

Material Safety Data Sheet

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| SECTION 1: Product Identification | | | | | | |
|---|---|-------|-----------------|------------------|---------------------------------------|-----------------------|
| Product name | (t-Butylimido)tris(i-propoxy)niobium | | | | | |
| CAS# | NA | | | | | |
| Catalog # | 0411100 | | | | | |
| Chemical family | Organometallic derivatives | | | | | |
| | | | | | | |
| SECTION 2: Composition, Information on Ingredients | | | | | | |
| Component | | % | CAS# | EINECS # | Hazard Symbol | R-Phrase |
| (t-Butylimido)tris(i-propoxy)niobium | | | NA | none | F Xn | 10 14 20/21/22 |
| CECTION 2. II. 111 CC C | | | | | | |
| E | SECTION 3: Hazard Identification | | | | | |
| Emergency overview | Flammable liquid. Reacts with water. Harmful by inhalation, if swallowed an | | | | , if swallowed and if | |
| Eye contact | absorbed through the skin. | | | | | |
| Skin contact | May cause mild irritation of the eyes. May cause mild irritation of the skin. | | | | | |
| Inhalation | May be harmful if inhaled. May cause severe irritation of the respiratory tract. | | | | | |
| Ingestion | Harmful if swallowed. | | | | | |
| Chronic health effects | No available information about long-term effects. | | | | | |
| Company of the property of the meaning of the property of the | | | | | | |
| SECTION 4: First Aid Measures | | | | | | |
| Eye exposure | Immediately flush eyes with plenty of water for at least 15 minutes, occasionally | | | | | |
| | lifting the upper and lower eyelids. Get medical aid immediately. | | | | | |
| Skin exposure | Wash the affected area with water. Remove contaminated clothes if necessary. | | | | | |
| _ | Seek medical assistance if irritation persists. | | | | | |
| Inhalation | Remove from exposure to fresh air immediately. If not breathing, give artificial | | | | | |
| | respiration. If breathing is difficult, give oxygen. In such cases seek immediate | | | | | ases seek immediate |
| | medical assistance. | | | | | |
| Ingestion | | | _ | | and alert, give | e 2-4 cupfuls of milk |
| | or water. | jet r | nedical aid imn | nediately. | | |
| | ~ | ~ | | | | |
| | | | | ghting Measu | | |
| General information | | | | | | eathing apparatus in |
| | 1 | | | ` 1 1 | 1 / | , and full protective |
| T-4: | gear. If involved in fire material may emit toxic fumes. | | | | | |
| Extinguishing media | Don't use water. Use dry chemical or carbon dioxide. | | | | | |
| SECTION 6: Accidental Release Measures | | | | | | |
| Spill and leak | Small spil | ls ca | n be mixed wit | h vermiculite or | other suitable | inert absorbents and |
| procedures | placed in a suitable container. Ventilate area after material is removed. | | | | | |
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| | SECTION 7: Handling and Storage | | | | | |
| Handling | Avoid inhalation. Don't get in eyes, on skin or on clothing. Handle under an | | | | | |
| Handing | inert atmosphere of argon or nitrogen. | | | | | |
| Storage | Store in a cool, dry place. Keep away from heat, sparks and open flame. Avoid | | | | | |
| Storage | contact with water. Store in a tightly closed container under an inert atmosphere. | | | | | |
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| | CTION 8: Exposure Controls and Personal Protection | | | | | |
| Eye protection | Always wear approved safety glasses when handling a chemical substance in th | | | | | |
| | laboratory. | | | | | |
| Skin protection | Wear protective gloves. | | | | | |
| Ventilation | Handling material in an efficient fume hood. Work with this substance in a well- | | | | | |
| D • • | ventilated area. | | | | | |
| Respirator | Follow the OSHA respirator regulations found in 29CFR 1910.134 or Europ | | | | | |
| | Standard EN 149. Always use a NIOSH or European Standard EN 149 approved | | | | | |
| | respirator when necessary. | | | | | |
| | SECTION 9: Physical and Chemical Properties | | | | | |
| Appearance | Colourless liq. | | | | | |
| Odor | No data | | | | | |
| Melting point | No data | | | | | |
| Boiling point | No data | | | | | |
| Flash point | No data | | | | | |
| Solubility in water | Reacts with water | | | | | |
| Specific gravity | No data | | | | | |
| Molecular formula | C15H34NO3Ta | | | | | |
| Molecular weight | 457.38 | | | | | |
| | SECTION 10: Stability and Reactivity | | | | | |
| Stability | Air and moisture sensitive. | | | | | |
| Hazardous | No hazardous polymerization. | | | | | |
| polymerization | 110 hazardous porymenzation. | | | | | |
| Conditions to avoid | Contact with air, moisture and ignition sources. | | | | | |
| Incompatibilities with | Strong oxidizing agents. | | | | | |
| other materials | ~ | | | | | |
| Hazardous decompo- | Carbon monoxide, carbon dioxide, tantalum oxides, nitrogen oxides. | | | | | |
| sition products | | | | | | |
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| | SECTION 11: Toxicological Information | | | | | |
| RTECS Data | No data available. | | | | | |
| Carcinogenic effects | No data available. | | | | | |
| Mutagenic effects | No data available. | | | | | |
| Tetratogenic effects | No data available. | | | | | |
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| SECTION 12: Ecological Information | | | | | | |
| Ecological | No information available. | | | | | |
| information | | | | | | |
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SECTION 13: Disposal Considerations

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| Dispose of in a manner consistent with federal, state, and local regulations. | | | | | |
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| SECTION 14: Transport Information | | | | | |
| Shipping name (CFR) | Flammable liquid, n.o.s.* | | | | |
| Hazard class (CFR) | 3 | | | | |
| Additional hazard | NA | | | | |
| class (CFR) | | | | | |
| Packing group (CFR) | II | | | | |
| UN ID number (CFR) | 1993 | | | | |
| Shipping name | Flammable liquid, n.o.s.* | | | | |
| (IATA) | | | | | |
| Hazard class (IATA) | 3 | | | | |
| Additional hazard | NA | | | | |
| class (IATA) | | | | | |
| Packing group | | | | | |
| (IATA) | | | | | |
| UN ID number | 1993 | | | | |
| (IATA) | | | | | |
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| SECTION 15: Regulatory Information | | | | | |
| TSCA | Not listed in the TSCA inventory | | | | |
| SARA | Not reported | | | | |
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| SECTION 16: Other Information | | | | | |
| Preparation date | 03.06.10 | | | | |
| Revision date | 03.06.10 | | | | |

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