SAFETY DATA SHEET

OXAMYL 95 TC

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 : Insectiside

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) :

Signal Word : Danger

Hazard statements
H300   Fatal if swallowed
H313   May be harmful in contact with skin
H330   Fatal if inhaled
H370   Causes damage organs (neurology system)
H372   Causes damage organs (neurology and vascular system) through prolonged or repeated exposure
H400   Very toxic to aquatic life
H412   Harmful to aquatic life with long lasting effects

Precautionary Statements Prevention
P260   Do not breathe dust/fume/gas/mist/vapours/spray
P264   Wash thoroughly after handling
P270   Do not eat, drink, or smoke when using this product
P271   Use only outdoors or in well ventilated area
P273   Avoid release to the environment
P284   (In case of inadequate ventilation) wear respiratory protection

SDS No : SDS - 002B
Revision : 4
Date of Issue : March 08th, 2019
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

Precautionary Statements

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

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: COx, NOx, SOx

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Physical Appearance</td>
<td>Powder</td>
</tr>
<tr>
<td>2 Color</td>
<td>White</td>
</tr>
<tr>
<td>3 Odor</td>
<td>Pungent/acrid (garlic-like)</td>
</tr>
<tr>
<td>4 Odor Threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>5 pH (1%)</td>
<td>Not available</td>
</tr>
<tr>
<td>6 Melting Point</td>
<td>100-102 °C</td>
</tr>
<tr>
<td>7 Freezing Point</td>
<td>Not available</td>
</tr>
<tr>
<td>8 Boiling Point</td>
<td>Not available</td>
</tr>
<tr>
<td>9 Flash Point</td>
<td>Not available</td>
</tr>
<tr>
<td>10 The rate of Evaporation</td>
<td>Not available</td>
</tr>
<tr>
<td>11 Flammability</td>
<td>Not available</td>
</tr>
<tr>
<td>12 Upper/lower flammability</td>
<td>Not available</td>
</tr>
<tr>
<td>13 Vapour Pressure</td>
<td>0.051 mPa (25°C)</td>
</tr>
<tr>
<td>14 Molecular weight</td>
<td>219.26</td>
</tr>
<tr>
<td>15 Decomposition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>16 Autoignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>17 Viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>18 Bulk Density</td>
<td>Not available</td>
</tr>
<tr>
<td>19 Density relative</td>
<td>1.2g/cm³</td>
</tr>
<tr>
<td>20 Water Solubility</td>
<td>280 g/l at 25 °C</td>
</tr>
<tr>
<td>21 Koefisien partition : n-octanol/water</td>
<td>Not available</td>
</tr>
</tbody>
</table>

### 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) LD$_{50}$ : 2.5 mg/kg Rat (FAO, 2008)
An acute oral LD50 of 2.5 mg/kg of body weight was calculated for female rats and 3.1 mg/kg for male rats gave oral doses of oxamyl (90% a.i.). Clinical signs that were observed included heavy breathing, fasciculation, salivation and lacrimation (EPA, 2004)

Acute Toxicity (dermal) LD$_{50}$ : >2000 mg/kg Rat (FAO, 2008)

Acute Toxicity (inhalation) LC$_{50}$ : 0.056 mg/l Rat (4 hours) (FAO, 2008)
Subchronic toxicity (90 days) - Technical Material
Repetead 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
Carcinogenicity : No carcinogenic activity
Eye Irritation : Not irritating
Skin Irritation : Not irritating

SECTION 12 - ECOLOGICAL INFORMATION

Acute Toxicity
Fish - Rainbow trout(LC$_{50}$ 96 h) : 4.2 mg/l (Pesticide Manual, 2009)
Daphnia - Daphnia (LC$_{50}$ 48 h) : 0.319 mg/l (Pesticide Manual, 2009)
Daphnia - Daphnia (NOEC 21 d) : 0.77 (FAO, 2008)
Algae - Green algae (EC$_{50}$ 96 h) : 3.3 mg/l (Pesticide Manual, 2009)
Bird - Mallard Duck (LD$_{50}$) : 3.83 mg/kg (Pesticide Manual, 2009)
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
7. EPA. Acute Exposure Guideline Levels (AEGLs for Oxamyl). 2009.