



## SAFETY DATA SHEET

### 1. Identification

|   |  |
|---|--|
| <b>Product identifier</b>   | Magnosphere MS160/Tosyl  |
| <b>Product code</b>   | J-MS-S160T   |
| <b>Recommended use</b>  | Industrial products  |
| <b>Recommended restrictions</b>                                     | None known.  |
| <b>Manufacturer / Importer / Supplier / Distributor information</b> |  |
| <b>Supplier</b>   | MBL International Corporation<br>15A Constitution Way, Woburn, MA 01801, USA |
| <b>Telephone number</b>   | +1-800-200-5459, option 3  |
| <b>Fax</b>  | +1-781-939-6963  |
| <b>E-mail</b>   | tech@mblintl.com   |
| <b>URL</b>  | <a href="http://www.mblintl.com/">http://www.mblintl.com/</a>                |
| <b>Contact person</b>   | Technical Service  |

### 2. Hazard(s) identification

|  |  |
|--|--|
| <b>Physical hazards</b>                          | Not classified.  |
| <b>Health hazards</b>                            | Not classified.  |
| <b>OSHA hazard(s)</b>                            | Not classified.  |
| <b>Label elements</b>                            |  |
| <b>Hazard symbol</b>                             | None.  |
| <b>Signal word</b>                               | None.  |
| <b>Hazard statement</b>                          | None.  |
| <b>Precautionary statement</b>                   |  |
| <b>Prevention</b>                                | Observe good industrial hygiene practices.                                     |
| <b>Response</b>                                  | Wash hands after handling.   |
| <b>Storage</b>                                   | Store away from incompatible materials.  |
| <b>Disposal</b>                                  | Dispose of waste and residues in accordance with local authority requirements. |
| <b>Hazard(s) not otherwise classified (HNOC)</b> | None.  |

### 3. Composition/Information on ingredients

#### Mixtures

| Chemical name                 | CAS number | %     |
|-------------------------------|------------|-------|
| Iron oxide                    | 1309-38-2  | <1    |
| 2-Methyl-4-isothiazolin-3-one | 2682-20-4  | < 0.1 |

|                             |  |
|-----------------------------|--|
| <b>Composition comments</b> | All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. |
|-----------------------------|--|

### 4. First-aid measures

|  |   |
|--|---|
| <b>Inhalation</b>  | Under normal conditions of intended use, this material is not expected to be an inhalation hazard.                            |
| <b>Skin contact</b>  | Remove contaminated clothing. Dry skin with paper towel or similar. Get medical attention if irritation develops or persists. |
| <b>Eye contact</b>   | Rinse immediately with plenty of water, also under the eyelids. Get medical attention if irritation develops or persists.     |
| <b>Ingestion</b>   | Drink plenty of water. Get medical attention if any discomfort occurs.  |
| <b>Most important symptoms/ effects, acute and delayed</b> | May cause irritation on skin or eye contact.  |

|   |   |
|---|---|
| <b>Indication of immediate medical attention and special treatment needed</b> | Treat symptomatically.                            |
| <b>General information</b>  | Get medical attention if any discomfort develops. |

## 5. Fire-fighting measures

|  |   |
|--|---|
| <b>Suitable extinguishing media</b>                                  | Use fire-extinguishing media appropriate for surrounding materials.   |
| <b>Unsuitable extinguishing media</b>                                | None known.   |
| <b>Specific hazards arising from the chemical</b>                    | None known.   |
| <b>Special protective equipment and precautions for firefighters</b> | Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire.                       |
| <b>Fire-fighting equipment/instructions</b>                          | Move containers from fire area if you can do that without risk. Use water spray to cool unopened containers. Prevent entry to sewers and public waters. |

## 6. Accidental release measures

|  |   |
|--|---|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Avoid contact with eyes and prolonged skin contact. For personal protection, see Section 8 of the SDS.          |
| <b>Methods and materials for containment and cleaning up</b>               | Absorb spillage with suitable absorbent material. After removal, flush contaminated area thoroughly with water. |
| <b>Environmental precautions</b>   | Prevent further leakage or spillage if safe to do so.   |

## 7. Handling and storage

|   |   |
|---|---|
| <b>Precautions for safe handling</b>                                | Avoid contact with eyes and prolonged skin contact. Wash hands after handling. Observe good industrial hygiene practices. |
| <b>Conditions for safe storage, including any incompatibilities</b> | Keep container tightly closed.  |

## 8. Exposure controls/personal protection

|  |   |
|--|---|
| <b>Occupational exposure limits</b>  | No exposure limits noted for ingredient(s).   |
| <b>Biological limit values</b>   | No biological exposure limits noted for the ingredient(s).  |
| <b>Exposure guidelines</b>   | No exposure standards allocated.  |
| <b>Appropriate engineering controls</b>                                      | Ventilation is not normally required.   |
| <b>Individual protection measures, such as personal protective equipment</b> |   |
| <b>Eye/face protection</b>   | Risk of splashes: Wear safety glasses with side shields.  |
| <b>Skin protection</b>   |   |
| <b>Hand protection</b>   | Risk of contact: Wear protective gloves. Nitrile or neoprene gloves are recommended. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.    |
| <b>Other</b>   | Wear appropriate clothing to prevent repeated or prolonged skin contact.  |
| <b>Respiratory protection</b>  | No special precautions. Seek advice from local supervisor.  |
| <b>Thermal hazards</b>   | Wear appropriate thermal protective clothing, when necessary.   |
| <b>General hygiene considerations</b>  | Handle in accordance with good industrial hygiene and safety practice. Wash hands after handling. Routinely wash work clothing and protective equipment to remove contaminants. |

## 9. Physical and chemical properties

|                       |                |
|-----------------------|----------------|
| <b>Appearance</b>     |                |
| <b>Physical state</b> | Liquid.        |
| <b>Form</b>           | Suspension     |
| <b>Color</b>          | Brown          |
| <b>Odor</b>           | Odorless.      |
| <b>Odor threshold</b> | Not available. |

|   |                   |
|---|-------------------|
| <b>pH</b>   | 6.8 - 7.6         |
| <b>Melting point/freezing point</b>                 | Not available.    |
| <b>Initial boiling point and boiling range</b>      | ca. 100°C (Water) |
| <b>Flash point</b>                                  | Not applicable.   |
| <b>Evaporation rate</b>                             | Not available.    |
| <b>Flammability (solid, gas)</b>                    | Not applicable.   |
| <b>Upper/lower flammability or explosive limits</b> |                   |
| <b>Flammability limit</b>                           | Not applicable.   |
| <b>- lower (%)</b>                                  |                   |
| <b>Flammability limit</b>                           | Not applicable.   |
| <b>- upper (%)</b>                                  |                   |
| <b>Vapor pressure</b>                               | Not available.    |
| <b>Vapor density</b>                                | Not available.    |
| <b>Relative density</b>                             | Not available.    |
| <b>Solubility(ies)</b>                              | Not available.    |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available.    |
| <b>Auto-ignition temperature</b>                    | Not available.    |
| <b>Decomposition temperature</b>                    | Not available.    |
| <b>Viscosity</b>                                    | Not available.    |

## 10. Stability and reactivity

|   |  |
|---|--|
| <b>Reactivity</b>                         | The product is non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Stable at normal conditions.   |
| <b>Possibility of hazardous reactions</b> | Hazardous polymerization does not occur. Hazardous reactions do not occur.         |
| <b>Conditions to avoid</b>                | Contact with incompatible materials. Elevated temperatures.                        |
| <b>Incompatible materials</b>             | Strong acid, strong basic substance and electrolyte solution.                      |
| <b>Hazardous decomposition products</b>   | None known.  |

## 11. Toxicological information

### Information on likely routes of exposure

|   |  |
|---|--|
| <b>Ingestion</b>  | May cause discomfort if swallowed.   |
| <b>Inhalation</b>   | Under normal conditions of intended use, this material is not expected to be an inhalation hazard. |
| <b>Skin contact</b>   | Prolonged contact may cause dryness of the skin.   |
| <b>Eye contact</b>  | May cause eye irritation on direct contact.  |
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | May cause irritation on skin or eye contact.   |

### Information on toxicological effects

#### Acute toxicity

| Components                                    | Species  | Test results |
|---|----------|--------------|
| 2-Methyl-4-isothiazolin-3-one (CAS 2682-20-4) |          |              |
| <b>Acute</b>                                  |          |              |
| <i>Oral</i>                                   | LD50 Rat | >5,000 mg/kg |

|  |  |
|--|--|
| <b>Skin corrosion/irritation</b>         | May cause mild skin irritation.                            |
| <b>Serious eye damage/eye irritation</b> | May cause eye irritation on direct contact.                |
| <b>Respiratory sensitization</b>         | No data available.   |
| <b>Skin sensitization</b>                | May cause sensitization by skin contact.                   |
| <b>Germ cell mutagenicity</b>            | No data available.   |
| <b>Carcinogenicity</b>                   | This product is not considered to be a carcinogen by IARC. |

|   |                    |
|---|--------------------|
| <b>Reproductive toxicity</b>                              | No data available. |
| <b>Specific target organ toxicity - single exposure</b>   | Not classified.    |
| <b>Specific target organ toxicity - repeated exposure</b> | Not classified.    |
| <b>Aspiration hazard</b>                                  | Not classified.    |

## 12. Ecological information

|   |  |  |                      |
|---|--|--|----------------------|
| <b>Ecotoxicity</b>                            | The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. |  |                      |
| <b>Components</b>                             |  | <b>Species</b>                               | <b>Test Results</b>  |
| 2-Methyl-4-isothiazolin-3-one (CAS 2682-20-4) |  |  |                      |
| <b>Aquatic</b>                                |  |  |                      |
| Crustacea                                     | LC50   | Calanoid copepod ( <i>Acartia clausi</i> )   | 0.056 mg/L, 48 hours |
| Fish  | LC50   | Rainbow trout ( <i>Oncorhynchus mykiss</i> ) | 0.07 mg/L, 96 hours  |
| <b>Persistence and degradability</b>          | No data available.   |  |                      |
| <b>Bioaccumulative potential</b>              | No data available.   |  |                      |
| <b>Mobility in soil</b>                       | Expected to be highly mobile in soil.  |  |                      |
| <b>Mobility in general</b>                    | The product is water soluble and may spread in water systems.  |  |                      |
| <b>Other adverse effects</b>                  | The environmental hazard of the product is considered to be limited.   |  |                      |

## 13. Disposal considerations

|  |   |
|--|---|
| <b>Disposal instructions</b>                 | Dispose of in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground. |
| <b>Local disposal regulations</b>            | Dispose of in accordance with local regulations.  |
| <b>Hazardous waste code</b>                  | Not regulated.  |
| <b>Waste from residues / unused products</b> | Dispose of in accordance with local regulations.  |
| <b>Contaminated packaging</b>                | Dispose of in same manner as unused product.  |

## 14. Transport information

|   |                                   |
|---|-----------------------------------|
| <b>DOT</b>  | Not regulated as dangerous goods. |
| <b>IATA</b>   | Not regulated as dangerous goods. |
| <b>IMDG</b>   | Not regulated as dangerous goods. |
| <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | Not applicable.                   |

## 15. Regulatory information

|   |  |                |
|---|--|----------------|
| <b>US federal regulations</b>   | This product is not hazardous according to OSHA 29CFR 1910.1200.<br>All components are on the U.S. EPA TSCA Inventory List.          |                |
| <b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>  |  | Not regulated. |
| <b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b> |  | Not listed.    |
| <b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>                 |  | Not listed.    |
| <b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>    |  |                |
| <b>Hazard categories</b>  | Immediate Hazard - No<br>Delayed Hazard - No<br>Fire Hazard - No<br>Pressure Hazard - No<br>Reactivity Hazard - No                   |                |
| <b>SARA 302 Extremely hazardous substance</b>                         |  | No             |
| <b>SARA 311/312 Hazardous chemical</b>                                |  | No             |
| <b>SARA 313 (TRI reporting)</b>                                       |  | Not regulated. |
| <b>US state regulations</b>   | This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. |                |

**Massachusetts RTK - Substance List**

Not regulated.

**New Jersey Worker and Community Right-to-Know Act**

Not regulated.

**Pennsylvania RTK - Hazardous Substances**

Not regulated.

**Rhode Island RTK**

Not regulated.

**California Proposition 65**

Not listed.

**International Inventories**

| <b>Country(s) or region</b>            | <b>Inventory name</b>   | <b>On inventory (yes/no)*</b> |
|--|---|-------------------------------|
| <b>Australia</b>                       | Australian Inventory of Chemical Substances (AICS)                | Yes                           |
| <b>Canada</b>                          | Domestic Substances List (DSL)                                    | Yes                           |
| <b>Canada</b>                          | Non-Domestic Substances List (NDSL)                               | No                            |
| <b>China</b>                           | Inventory of Existing Chemical Substances in China (IECSC)        | Yes                           |
| <b>Europe</b>                          | EC Inventory  | Yes                           |
| <b>Japan</b>                           | Inventory of Existing and New Chemical Substances (ENCS)          | Yes                           |
| <b>Korea</b>                           | Existing Chemicals List (ECL)                                     | Yes                           |
| <b>Philippines</b>                     | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes                           |
| <b>United States &amp; Puerto Rico</b> | Toxic Substances Control Act (TSCA) Inventory                     | Yes                           |

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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**16. Other information**

**Issue date** 01/06/2020

**Revision date** -

**Version** 10

**List of abbreviations** EC50: Effective Concentration, 50%.  
LC50: Lethal Concentration, 50%.  
LD50: Lethal Dose, 50%.

**Disclaimer** This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.