | Describe the uses of the chemical as a pesticide in your country:<br><br>Insecticide, used for control of thrips and aphids in cotton; thrips, armyworm and rose beetle in maize; and armyworm in sorghum. Apply azinphos-ethyl, 20-40 ml. in 20 litres of water, by spraying, PHI 10 days. |
| 1.7.2                           | <input type="checkbox"/> Industrial   |
|                                 | Describe the industrial uses of the chemical in your country:   |

| 1.8 Properties |   |
|----------------|---|
| 1.8.1          | Description of physico-chemical properties of the chemical  |
|                | Molecular weight : 345.4. Molecular formula : C <sub>12</sub> H <sub>16</sub> N <sub>3</sub> O <sub>3</sub> PS <sub>2</sub> . Form : colourless needles. Melting point : 50°C. Boiling point : 147°C/1.3 Pa. Vapour pressure : 0.32 mPa ( 20°C ). K <sub>ow</sub> : log P = 3.18. Specific gravity/density : 1.284 (20°C). Solubility in water 4-5 mg/l (20°C), highly soluble in dichloromethane and toluene. Stability : Rapidly hydrolysed in alkaline media, relatively stable in acidic media. DT <sub>50</sub> (22°C), 3 h (pH 4), 270 days (pH 7), 11 days (pH). |

|       |  |
|-------|--|
| 1.8.2 | <p>Description of toxicological properties of the chemical</p> <p>Acute oral LD<sub>50</sub> for rats 12 mg/kg. Skin and eye : acute percutaneous LD<sub>50</sub> (24 h) for rats 500 mg/kg. Not irritating to skin and eyes of rabbits. Inhalation LC<sub>50</sub> (4 h) for rats 0.15 mg/l air. NOEL (2 Y) for rats = 2, dogs = 0.1, mice = 1.4 mg/kg diets, monkeys 0.02 mg/kg b.w. No. ADI (JMPR, 1973).</p> |
| 1.8.3 | <p>Description of ecotoxicological properties of the chemical</p> <p>Birds acute oral LD<sub>50</sub> for Japanese quail 12.5 - 20 mg/kg. Fish LC<sub>50</sub> (96 h) for golden orfe 0.03, rainbow trout 0.08 mg/l. Not toxic to bees. Daphnia LC<sub>50</sub> (48 h) 0.0002 mg/l.</p>  |

**PART II: FINAL REGULATORY ACTION**

|       |  |
|-------|--|
| 2.    | <b>FINAL REGULATORY ACTION</b>   |
| 2.1   | The chemical is: <input checked="" type="checkbox"/> banned OR <input type="checkbox"/> severely restricted  |
| 2.2   | Information specific to the final regulatory action  |
| 2.2.1 | <p>Summary of the final regulatory action</p> <p>Banned for import, production, having in possession and use as an agricultural pesticide.</p>   |
| 2.2.2 | <p>Reference to the regulatory document</p> <p>Notification of Ministry of Industry dated 20 March 2000, published in the Royal Gazette volume no. 117, section 43 Ng, dated 8 May 2000.</p> |
| 2.2.3 | <p>Date of entry into force of the final regulatory action</p> <p>9 May 2000.</p>  |

|     |   |   |
|-----|---|---|
| 2.3 | Was the final regulatory action based on a risk or hazard evaluation?   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
|     | <p data-bbox="225 232 1216 273">If yes, give information on such evaluation</p> <p data-bbox="279 367 1053 407">The acute oral LD<sub>50</sub>= 12 mg/kg is very high risk to humans.</p>                                 |   |
|     | <p data-bbox="225 600 1216 640">Reference to the relevant documentation</p> <p data-bbox="288 667 1361 743">The WHO Recommended Classification of Pesticides by Hazard and Guidelines to Classification, 1996 – 1997.</p> |   |

|       |  |   |
|-------|--|---|
| 2.4   | Reasons for the final- regulatory action   |   |
| 2.4.1 | Is the reason for the final regulatory action relevant to the human health?  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
|       | <p data-bbox="225 983 1216 1059">If yes, give summary of the known hazards and risks presented by the chemical to human health, including the health of consumers and workers</p> <p data-bbox="272 1126 1320 1202">Very high acute toxicity, extremely hazardous and risk to workers in formulation plant and during apply by spraying.</p> |   |
|       | <p data-bbox="225 1518 1216 1559">Reference to the relevant documentation</p> <p data-bbox="272 1626 1345 1702">The WHO Recommended Classification of Pesticides by Hazard and Guidelines to Classification, 1996 – 1997.</p>  |   |
|       | <p data-bbox="225 1816 1216 1856">Expected effect of the final regulatory action</p> <p data-bbox="279 1924 1006 1964">No poisoning case caused by azinphos-ethyl is reported.</p>   |   |

|       |  |   |
|-------|--|---|
| 2.5.2 | Final regulatory action has been taken for the chemical category   | <input checked="" type="checkbox"/> Pesticide |
|       | Formulation(s) and use or uses prohibited by the final regulatory action<br><br>All formulations and use were prohibited by the final regulatory action. |   |
|       | Formulation(s) and use or uses that remain allowed<br><br>None   |   |

| 2.5.3 Estimated quantity of the chemical produced, imported, exported and used, where available. |                        |                             |
|--|------------------------|-----------------------------|
|  | Quantity per year (MT) | Year                        |
| Produced   |                        |                             |
| Imported   | 5.76                   | 1997 (Final year of import) |
| Exported   |                        |                             |
| Used   |                        |                             |

|     |  |
|-----|--|
| 2.6 | Indication, to the extent possible, of the likely relevance of the final regulatory action to other states and regions |
|     |  |

|  |   |
|--|---|
| 2.7 Other relevant information that may cover: |   |
| 2.7.1  | Assessment of socio-economic effects of the final regulatory action |
|  |   |

|       |  |   |
|-------|--|---|
| 2.4.2 | Is the reason for the final regulatory action relevant to the environment? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
|       | If yes, give summary of the known hazards and risks to the environment     |   |
|       | Reference to the relevant documentation                                    |   |
|       | Expected effect of the final regulatory action                             |   |

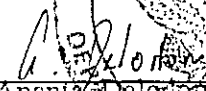
|   |  |                                     |
|---|--|-------------------------------------|
| 2.5 Category or categories where the final regulatory action has been taken |  |                                     |
| 2.5.1   | Final regulatory action has been taken for the chemical category | <input type="checkbox"/> Industrial |
|   | Use or uses prohibited by the final regulatory action            |                                     |
|   | Use or uses that remain allowed                                  |                                     |

|       |   |
|-------|---|
| 2.7.2 | <b>Information on alternatives and their relative risks</b><br><br>Alternatives are endosulfan ( $LD_{50} = 80$ ) and carbaryl ( $LD_{50} = 300$ ). |
| 2.7.3 | <b>Relevant additional information</b>  |

### PART III : GOVERNMENT AUTHORITIES

| Ministry/Department and authority responsible for issuing/enforcing the final regulatory action |   |
|---|---|
| Institution   | Department of Agriculture                                 |
| Address   | 50 Phaholyotin Rd., Chatuchak,<br>Bangkok 10900 Thailand. |
| Telephone   | 66 - 2 - 5790586  |
| Telefax   | 66 - 2 - 5615024  |
| E-mail address  | anantad@doa.go.th   |
| Designated National Authority   |   |
| Institution   | Department of Agriculture                                 |
| Address   | 50 Phaholyotin Rd., Chatuchak,<br>Bangkok 10900 Thailand. |
| Name of person in charge  | Dr. Ananta Dalodom.                                       |
| Position of person in charge  | Director - General  |
| Telephone   | 66 - 2 - 5790586  |
| Telefax   | 66 - 2 - 5615024  |
| E-mail address  | anantad@doa.go.th   |

Date, signature of DNA and official seal: 

  
 Mr. Ananta Dalodom  
 Director - General

