



1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Product Name: MS-3200MD, MS-3210MD, MS-3220MD, MS-3230MD, MS-3240MD, MS-3250MD, MS-3260MD, MS-3270MD

Product Meets: ISO 10993 Biocompatibility testing

MANUFACTURER/DISTRIBUTOR:

Miller-Stephenson Chemical 55 Backus Ave, Danbury, Conn. 06810 USA (203) 743-4447 Emergency Phone Number: (800) 424-9300

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture: Not classified as a hazardous substance or mixture according to Occupational Safety and Health Administration (OSHA) Hazard Communication Standard 2012.

Label elements:

Hazard Symbol: None Signal word: None Hazard Statements: None

Other hazards:

The product as such is not hazardous. The thermal decomposition vapors of fluorinated polymers may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco. Repeated episodes of polymer fume fever may result in persistent lung effects.

3. INGREDIENTS

This product does not contain any components that require disclosure according to OSHA Hazard Communication Standard 2012.

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4. FIRST AID MEASURES

General Advice: When symptoms persist or in all cases of doubt seek medical advice.

Inhalation: Remove patient to fresh air in case of accidental inhalation of fumes from overheating or combustion. Oxygen or artificial respiration if needed.

Eye: Rinse with plenty of water. If eye irritation persists, consult a specialist.

Skin: Wash skin with soap and water as a precaution.

Oral: If swallowed, DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed: No applicable data available.

Note to Physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flash Point: Does not flash

Method: Pensky-Martens Close Cup

Decomposition Temperature: 300°C

Suitable Extinguishing Media: The product itself does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: None known.

Special hazards: In fire conditions, toxic decomposition products may be formed. (See also section 10)

Special Fire Fighting Instruction: Wear self-contained breathing apparatus (SCBA). Wear suitable protective equipment.

Further information: Standard procedure for chemical fires.

6. ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel): Avoid contact with the skin and the eyes. Refer to protective measures listed in sections 7 and 8.

Environmental precautions: Prevent material from entering sewers, waterways, or low areas.

Spill Cleanup: Shovel into suitable container for disposal.

Accidental Release Measures: No applicable data available.

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7. HANDLING AND STORAGE

Handling (**Personnel**): Avoid breathing vapors from overheated material. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material. General industrial hygiene practice. Keep away from food and drink. Keep away from tobacco products. Wash hands and face before breaks and immediately after handling the product.

Handling (Physical Aspects): No applicable data available. Dust explosion class: No applicable data available.

Dust explosion class. No applicable data available.

Storage Conditions: No special storage conditions required. Keep container closed to prevent contamination. No decomposition if stored and applied as directed.

Storage period: No applicable data available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: In the event that the polymer is heated above 300°C/572°F, local ventilation should be used to avoid exposure to fumes.

Personal protective equipment/Respiratory Protection: No personal respiratory protective equipment normally required. In the case of hazardous fumes caused by overheating, wear self-contained breathing apparatus.

Hand protection: Additional protection: No particular glove type is recommended, but nitrile may be used.

Eye Protection: Safety glasses.

Skin and Body Protection: No PPE is specified, however, avoid contact with skin, eyes, and clothing. Preventative skin protection.

Exposure Guidelines/Exposure Limit Values: This product does not contain any exposure limits that require disclosure according to OSHA Hazard Communication Standard 2012.

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity:	1.89 – 1.93 at 24°C/75°F
Appearance/Physical State:	Solid
Form:	Grease
Color:	White
Odor:	None
pH:	Neutral
Melting point/freezing point:	Melting point/range 320°C/608°F
Boiling point/boiling range:	No applicable data available
Vapor pressure:	No applicable data available
Vapor density:	No applicable data available
Water solubility:	Insoluble
Partition coefficient: n-Octanol/water: No applicable data available	
Auto-ignition temperature:	No applicable data available
Decomposition temperature:	300°
Viscosity:	No applicable data available

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10. STABILITY AND REACTIVITY

Reactivity: Stable under recommended storage conditions.

Chemical Stability: Stable under normal conditions.

Possibility of hazardous Reactions: No applicable data available.

Conditions to avoid: Decomposition temperature 320°C/608°F

Incompatible Materials: No applicable data available.

Hazardous decomposition Products: Hazardous thermal decomposition products: Fluorinated compounds.

11. TOXICOLOGICAL INFORMATION

Oral ALD – Approximate Lethal Dose: > 11,000 mg/kg, Rat

Skin irritation: Slight irritation, Rabbit

Eye irritation: Slight irritation, Rabbit

Sensitization: Animal test did not cause sensitization by skin contact. Guinea pig

Further information: The product contains no substances classified as hazardous to health in concentrations which should be taken into account.

Carcinogenicity: The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

12. ECOLOGICAL INFORMATION

Environmental Fate

Biodegradability: Not readily biodegradable

Additional ecological Information: The product contains no substances classified as hazardous to the environment in concentrations which should be taken into account.

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13. DISPOSAL CONSIDERATIONS

Waste disposal methods-Product: In accordance with local and national regulations.

Contaminated packaging: Dispose of container properly. If recycling is not practicable, dispose of in compliance with local regulations.

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

15. <u>REGULATORY INFORMATION</u>

U.S. Federal Regulations

TSCA: On the inventory, or in compliance with the inventory.

16. OTHER INFORMATION

Restrictions for use: Do not use Miller-Stephenson materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided under a written contract that is consistent with our policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your Miller-Stephenson representative.

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user.