

# MATERIAL SAFETY DATA SHEET

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## SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: DRUM FOR MFX1500 (MU-3 Drum)  
Product Code: F43-1225-000  
Company Name: Murata Machinery LTD.  
136, Takeda-Mukaisiro-cho, Fushimiku, Kyoto 612 Japan  
Phone #: 81/75-662-7719  
MSDS#: DR0037-0101

## SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)

Chemical Name	CAS#	Weight %	EU Symbol	EU R-Phrase
Not applicable for drum				

Chemical Name	USA OSHA PEL	ACGIH TLV
Not applicable for drum		

Chemical Name	EU ILV	DFG MAK
Not applicable for drum		

Carcinogen	Chemical Name	CAS #	Reference
None			

Other Ingredient(s)	Chemical/Generic Name	Weight %
	Aluminum alloy	94.0 - 98.0
	Titanium dioxide (13463-67-7)	0.5 - 2.0
	Binder resin	0.5 - 2.0
	Organic semiconductor	0.3 - 0.8

## SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview: Dark yellowish green colored aluminum cylinder with no odor.

Potential Health Effects and Symptoms:  
Inhalation: Not applicable under intended use.

Ingestion: Not applicable under intended use.

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Eyes: Not applicable under intended use.  
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Skin: No corroding or irritating effect is expected at usual use as a photosensitive drum.  
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Chronic Effects: Not Identified  
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Medical Conditions Generally Known to be Aggravated by Exposure:  
Not identified  
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#### **SECTION 4 FIRST AID MEASURES**

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First Aid Measures:

Inhalation: Not applicable under intended use. If needed, get medical attention.  
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Ingestion: Not applicable under intended use. If needed, get medical attention.  
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Eye: Not applicable under intended use. Flush with plenty of water.  
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Skin: In case of contact, wash skin with water and soap.  
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Note to Physicians: None  
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#### **SECTION 5 FIRE FIGHTING MEASURES**

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Fire Fighting Measures:

Extinguishing Media: CO<sub>2</sub>, Dry Chemical, foam or water  
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Unsuitable  
Extinguishing Media: None  
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Special Fire  
Fighting Procedures: None

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Unusual Fire and  
Explosion Hazards:      None

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Fire and Explosive Properties:  
Flash Point (°C)      Not applicable

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Flammable (Explosive)  
Limits:                      Not applicable

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Autoignition  
Temperature (°C):      Not applicable

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Flammability:              Not flammable

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Autoflammability:      None

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Explosive Properties:      None

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Oxidizing Properties:      None

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Hazardous Combustion  
Products:                      CO, CO<sub>2</sub>

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Other Properties:              None

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## SECTION 6 ACCIDENTAL RELEASE MEASURES

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Personal Precautions: Not applicable under intended use.

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Environmental Precautions: Not applicable under intended use.

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Method for Cleaning Up: Not applicable under intended use.

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## SECTION 7 HANDLING AND STORAGE

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Handling: No safe handling advice.

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Storage: Keep at temperature not exceeding 45°C.

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## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

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Exposure Guidelines: None

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Engineering Controls: Not required.

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Personal Protection Equipment:

Respiratory Protection:  Required  Not required

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Eye/Face Protection:  Required  Not required

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Skin Protection  Required  Not required

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**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

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Appearance:	Dark yellowish green colored aluminum cylinder
Odor:	No odor
pH:	Not applicable
Boiling Point / Range (°C):	Not applicable
Melting Point / Range (°C):	100°C or higher
Decomposition Temperature (°C):	No data available
Flash Point (°C):	Not applicable
Flammable (Explosive) Limits:	Not applicable
Autoignition Temperature (°C):	Not applicable
Flammability:	Not flammable
Autoflammability:	None
Explosive Properties:	None
Oxidizing Properties:	None
Vapor Pressure:	Negligible
Vapor Density:	Not applicable
Density / Specific Gravity:	No data available
Water Solubility:	Negligible
Fat Solubility:	Partially soluble in ketones, esters and aromatic solvents
Partition Coefficient (N-Octanol/Water):	Not soluble in water and n-octanol
Percent Volatile:	Negligible
Evaporation Rate:	Not applicable

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## SECTION 10 STABILITY AND REACTIVITY

Stability  Stable  Unstable  
Conditions to Avoid: None

Materials to Avoid: None

Hazardous Decomposition Products: None

Hazardous Polymerization:  May Occur  Will not occur  
Conditions to Avoid: None

## SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity: Inhalation: No data available

Ingestion: Oral LD50: >200mg/Kg (rats)

Eye: No data available

Skin: No data available

Sensitization: No data available

Mutagenicity: Negative (Ames Test: Salmonella typhimurium)

Reproductive Toxicity

city: No data available

Carcinogenicity: No human carcinogen or potential carcinogen, according to IARC Monographs, NTP, OSHA (USA) regulation, California Proposition 65 and Annex I of EU Directive 67/548/EEC.

Others: None

## SECTION 12 ECOLOGICAL INFORMATION

No information indicating any adverse ecological effects.

## SECTION 13 DISPOSAL INFORMATION

Method of Disposal: Dispose under conditions which meet all federal, state, and local environmental control regulations.

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## SECTION 14 TRANSPORT INFORMATION

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UN#:	None
UN Shipping Name:	None
UN Classification:	None
UN Packing Group:	None
Special Precautions:	None

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## SECTION 15 REGULATORY INFORMATION

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### EU Information

#### Information on the Label:

Symbol & Indication: Not required

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R-Phrase: Not required

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S-Phrase: Not required

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Dangerous Component(s): None

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#### Specific Provisions in Relation to Protection of Man or the Environment:

76/769/EEC: Not regulated

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(EEC)3093/94: Not regulated

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(EEC)2455/92: Not regulated

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Others: None

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### USA Information:

#### Information on the Label

Signal Word: Not required

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Hazard Warning: Not required

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Safety Advice: Not required

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Hazardous Component(s): None

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Chemical Name	Weight %
None	

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California Proposition 65: Chemical Name	Weight %
None	

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## SECTION 16 OTHER INFORMATION

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### Literature Reference:

- U.S. Department of Labor, 29 CFR Part 1910
- U.S. Environmental Protection Agency, 40 CFR Part 372
- U.S. Consumer Product Safety Commission, 16CFR Part 1500
- ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices
- U.S. Department of Health and Human Services National Toxicology Program, annual Report on Carcinogens
- World Health Organization International Agency for Research on Cancer, IARC Monographs on the Evaluation on the Carcinogenic Risk of Chemicals to Humans
- DFG, List of MAK and BAT Values
- EU Directive 76/769/EEC, 67,548/EEC, 88/379/EEC and their amendments.
- EU Regulation (EC)3093/94, (EEC)2455/92 and their amendments.

### Other Information:

None

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### Abbreviations:

- “EU” stands for European Union
- “OSHA PEL” stands for PEL (Permissible Exposure Limit) under Occupational Safety and Health Administration.
- “ACGIH TLV” stands for TLV (Threshold Limit Value) under American Conference of Governmental Industrial Hygienists
- “EU ILV” stands for Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC.
- “DFG MAK” stands for MAK (Maximale Arbeitsplatzkonzentrationen) under Deutsche Forschungsgemeinschaft.
- “TWA” stands for Time Weighted Average.
- “IARC” stands for International Agency for Research on Cancer.
- “NTP” stands for National Toxicology Program (USA).

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