

MATERIAL SAFETY DATA SHEET  
5-CARBETHOXY-2-THIOURACIL 99%

**Section 1 - Chemical Product and Company Identification**

**MSDS Name:** 5-CARBETHOXY-2-THIOURACIL 99%  
**Catalog Numbers:** 10.23  
**Synonyms:** Ethyl 2-thiouracil-5-carboxylate  
**Company Identification:** Tau-Chem, Ltd.  
Nobelova 34, P.O. Box 29  
836 05 Bratislava, Slovak Republic  
Phone: +421 2 44 452 252 Fax: +421 2 44 457 645

Relevant identified uses of substance or mixture and uses advised against  
Identified uses Laboratory chemicals, Manufacture of substances

**POISON CENTER:** National Toxicological Information Centre  
Limbová 5, 833 05 Bratislava,

**Emergency Numbers Slovakia:** Phone: +421 2 54 774 166 Fax: +421 2 54 774 605

**Section 2 – Hazards Identification**

**Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**

Not a dangerous substance according to GHS.

**According to European Directive 67/548/EEC as amended**

This substance is not classified as dangerous according to Directive 67/548/EEC.

**Labeling according to Regulation (EC) No 1272/2008 [CLP]**

**Label elements**

This product does not need to be labeled in accordance with EC directives or respective national laws.

**Other hazards** None.

**Section 3 - Composition, Information on Ingredients**

| CAS#       | Chemical Name:            | %  | EINECS#   |
|------------|---------------------------|----|-----------|
| 38026-46-9 | 5-CARBETHOXY-2-THIOURACIL | 99 | 253-749-2 |

**Classification** This substance is not classified as dangerous according to Directive 67/548/EEC.

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### Section 4 - First Aid Measures

|                                 |  |
|---------------------------------|--|
| <b>General advice:</b>          | Consult a physician. Show this safety data sheet to the doctor in attendance.                                  |
| <b>If inhaled:</b>              | If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician. |
| <b>In case of skin contact:</b> | Wash off with soap and plenty of water. Consult a physician.   |
| <b>In case eye contact:</b>     | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.                         |
| <b>If swallowed:</b>            | Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.            |

#### Section 5 - Fire Fighting Measures

|  |   |
|--|---|
| <b>Suitable extinguishing media:</b>                   | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.          |
| <b>Special protective equipment for fire-fighters:</b> | Wear self contained apparatus breathing apparatus for fire fighting if necessary. |

#### Section 6 - Accidental Release Measures

|   |  |
|---|--|
| <b>Personal precautions:</b>                                  | Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Avoid breathing dust.       |
| <b>Environmental precautions:</b>                             | Do not let product enter drains.   |
| <b>Methods and materials for containment and cleaning up:</b> | Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. |

#### Section 7 - Handling and Storage

|                                       |  |
|---------------------------------------|--|
| <b>Precautions for safe handling:</b> | Avoid formation of dust. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection. |
| <b>Conditions for safe storage:</b>   | Store in cool place. Keep container tightly closed in a dry and well-ventilated place.   |

#### Section 8 - Exposure Controls, Personal Protection

|                                       |   |
|---------------------------------------|---|
| <b>Personal protective equipment:</b> |   |
| <b>Respiratory protection:</b>        | Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).   |
| <b>Hand protection</b>                | Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.<br>The selected protective gloves have to satisfy the specifications of EU Directive |

89/686/EEC and the standard EN 374 derived from it.

|                                  |   |
|----------------------------------|---|
| <b>Eye protection:</b>           | Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).  |
| <b>Skin and body protection:</b> | Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. |
| <b>Hygiene measures:</b>         | Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.  |

## Section 9 - Physical and Chemical Properties

### Appearance

|        |                              |
|--------|------------------------------|
| Form:  | Fine crystalline powder      |
| Color: | Yellowish to slightly orange |

### Safety data:

|                          |   |
|--------------------------|---|
| pH                       | Not available   |
| Boiling Point:           | Not available   |
| Melting Point:           | 249-255 °C (dec.)(lit.)                                       |
| Flash Point:             | Not available   |
| Ignition temperature:    | Not available   |
| Explosion Limits: Lower: | Not available   |
| Explosion Limits: Upper: | Not available   |
| Solubility in water:     | Soluble   |
| Density:                 | Not available   |
| Refractive Index:        | Not available   |
| Molecular Formula:       | C <sub>7</sub> H <sub>8</sub> N <sub>2</sub> O <sub>3</sub> S |
| Molecular Weight:        | 200.22 g/mol  |

## Section 10 - Stability and Reactivity

|   |  |
|---|--|
| <b>Chemical Stability:</b>              | Stabile under recommended storage conditions.  |
| <b>Conditions to Avoid:</b>             | No data available.   |
| <b>Materials to avoid:</b>              | Strong oxidizing agents.   |
| <b>Hazardous Decomposition Products</b> | Hazardous decomposition products under fire conditions.<br>– Carbon oxides, Nitrogen oxides, Sulphur oxides. |

## Section 11 - Toxicological Information

|  |                   |
|--|-------------------|
| <b>Acute toxicity</b>                    | No data available |
| <b>Skin corrosion/irritation</b>         | No data available |
| <b>Serious eye damage/eye irritation</b> | No data available |
| <b>Respiratory or skin sensitization</b> | No data available |
| <b>Germ cell mutagenicity</b>            | No data available |

**Carcinogenicity:**

IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

|   |  |
|---|--|
| <b>Reproductive toxicity:</b>                             | No data available                        |
| <b>Specific target organ toxicity – single exposure</b>   | No data available                        |
| <b>Specific target organ toxicity – repeated exposure</b> | No data available                        |
| <b>Aspiration hazard</b>                                  | No data available                        |
| <b>Potential health effect:</b>                           |  |
| <b>Inhalation</b>   | May be harmful if inhaled.               |
| <b>Ingestion</b>  | May be harmful if swallowed.             |
| <b>Skin</b>   | May be harmful if absorbed through skin. |
| <b>Eyes</b>   | May cause eye irritation                 |

**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

**Additional Information**

RTECS: UV7775000

## Section 12 – Ecological Information

|                                      |                   |
|--------------------------------------|-------------------|
| <b>Toxicity:</b>                     | No data available |
| <b>Persistence and degradability</b> | No data available |
| <b>Bioaccumulative potential</b>     | No data available |
| <b>Mobility in soil</b>              | No data available |
| <b>PBT and vPvB assessment</b>       | No data available |
| <b>Other adverse effects</b>         | No data available |

## Section 13 - Disposal Considerations

|                               |  |
|-------------------------------|--|
| <b>Product</b>                | Offer surplus and non-recyclable solutions to a licensed disposal company. |
| <b>Contaminated packaging</b> | Dispose of as unused product.  |

## Section 14 - Transport Information

|                       | IATA                | IMDG                | RID/ADR             |
|-----------------------|---------------------|---------------------|---------------------|
| <b>Shipping Name:</b> | Not dangerous goods | Not dangerous goods | Not dangerous goods |
| <b>Hazard Class:</b>  |                     |                     |                     |
| <b>UN Number:</b>     |                     |                     |                     |
| <b>Packing Group:</b> |                     |                     |                     |

## Section 15 - Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

This product does not need to be labeled in accordance with EC directives or respective national laws.

## Section 16 - Other Information

### Text of H-code(s) and R-phrase(s) mentioned in Section 3

**MSDS Creation Date:** 30/09/2011

**Revision #0 Date:** Original

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

**Disclaimer:**

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.