



# MATERIAL SAFETY DATA SHEET

Arrangement No. : EDM1209

Issued: September 28, 2012

## ASSISTED SOLUTION FOR ELECTRICAL ANTI-RUST UNIT

### 1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY

**Product name** : Assisted solution for electrical anti-rust unit MEA-10  
**Product use** : Additive solution for dielectric water for wire EDM machine  
**Supplier** : MAKINO MILLING MACHINE CO.,LTD.  
**Address** : 3-19,Nakane2-chome,Meguro-ku,Tokyo152-8578,Japan  
**Telephone Number** : +81-(0)3-3717-1151  
**Fax Number** : +81-(0)3-3725-2105  
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### 2. HAZARDS IDENTIFICATION

#### GHS Classification

##### Physical hazards

Explosives	Not classified
Flammable gases	Not classified
Flammable aerosols	Not classified
Oxidizing gases	Not classified
Gases under pressure	Not classified
Flammable liquids	Not classified
Flammable solids	Not classified
Self-reactive substances and mixtures	Not classified
Pyrophoric liquids	Not classified
Pyrophoric solids	Not classified
Self-heating substances and mixtures	Not classified
Substances and mixtures which, in contact with water, emit flammable gases	Not classified
Oxidizing liquids	Not classified
Oxidizing solids	Not classified
Organic peroxides	Not classified
Corrosive to metals	Not classified

##### Health hazards

Acute toxicity ( oral )	Not classified
Acute toxicity ( dermal )	Not classified
Acute toxicity ( gases )	Not classified
Acute toxicity ( vapors )	Not classified
Acute toxicity ( dust / mist )	Not classified
Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory sensitization	Not classified
Skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified

	Reproductive toxicity	Not classified
	Specific target organ systemic toxicity single exposure	Not classified
	Specific target organ systemic toxicity repeated exposure	Not classified
	Aspiration hazard	Not classified
<b>Environmental hazards</b>	Acute aquatic toxicity	Not classified
	Chronic aquatic toxicity	Not classified
<b>Labeling elements</b>	:	Not applicable
<b>Signal words</b>	:	Not applicable
<b>Hazard statements</b>	:	Not applicable
<b>Precautionary statements</b>	:	Wash immediately when solution gets contact to your eyes or skin. Wear the protective equipment such as goggles, gloves, and masks if necessary.

### 3 . COMPOSITION / INFORMATION ON INGREDIENTS

<b>Substance or Mixture</b>	:	Mixture
<b>GHS hazardous ingredients</b>	:	No hazardous material presents.

### 4 . FIRST AID MEASURES

<b>Inhalation</b>	:	Rest in a well-ventilated area and seek medical attention if necessary.
<b>Skin contact</b>	:	Wash with running water immediately and seek medical attention if necessary.
<b>Eye contact</b>	:	Rinse with clean running water for at least 15 minutes and seek medical attention.
<b>Ingestion</b>	:	Have a glass of water immediately and induce vomiting. When cannot vomit or illness remains, give large amount of water or milk, and seek medical attention immediately.

### 5 . FIRE FIGHTING MEASURES

<b>Extinguishing media</b>	:	Foam, Carbon dioxide, Dry chemical, Water
<b>Fire fighting instructions</b>	:	For peripheral fire, the following procedure should be taken. <ol style="list-style-type: none"> <li>1. Move container(s) to safe place.</li> <li>2. If cannot move the containers, keep it wet and cool by using water. Treat carefully to avoid container breakage.</li> <li>3. Be aware of possible contamination by extinguishing water or diluted chemical liquid.</li> </ol>
<b>Protective equipment</b>	:	Quenching should start from the windward and wear appropriate personal protective equipment.

### 6 . ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	:	Wear appropriate personal protective equipment in order to avoid contact with eyes, skin and clothes.
<b>Environmental precautions</b>	:	Must NOT drain directly.
<b>Methods and materials for containment and cleaning up</b>	:	Wipe the leaked agent by using rags, and collect it in empty container as much as possible. Wash with water, and the wastewater should under go wastewater treatment.

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## 7. HANDLING AND STORAGE

- Handling** : Handling container carefully to avoid falling and damage.  
Keep container closed during storage.  
Wear appropriate personal protective equipment in order to avoid contact with eyes, skin and clothes.  
Prevent mixture with incompatible substances (Strong base / Strong acid / Oxidizing agent).
- Storage** : Keep the container closed to prevent mixture with other agent.  
Never store with Strong base / Strong acid / Oxidizing agent at same area.  
Store in a cool ventilated area and avoid direct sunlight.  
We recommend non fragile polyethylene resin and metal containers.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Exposure limit values** : Information is not available
- Engineering controls** : Use with adequate ventilation.  
Handle and store in a cool ventilated space.
- Personal protective equipment**
- Respiratory protection** : Mask
- Hand protection** : Rubber gloves
- Eye protection** : Safety goggle
- Skin protection** : Rubber apron

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** : Colorless clear liquid
- Odor** : None
- pH** : 5.1
- Melting point / freezing point** : Not available
- Initial boiling point and boiling range** : Not applicable
- Flash point** : Not applicable;
- Upper / lower flammability or explosive limits** : Not applicable
- Vapor pressure** : Not applicable
- Vapor density** : Not applicable
- Relative density** : 1.17 g/cm<sup>3</sup> (15°C)
- Solubility** : Water soluble
- Partition coefficient : octanol / water** : Not applicable
- Auto-ignition temperature** : Not applicable
- Decomposition temperature** : Not available
- Viscosity** : 4.6 mPa·s (15°C)

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## 10. STABILITY AND REACTIVITY

- Chemical stability** : Stable
- Possibility of hazardous reactions** : Not applicable
- Conditions to avoid** : Combustion
- Incompatible materials** : Strong base / Strong acid / Oxidizing agent

Hazardous decomposition products : Not applicable

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## 11. TOXICOLOGICAL INFORMATION

Acute toxicity : Information is not available  
Skin corrosion / irritation : Not classified  
Serious eye damage / eye irritation : Not classified  
Respiratory or skin sensitization : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified  
Specific target organ systemic toxicity : Not classified  
single exposure  
Specific target organ systemic toxicity : Not classified  
repeated exposure  
Aspiration hazard : Not classified

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## 12. ECOLOGICAL INFORMATION

Toxicity : Information is not available.  
Persistence and degradability : Biodegradation  
Bioaccumulative potential : Toxicity by bioaccumulation is not reported.  
Mobility in soil : Information is not available  
Other adverse effects : Information is not available

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## 13. DISPOSAL CONSIDERATIONS

Comply with all federal, state and local regulations.

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## 14. TRANSPORT INFORMATION

Transport : Confirm no leak in vessel.  
Carefully load cargo to avoid falling and damage.  
UN number : Information is not relevant  
UN hazard class : Information is not relevant  
UN subsidiary risks : Information is not relevant  
UN packing group : Information is not relevant

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## 15. REGULATORY INFORMATION

The compounds in the product are not under the Montreal Protocol, the Stockholm Convention and the Rotterdam Convention.

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## 16. OTHER INFORMATION

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