SECTION 1 - IDENTIFICATION

Product Name: OXAMYL 95 TC
Active Ingredients: Oxamyl
Synonym: N,N-dimethyl-2-methylcarbamoyloxyimino-2-(methylthio)acetamide
Recommended use and restrictions on use: Insecticide
Company Identification: PT Inti Everspring Indonesia
Wisma UIC 4th floor, JL. Gatot Subroto Kav. 6-7
Jakarta 12930, Indonesia
Tel. 62-21-57905245 ; Fax. 62-21-57905244

SECTION 2 - HAZARDS IDENTIFICATION

GHS Classification:
- Acute Toxicity (Oral) Category 1
- Acute Toxicity (Dermal) Category 5
- Acute Toxicity (Inhalation) Category 2
- Specific Target Organ Toxicity (Single Exposure) Category 1
- Specific Target Organ Toxicity (Repeated Exposure) Category 1
- Acute Aquatic Toxicity Category 1
- Chronic Aquatic Toxicity Category 3

GHS Labelling:
- Symbol(s):
  - Danger
  - Fatal if swallowed
  - May be harmful in contact with skin
  - Fatal if inhaled
  - Causes damage organs (neurology system)
  - Causes damage organs (neurology and vascular system) through prolonged or repeated exposure
  - Very toxic to aquatic life
  - Harmful to aquatic life with long lasting effects

Precautionary Statements:
- Prevention:
  - Do not breathe dust/fume/gas/mist/vapours/spray
  - Wash thoroughly after handling
  - Do not eat, drink, or smoke when using this product
  - Use only outdoors or in well ventilated area
  - Avoid release to the environment
  - (In case of inadequate ventilation) wear respiratory protection
**SAFETY DATA SHEET**

**Precautionary Statements**

**Respons**
- P301+P310 IF SWALLOWED: immediately call a poison center/doctor
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
- P308+P311 IF exposed or concerned: call a poison center/doctor
- P310 Immediately call a poison center/doctor
- P312 Call a poison center/doctor if you fell unwell
- P314 Get medical advice/attention if you fell unwell
- P320 Specific treatment is urgent (see on this label)
- P321 Specific treatment (see on this label)
- P330 Rinse mouth
- P391 Collect spillage

**Storage**
- P405 Store locked up
- P403+P233 Store in well ventilated place. Keep container tightly closed.

**Disposal**
- P501 Dispose of contents/container in accordance with local regulations / regional / national / international

**Other Hazard**

### SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS NO</th>
<th>CONCENTRATION (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N,N-dimethyl-2-methylcarbamoyloxyimino-2-[(methylthio)acetamide</td>
<td>23135-22-0</td>
<td>95</td>
</tr>
</tbody>
</table>

### SECTION 4 - FIRST-AID MEASURES

**Eye**
- If concentrate is splashed in eyes, flush with running water for at least 15 minutes. Take to hospital without delay.

**Skin**
- If spilt on the skin, remove contaminated clothing and wash affected areas of skin immediately. DO NOT Scrub the skin. Remove and wash contaminated clothing before re-use.

**Ingestion**
- If swallowed DO NOT induce vomiting. For advice, contact the National Poisons Centre or a doctor immediately.

**Inhalation**
- If inhaled, remove from exposure and have patient lie down and keep quiet. If patient is not breathing, start artificial respiration immediately. Never give anything by mouth to an unconscious person. Call a physician if necessary.

### SECTION 5 - FIRE FIGHTING MEASURES

**General Information**
- Firefighters must consider the nature of the product and use the poison face shields, full breathing apparatus and flame resistant clothing

**Extinguishing Media**
- Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Do not use high volume water jet.

**Specific Hazard of Fire**
- CO₂, NO₂, SO₂

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

Use Personal protective equipment.
Prevent product from entering drains or water courses.
Shovel or sweep up spills. Never return to container for reuse. Scoop into bags or boxes using plastic...
or aluminium shovel. Wash contaminated surfaces to remove any residues. Neutralise with solid sodium hydroxide at rate of 1 kg per 5 litres. Contaminated extinguishing water must be disposed of in accordance with official regulations.

**SECTION 7 - HANDLING AND STORAGE**

Handling: Do not breathe vapour or mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Wash clothing after use. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material. This product must be under the control of an approved handler at all times. This product must be tracked.

Storage: Do not store near sources of sparks, flame or heat. Keep under lock and keep out of reach of unauthorised persons, children and animals. Store in its original labeled container in isolated, dry, cool and well-ventilated area. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

**SECTION 8 - EXPOSURE CONTROL / PERSONAL PROTECTION**

Engineering control: Use only with adequate ventilation

Threshold Limit Value: 0.32 mg/m³ – 8 hr (Slight symptoms of cholinesterase activity inhibition – rat AEGLs, EPA 2000)

Personal Protective Equipment

Eye Protection: Safety goggles and protective eye

Gloves: Chemical resistant gloves

Clothing Protection: Long-sleeved clothing and long sleeve pants, shoes and socks, chemical-resistant headgear mask

Respiratory Protection: Mask, in case of inadequate ventilation wear respiratory protection that recommended by NIOSH

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

1. Physical Appearance: Powder
2. Color: White
3. Odor: Pungent/acrid (garlic-like)
4. Odor Threshold: Not available
5. pH (1%): Not available
6. Melting Point: 100-102 °C
7. Freezing Point: Not available
8. Boiling Point: Not available
9. Flash Point: Not available
10. The rate of Evaporation: Not available
11. Flammability: Not available
12. Upper/lower flammability: Not available
13. Vapour Pressure: 0.051 mPa (25°C)
14. Molecular weight: 219.26
15. Decomposition temperature: Not available
16. Autoignition temperature: Not available
17. Viscosity: Not available
18. Pour Density: 0.33 g/ml at 20°C
19. Tap Density: 0.54 g/ml at 20°C
20. Water Solubility: 280 g/l at 25 °C

**SECTION 10 - STABILITY AND REACTIVITY**

Reactivity: Corrosive effects to metal
Stability: Decomposes under alkaline conditions or in presence of moisture. Sensitive to heat and light.

Hazardous Reaction under Specific Condition: Not available

Condition to Avoid: Heat, sparks, or open flame.

Incompatible material to avoid: strong acids or bases (slowly hydrolyzes)

Hazardous Product of Decomposition: No hazardous decomposition products if stored and handled as prescribed/indicated

Hazardous Polymerization: Will not occur

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity (oral) LD₅₀: 5 mg/kg body weight (JRF Study Number: 401-1-01-16863)
- An acute oral LD50 of 5 mg/kg of body weight was calculated for female rats gave oral doses of oxamyl (97.03% ± 0.07% w/w a.i.). Clinical signs that were observed included chromodacryorrhea and tremor (JRF Study Number: 401-1-01-16863).

Acute Toxicity (dermal) LD₅₀: >2000 mg/kg body weight (JRF Study Number: 403-1-01-16864)

Acute Toxicity (inhalation) LC₅₀: 0.056 mg/l Rat (4 hours) (FAO, 2008)

Subchronic toxicity (90 days) - Technical Material: Repeated oral doses of 2.4 mg/kg of oxamyl given 5 days/week for 2 weeks caused the animals also had slight body weight decreases, exhibited salivation and slight pallor. The animals also exhibited typical anticholinesterase symptoms such as fasciculations and salivation soiled fur, lacrimation, salivation, slow righting reflex, abnormal gait, tremors, impaired locomotion, no response to tail pinch, increased limb splay, incoordination, labored breathing, decreased forelimb and hind limb grip strength (EPA, 2004).

Chronic Toxicity (2 years) -Technical Material: Not available

Mutagenicity in germ cells: No mutagenicity (JRF Study Number: 481-1-06-16877)

Carcinogenicity: No carcinogenic activity

Eye Irritation: Not classified as an eye irritant (JRF Study Number: 407-1-01-16866)

Skin Irritation: Not classified as a skin irritant (JRF Study Number: 406-1-01-16865)

Skin Sensitizer: Not a skin sensitizer (guinea pigs) (JRF Study Number: 408-1-01-16867)

SECTION 12 - ECOLOGICAL INFORMATION

Acute Toxicity

Fish - Zebra fish (LC₅₀ 96 h) : 12.40 mg/l (JRF Study Number: 526-3-07-16870)
- Zebra fish (NOEC) : 4.70 mg/l (JRF Study Number: 526-3-07-16870)

Daphnia - Daphnia magna (EC₅₀ 48 h) : 0.90 mg/l (JRF Study Number: 502-3-07-16869)
- Daphnia magna (NOEC) : 0.20 mg/l (JRF Study Number: 502-3-07-16869)

Algae - Green algae (EC₅₀ 96 h) : 0.24 mg/l (JRF Study Number: 501-3-07-16868)
- Green algae (NOEC) : 0.03 mg/l (JRF Study Number: 501-3-07-16868)

Bird - Japanese quail (LD₅₀) : 11.49 mg/kg (JRF Study Number: 516-3-08-16871)

Bees - Apis mellifera (oral) (LD₅₀ 48 h) : 0.04 µg/bee (JRF Study Number: 523-3-08-16873)
- Apis mellifera (contact) (LD₅₀ 48 h) : 0.33 µg/bee (JRF Study Number: 524-3-08-16874)
Worms - *Eisenia fetida* (LC50 14 d) : 131.68 mg/kg (JRF Study Number: 521-3-08-16872)

- *Eisenia fetida* (NOEC 14 d) : 70.00 mg/kg (JRF Study Number: 521-3-08-16872)

Bio accumulation : Low potential to bio-concentrate.

Persistence and degradation by environment : In the soil, oxamyl degrades rapidly with a half-life of 2 to 4 weeks under aerobic conditions and less than 1 week under anaerobic conditions. Not persistent in soil or water.

Soil Mobility : Mobility increased as the amount of organic matter decreased in the soil.

Others adverse effect : Not available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Disposal, storage or cleaning equipment should not be used to contaminate food, animal feed or water. Read extermination instructions listed on the product label. Products are very toxic to aquatic life (short-term) and harmful to aquatic life with long lasting effects. Do not contaminate domestic water or other water sources.

Disposal Containers / Packaging: Destroy empty container and dispose of / destroyed in accordance with local regulations. Never use second-hand containers for any purpose.

**SECTION 14 - TRANSPORT INFORMATION**

**DOT (US)**

Proper shipping name : CARBAMATE PESTICIDE, SOLID, TOXIC (Oxamyl Technical)

Class Danger Transport : 6.1

UN Number : UN 2757

Packing Group : I

**IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)**

UN Number : UN 2757

Class and Packing group : 6.1 and I

Proper shipping name : CARBAMATE PESTICIDE, SOLID, TOXIC (Oxamyl Technical)

Marine Pollutant : Yes (Oxamyl)

**IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)**

UN Number : UN 2757

Class and Packing group : 6.1 and I

Proper shipping name : CARBAMATE PESTICIDE, SOLID, TOXIC (Oxamyl Technical)

**SECTION 15 - REGULATORY INFORMATION**

Safety Data Sheet / Safety Data Sheet meets the regulations:

1. Regulation of the Minister of Industry of the Republic of Indonesian number 23 / M-INDPER / 4/2013


3. GHS Building Blocks Seventh revised edition

**SECTION 16 - OTHER INFORMATION**

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

**Reference:**

1. Building Blocks Seventh revised edition of the GHS

2. Regulation of the Minister of Industry of the Republic of Indonesian number 23 / M-INDPER/4/2013
3. Toxicity Data of Salim Agrochemical Group’s Product
4. FAO Specifications and Evaluations for Oxamyl. 2008