1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

<table>
<thead>
<tr>
<th>Trade name:</th>
<th>M2431</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical identification:</td>
<td>SATURATED CARBOXYL-TERMINATED POLYESTER RESIN</td>
</tr>
<tr>
<td>Intended/recommended use:</td>
<td>POWDER COATING</td>
</tr>
</tbody>
</table>

Identification of the company

Company: Yantai Meicheng Advanced Materials Co., Ltd

#1202 Huanghai Mingzhu No.63 Guanhai RD,Laishan,Yantai, China

Telephone: +86-535-6397472

Fax: +86-535-6903929

Emergency Phone +86-18953566117

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances presenting a health or environmental hazard within the meaning of the Dangerous Substance Directive 67/548/EEC:

None.

3. HAZARDS IDENTIFICATION

This product is not hazardous when handled under normal conditions of use.

By excessive exposure to dust coming from the polyester resin, eye and respiratory tract irritation is possible.

4. FIRST AID MEASURES

General information:

In all cases of doubt, or when symptoms persist, seek medical attention.

Never give anything by mouth to an unconscious person.

Take to fresh air and seek medical attention.

After inhalation:

Do NOT use solvents nor thinners, an industrial skin cleanser is preferred.

If easy to do, remove any contact lenses.

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

After ingestion:

Stimulate vomiting and seek medical attention..

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

foam, CO2 powder, water

Extinguishing media which must not be used for safety reasons:

High pressure water jet

Special hazards from the substance itself, its combustion products or from its vapors:

Fire will produce dense black smoke.

Exposure to decomposition products may cause a health hazard.

Keep containers cool by spraying with water if exposed to fire.

Do not allow run-off from fire fighting to enter drains or water courses.

Aldehydes and acids can be liberated.

Thermal decomposition can lead to the evolution of irritant vapor or gases and/or fire.

Special protective equipment for firefighters:

Pressure demand self contained breathing apparatus should be provided to fire fighters in building or confined area where this product is stored.

6. ACCIDENT RELEASE MEASURE)

Personal precautions:

Protective measures are listed in sections 7 and 8.

Confine area of spill and transfer spilled product to suitable containers for disposal.

Environmental precautions:

Avoid discharge into the environment.

If the product gets into drains, inform the relevant authorities immediately.

Methods for cleaning up/taking up:

Sweep up into suitable containers for disposal.

7. HANDLING AND STORAGE

Handling:

Comply with the health and safety at work laws.

Information regarding personal protective measures see, section 8.

Always keep in polyethylene bags of same material as the original one.

Avoid the inhalation of dust and/or particulates arising from the application.

Isolate from sources of heat, sparks and open flame.

Do not eat, drink or smoke in application area.

Local exhaust is recommended.
## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure limit values – Exposure control

**Remarks to Exposure controls:**
- Local exhaust is recommended.
- Avoid inhalation of dust.

### Personal protection

**Respiratory protection:**
- Ensure adequate ventilation.
- Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates below the OEL, suitable respiratory protection must be worn.
- Under conditions of frequent use or heavy exposure, respiratory protection may be needed.
- In situations where misting or flying may occur, use appropriate certified respirators.

**Hand protection:**
- Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.
- Wear suitable gloves.

**Eye protection:**
- Protection from dust by safety glasses.
- None.

**Skin protection:**
- None.

### Environmental exposure controls:
- See the Community Environmental Protection Legislation.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Pale granules</td>
</tr>
<tr>
<td>Odor</td>
<td>odorless</td>
</tr>
<tr>
<td>Freezing point / interval</td>
<td>not applicable</td>
</tr>
<tr>
<td>Boiling point / interval</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 200°C (Method: Cleveland Open Cup)</td>
</tr>
<tr>
<td>Explosion properties</td>
<td>not applicable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>not applicable</td>
</tr>
<tr>
<td>Density</td>
<td>1.2 g/cm³</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>insoluble</td>
</tr>
<tr>
<td>Octanol/water partition coefficient (log Pow)</td>
<td>Not available</td>
</tr>
<tr>
<td>Fat solubility (solvent-oil)</td>
<td>Not available</td>
</tr>
</tbody>
</table>

## 10. STABILITY AND REACTIVITY

**Condition to avoid:**
- Protect from heat and direct sunlight

**Materials to avoid:**
- None.

**Hazardous decomposition products:**
- None.

## 11. TOXICOLOGICAL INFORMATION

**Toxicological (health) effects and possible symptoms after exposure:**
- When the preparation test-data are not available, the preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 2 and 15 for details.

**Information on the product:**
- No specific toxicological data available for this product.

## 12. ECOLOGICAL INFORMATION

When the preparation test-data are not available, the preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 2 and 15.
**Information on the Component(s):**

**Ecotoxicity:** This product may not be released into water without any treatment.

**Persistence and Degradability:** No data available.

**Mobility:** No data available.

**Bioaccumulative Potential:** No data available.

**13. DISPOSAL CONSIDERATION**

**Product:** The product and its packaging may be disposed of under controlled incineration and in agreement with local and national legislation. Do not allow to enter soil, waterways or waste water canal.

**14. TRANSPORT INFORMATION**

- **ADR:** Not regulated for transport.
- **RID:** Not regulated for transport.
- **IMDG:** Not regulated for transport.
- **IATA:** Not regulated for transport.

**Classification of preparation, in accordance with Directive 1999/45/EC:**


**National regulations:**

- All components may be commercialized according EEC/92/32 directive.

**15. REGULATORY INFORMATION**

**Recommended restrictions on use:** For industrial use only.

**References for specific use guidelines:** CEPE = European Council of Paint, Printing Ink and Artists’ Colours Industry; www.cepe.org

**Abbreviations:**

- **ACGIH:** American Conference of Governmental Industrial Hygienists; www.acgih.org
- **BS, MB:** Belgisch Staatsblad, Moniteur Belge, Belgisches Staatsblatt.
- **ADR:** European Agreement concerning the international Carriage of Dangerous Goods by Road
- **BOD/COD:** Biological/Chemical Oxygen Demand
- **CAS:** Chemical Abstract Service number; www.cas.org
- **DFG:** Deutsche Forschungsgemeinschaft; German Research Community; www.dfg.de
- **EC:** All components may be commercialized according to EEC/92/32 directive.
- **EIJCT:** European Agreement Concerning the Transport of Dangerous Goods by Rail
- **GBB-VLEP:** Grenswaarden voor beroepsmatige blootstelling, Valeurs Limites d’Exposition Professionelle, Occupational Exposure Limits (Belgium).
- **IATA:** International Air Transport Association; www.iata.org
- **IMDG:** International Maritime Dangerous Goods Code
- **IUCLID:** International Unified Chemicals Information Database; http://ecb.jrc.it/
- **MAK:** Maximale Arbeitsplatz-Konzentration; Maximum concentration on the working area
- **NLP:** No Longer Polymer
- **OECD:** Organisation for Economic Co-operation and Development; www.oecd.org
- **OEL:** Occupational Exposure Limit
- **P.I.I.:** Primary Irritation Index
- **RID:** International Agreement Concerning the Transport of Dangerous Goods by Road
- **STEL:** Short Term Exposure Limit
- **TLV:** Threshold Limit Value
- **TWA:** Time Weighted Average
- **UN:** United Nations; www.un.org

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