

SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: Bis(tert-butylimido) bis(dimethylamido) molybdenum

FORMULA: $C_{12}H_{30}N_4Mo$

CAS NO: 923956-62-1

MANUFACTURER:

Wonik Materials North America
N115 W19392 EDISON DRIVE
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IN CASE OF TRANSPORTATION EMERGENCY CONTACT CHEM-TREC 1-703-741-5500

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SECTION 2 HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Pictogram



Signal Word

Danger

Hazard Statements

H227	Combustible liquid
H260	In contact with water releases flammable gases which may ignite spontaneously
H314	Causes severe skin burns and eye damage

SECTION 2 HAZARDS IDENTIFICATION (Cont.)

Precautionary Statements

Bis(tert-butylimido) bis(dimethylamido) molybdenum

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P223	Keep away from any possible contact with water, because of violent reaction and possible flash fire
P231 + P232	Handle under inert gas. Protect from moisture.
P280	Wear protective gloves/protective clothing/eye protection/face protection
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P303 + P361 + P353	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction
P402 + P404	Store in a dry place. Store in a closed container.
P403 + P235	Store in a well-ventilated place. Keep cool.

HMIS RATING:

Health: 3 Flammability: 3 Physical: 2

NFPA RATING:

Health: 3 Fire: 2 Reactivity: 2 Special: W

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: C₁₂H₃₀N₄Mo

Molecular Weight: 326.34

CHEMICAL NAME	CAS#
Bis(tert-butylimido) bis(dimethylamido) molybdenum	923956-62-1

SECTION 4 FIRST AID MEASURES

EYE EXPOSURE: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

SKIN EXPOSURE: Take off contaminated clothing and shoes immediately. Wash with soap and plenty of water. Consult a physician.

INHALATION: If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.

INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5 FIREFIGHTING MEASURES

EXTINGUISHING MEDIA:

Suitable Dry powder

Unsuitable

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:

Carbon oxides, nitrogen oxides, molybdenum oxide.

ADVICE FOR FIRE FIGHTERS

Wear self-contained respirator.

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Always use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

ENVIRONMENTAL PRECAUTIONS

Bis(tert-butylimido) bis(dimethylamido) molybdenum

Prevent all further leakage or spillage. Do not let enter drains.

METHODS AND MATERIALS

Contain spillage and sweep up and place in a container for disposal according to local regulations. Do not flush with water.

SECTION 7 HANDLING AND STORAGE

PERSONNEL PRECAUTIONS

Avoid inhalation of vapor or mist. Keep away from sources of ignition. Avoid build up of electrostatic charge.

CONDITIONS FOR SAFE STORAGE

Keep container tightly closed in a dry and well-ventilated place. Never allow product to get in contact with water during storage. Air and moisture sensitive. Handle and store under inert gas.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: Use full-face respirator with multi purpose combination cartridges. Be sure that respirators are approved under government standards such as NIOSH (US) or CEN (EU).

EYE/FACE PROTECTION: Use safety glasses, tightly sealed goggles, and full-face protection.

SKIN PROTECTION: Handle with gloves. Wear complete suit protecting against chemicals. Flame retardant protective clothing. Avoid skin contact. Dispose of contaminated gloves in accordance to the laws and regulations.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: Orange Liquid

MELTING POINT/ FREEZING POINT: Not available

BOILING POINT: 60-62° C @ 0.01-0.03 Torr

DECOMPOSITION: Not available

FLASH POINT: Not available

VAPOR PRESSURE: Not available

SOLUBILITY IN WATER: Not available

ODOR: Not available

ODOR THRESHOLD: Not available

EVAPORATION RATE: Not available

SECTION 10 STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Heat, flames, and sparks. Exposure to moisture.

INCOMPATIBILITY: Acids and alcohols

DECOMPOSITION PRODUCTS: Dimethylamine, tert-Butylamine, carbon oxides, nitrogen oxides, and molybdenum oxide.

SECTION 11 TOXICOLOGICAL DATA

ACUTE TOXICITY

No data available

SECTION 11 TOXICOLOGICAL DATA (Cont.)

CARCINOGENICITY

No data available

REPRODUCTION TOXICITY

No data available

ADDITIONAL TOXICOLOGICAL INFORMATION

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

SECTION 12 ECOLOGICAL DATA

No information available

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of all product and materials according to the state, local, or national regulations.

SECTION 14 TRANSPORTATION DATA

Organometallic substance, liquid, water-reactive, flammable (Bis(tert-butylimido) bis(dimethylamido) molybdenum)

Class 4.3 (3)

UN3399

PG I

IATA and DOT Regulated

Marine Pollutant: No

SECTION 15 REGULATORY INFORMATION**SARA 302 COMPONENTS:**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 COMPONENTS:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 HAZARDS:

Fire hazard, reactivity hazard, acute health hazard

MASSACHUSETTS RIGHT TO KNOW COMPONENTS:

No components are subject to the Massachusetts Right to Know Act.

PENNSYLVANIA RIGHT TO KNOW COMPONENTS:

Bis(tert-butylimido)bis(dimethylamido)molybdenum

NEW JERSEY RIGHT TO KNOW COMPONENTS:

Bis(tert-butylimido)bis(dimethylamido)molybdenum

CALIFORNIA PROP. 65 COMPONENTS:

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16 OTHER INFORMATION

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, Wonik Materials North America makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

DATE PREPARED: 06/11

SDS DEPT