

## MATERIAL SAFETY DATA SHEET

November : 24,2017

## 1. PRODUCT AND COMPANY IDENTIFICATION

-Product Name : M-HGMX

-Product Use : WAX FOR SCREW MAINTENANCE

-Supplier

Mold Components Division, MISUMI Die &amp; Mold Business Company, MISUMI Corporation

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Administrative Number: M-HGMX\_ENG

## 2. HAZARDS IDENTIFICATION

## GHS CLASSIFICATION:

PHYSICAL AND CHEMICAL HAZARDS: not applicable

## HEALTH TOXICITY:

Respiratory sensitization: Category 1

Skin sensitization: Category 1

Carcinogenicity: Category 1A

Specific target organ systemic toxicity Category3 - Respiratory tract irritation

-Single exposure:

Specific target organ systemic toxicity Category 1 – inhalation: Lung, Central

-Repeated exposure: nervous system

## HAZARDOUS TO THE AQUATIC ENVIRONMENT:

Hazardous to the aquatic environment Category 3 – acute:

Hazardous to the aquatic environment Category 3 – chronic:

## GHS LABEL ELEMENTS:

## PICTOGRAMS/SYMBOLS



Signal word: DANGER

Hazard statements: May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

May cause cancer

May cause respiratory irritation  
 Causes damage to lung, central nervous system through prolonged or repeated exposure  
 Harmful to aquatic life  
 Harmful to aquatic life with long lasting effects

#### PRECAUTIONARY STATEMENTS

**Prevention:** Do not eat, drink or smoke when using this product.  
 Use only outdoors or in well-ventilated area.  
 Do not breathe dust.  
 Wear protective eyeglasses as needed.  
 Wear respiratory protection/face protection/protective gloves / goggles and clothing.  
 Wash hands thoroughly after handling.

**Response:** If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 If you feel unwell, get medical attention.

**Storage:** Store in a well-ventilated and cool place

**Disposal:** Dispose of contents/container in accordance with local/ regional/ national/ international regulations.  
 Dispose of cleaning solution after making harmless.

#### 3. CONPOSITION / INFORMATION ON INGREDIENTS

Substance/mixture : Mixture

Chemical name	CAS No.	Concentration【%】
Aluminium oxide( $Al_2O_3$ )	1344-28-1	60
Paraffin	8009-03-8	5
	64742-61-6	
	63231-60-7	
Rosin	8050-09-7	3
Mineral oil	Non disclosure	<1

Contains fatty acids and others.

#### 4. FIRST AID MEASURES

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 If you feel unwell, get medical advice/attention.

**Skin contact:** Remove/ take off immediately all contaminated clothing.

	Rinse skin immediately with water/ shower.
	Wash contaminated clothing before reuse.
Eye contact:	Rinse cautiously with water for several minutes.
	Remove contact lenses, if present and easy to do. Continue rinsing
	get medical attention/ advice.
Ingestion:	Rinse mouth immediately with water. Call a doctor immediately.

## 5. FIRE FIGHTING MEASURES

Suitable extinguishing media:	In case initial fires, use fire-extinguishing powder/foam, carbon dioxide or dry sand.
	In case of larger fires, asphyxiating a fire using fire-fighting foam and others is effective
Unsuitable extinguishing media:	Using water may be dangerous to spread fires.

## 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTION:	Evacuate nonessential personnel. Authorized only.
Equipment and emergency	Wear proper protective equipment (gloves/ goggles/ clothing and high boots.)
Procedures:	
Environmental precautions:	Caution do not to discharge into rivers or seas. Do not wash away directly into rivers or sewers.
Method and materials for contaminant	Collect spilled material into empty containers.
And cleaning up:	

## 7. HANDLING AND STORAGE

Handling:	
Technical measure	According to “ <b>8.EXPOSURE CONTROLS/PERSONAL PROTECTION</b> ”, put facility measure into operation and wear protective equipment.
Local-ventilation/Whole ventilation:	According to “ <b>8.EXPOSURE CONTROLS/PERSONAL PROTECTION</b> ”, put facility measure into Operation (Local-ventilation/Whole ventilation)
Note:	Use only outdoors or in well-ventilation area Do not contact/breathe/swallow. Do not breathe powder dust.

Wash hands thoroughly after handling.

Storage:

Technical measure:	Install the equipment of lighting, ventilation and necessary daylighting to handle.
Incompatible substances:	Reference to "10. STABILITY AND REACTIVITY".
Storage conditions:	Keep away from high heat and store in a well ventilated place. Keep cool.
Packaging materials:	Use a break-proof package.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Facility measures:	Ventilate to avoid inhalation of dust.
Personal protective equipment	
Respiratory protection:	Wear appropriate respiratory protective equipment, dust-proof mask and others.
Hand protection:	Wear appropriate protective gloves, leather gloves and others.
Eye protection:	Wear protective glasses (ordinary glasses type/ goggle type and others).
Skin and body protection:	Wear protective clothing and safety shoes.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Pink solid
Odor:	Slight odor
pH:	No data
Melting point/freezing point:	No data
Initial boiling point and boiling range:	No data
Flash point:	No data
Explosion limit:	No data
Vapor pressure:	No data
Vapor density:	No data:
Relative density:	No data
Solubility:	Insoluble in water
Partition coefficient: n-octanol/water:	No data
Auto-ignition temperature:	No data
Decomposition temperature:	No data

## 10. STABILITY AND REACTIVITY

Stability/Reactivity:	Stable under normal condition (room temperature)
Possibility of hazardous reactions:	Almost never
Condition to be avoided:	Fire, direct sunlight.
Incompatible materials:	Do not store together with acid/alkaline/ materials.
Hazardous decomposition products:	Nothing

## 11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Aluminium oxide LD <sub>50</sub> > 5000 mg/kg (rat, oral) <sup>1)</sup>
	Paraffin LD <sub>50</sub> > 5000 mg/kg (rat, oral) <sup>1)</sup>
	LD <sub>50</sub> 3600 mg/kg (rabbit, skin) <sup>1)</sup>
	Rosin LD <sub>50</sub> 7800mg/kg (rat, oral) <sup>2)</sup>
	LD <sub>50</sub> > 2500 mg/kg (rabbit, skin) <sup>2)</sup>
	LD <sub>50</sub> 2.3 mg/L (rat, inhalation: dust) <sup>2)</sup>
	Mineral oil LD <sub>50</sub> > 5000 mg/kg (rat, oral) <sup>3)</sup>
	LD <sub>50</sub> > 5000 mg/kg (rabbit, skin) <sup>3)</sup>
	LD <sub>50</sub> 2.18 mg/L (rat, inhalation: mist) <sup>3)</sup>
	Fatty acids LD <sub>Lo</sub> 4640 mg/kg (rat)
Skin corrosion/irritation:	No data
Serious eye damage/eye irritation:	No data
Respiratory sensitization:	Rosin may cause allergy or asthma symptoms or breathing difficulties if inhales <sup>4)5)</sup>
	There are a number of case reports of asthma or asthma-like symptoms in workers handling pine resin, solderflux and resin acid which contained this substance.
	Cases of workers complained of respiratory symptoms, decrease in expiratory flow, bronchitis, persistent symptoms and severe attacks of asthma related to their work are also reported, and the incidence and severity of the symptoms are suggested to be related to exposure level.
	In addition to these evidences, the substance is classified into Category 1 for respiratory tract sensitizer in Japan Society for Occupational Health(JSOH)(Recommendations for allowable concentrations(2008)) <sup>6)</sup>
	This product was classified into Category 1.

Skin sensitization:	Rosin may cause an allergic skin reaction <sup>4)5)</sup> . There is a report of positive results in a guinea pig maximization test. There are case reports of allergic contact dermatitis in humans attributed to the substance or products containing the substance. The substance was classified into R43 in EU classification, therefore, Rosin was classified into Category 1 <sup>6)</sup>
Germ cell mutagenicity:	No data
Carcinogenicity:	Mineral oil classified into Category 1A – May cause cancer <sup>3)</sup> This product was classified into Category 1A
Reproductive toxicity:	No data
Specific target organ systemic toxicity -Single exposure:	Aluminium oxide is classified into Category 3(Respiratory tract irritation) based on enrollment"upper respiratory tract irritation" <sup>7)</sup>
Specific target organ systemic toxicity -Repeated exposure:	Occupational lung fibrosis caused by inhalation of Aluminium oxide <sup>8)</sup> (Category 1) Aluminium oxide was classified into Category 1(Inhalation ; Central nervous system) based on enrollment " Aluminium oxide have the potential to impact the central nervous system" <sup>7)</sup>
Aspiration hazard:	No data

## 12. ECOLOGICAL INFORMATION

Ecotoxicity:	Rosin was classified into Category 2 of hazardous to the aquatic environment – acute based on the description "Crustaceans (Daphnia magna) EC <sub>50</sub> = 4.5mg/L48hr" and to be toxic for aquatic organisms <sup>6)</sup> . This product was classified as Category 3 for aquatic environmental acute hazards. Other ingredients are unknown hazards to the aquatic environment.
Persistence/degradability:	Rosin was classified into Category 2 of acute toxicity, and Category 2 of hazardous to the aquatic environment – chronic to be non-acute degradable (The degree of resolution by BOD: 36-48%) and based on the description

“it is unknown bioaccumulation potential”<sup>6)</sup>

This product was classified as Category 3 for aquatic environmental chronic hazards. Other ingredients are unknown hazards to the aquatic environment.

Bioaccumulation potential:	No data
Mobility in soil:	No data
Hazard to the ozone layer:	No data

### 13. DISPOSAL CONSIDERATION

The remainder waste:	In case of the disposal, comply with local government codes and related regulations.
Contaminated container and packing:	Recycle containers after washing, or dispose according to local government codes and related regulations. In case of dispose of the container, remove the content.

### 14. TRANSPORT INFORMATION

international regulations:	Not applicable with IMDG Code and IATA Dangerous Goods Regulations.
Safety measure and conditions Transport:	Check the container for damage, corrode and leak before transport. Local the cargo without fall, drop and damage. Prevent the cargo from unloading for sure. Handle the shipping case with care and do not make an impact. Do not handle shipping case roughly, for example, collision, drag, etc.

### 15. REGULATORY INFORMATION

Aluminium oxid:	Industrial Safety and Health Act; Notifiable hazardous substance, 189 Aluminium oxide (Paragraph 2, Article 57. Paragraph 2, Article 18 of the Order for Enforcement, The Appended Table 9)
Paraffin:	Industrial Safety and Health Act; Notifiable hazardous substance, 170 Solid paraffin (Paragraph 2, Article 57. Paragraph 2, Article 18 of the Order for Enforcement, The Appended Table 9)
Rosin:	Industrial Safety and Health Act;

	Notifiable hazardous substance, 632 Rosin (Paragraph 2, Article 57. Paragraph 2, Article 18 if the Order for Enforcement. The Appended Table9)
Mineral oil:	Industrial Safety and Health Act; Notifiable hazardous substance, 168 Mineral oil (Paragraph 2, Article 57. Paragraph 2, Article 18 pf the Order for Enforcement, The Appended Table 9)
Other regulations for foreign countries:	Regulations in “SDS” are Japanese ones. Regulatory information with regards to this preparation in you country or region should be examined by you own responsibility.

#### 16. OTHER INFORMATION

All reasonable care has been taken in the preparation of the information contained herein, the manufacturer extend no warranties, makes no makes representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser’s intended purposes or for consequences of its use.