# Material Safety Data Sheet (MSDS)

## Part 1: Chemicals and Corporate Identification

Chemical Name (Chinese): M78H-86 Conformal Coating

Common or trade name of the chemical: moisture absorber, protective coating

Chemical formula: mixture

Company Name: Zhuhai Changxian New Material Technology Co., Ltd.

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National Emergency Hotline: +86-532-83889090

## Part 2: Hazard Overview

Emergency Overview: Flammable Liquids and Vapors

GHS hazard category: Flammable liquid, Category 2 ;

Label elements are in accordance with GB 15258-2009 (Regulations for the Preparation of Safety Labels for Chemicals).

Pictograms:  

Signal words: Flammable, Health hazards

Warning word: Danger

Hazard statement: Flammable liquids and vapors

Prevention instructions:

Preventive measures Keep away from sparks, open flames, and heat sources. Keep containers sealed. Ground containers and receiving equipment. Use explosion-proof electrical, ventilation, and lighting equipment, and use machinery and tools that do not generate electrical sparks. Take anti-static measures. Wear protective gloves, safety glasses, and a face shield.

Incident Response: In case of fire, use foam, carbon dioxide, dry powder, or sand to extinguish the fire. If skin (or hair) comes into contact: immediately remove contaminated clothing, wash thoroughly with soap and water, and take a shower.

Secure storage Store in a cool, dark, and well-ventilated warehouse. Keep

containers tightly sealed. Maintain a low temperature.
Waste disposal Before disposal, consult relevant national and local regulations, or use incineration.

Physical and chemical hazards:
It is flammable, and its vapor can form an explosive mixture when mixed with air.
Health hazards: Irritating to the eyes, nose, and throat. Inhalation of high concentrations has a progressive anesthetic effect and can cause respiratory paralysis. Ingestion may cause nausea, vomiting, and abdominal pain.
Environmental hazards: May be harmful to the environment.

## Part 3: Ingredient/Composition Information

Pure mixtures ■
Concentration of substance components (W/W, %) CAS.NO
Modified polyurethane resin 30-40 9009-54-5
Hydrocarbon solvents 35-40 64742-48-9
Ester solvents 10-20 108-65-6
Additives 1-3: Trade Secret

## Part 4: First Aid Measures

Inhalation: Immediately move to fresh air.
Skin contact: Remove contaminated clothing and wash skin thoroughly with soap and water.
Eye contact: Immediately open the upper and lower eyelids and rinse with running water or saline solution for at least 15 minutes . Seek medical attention.
If ingested: Rinse mouth with water and seek medical attention.

## Part 5: Fire Prevention Measures

Extinguishing agents: Foam, carbon dioxide, dry powder, and sand can be used to extinguish fires.
Special hazards: Flammable; its vapor forms an explosive mixture with air. It can react with oxidizers.
Firefighting Precautions and Protective Measures: Firefighters must wear gas masks and full-body fire suits and fight the fire from upwind. Move containers

from the fire area to an open space if possible. Spray water to keep containers in the fire area cool until the fire is extinguished. If containers suddenly make unusual noises or exhibit unusual phenomena, evacuate immediately.
Hazardous combustion products: CO ¸CO2

## Part 6 Leakage Emergency Handling

Personnel protective measures : Immediately evacuate personnel from the contaminated area to an upwind location and isolate the area, strictly restricting access. Eliminate ignition sources. Emergency responders are advised to wear self-contained positive pressure breathing apparatus and anti-static work clothes. Cut off the leak source if possible.
Environmental protection measures: Prevent leaked materials from entering water bodies, sewers, basements, or confined spaces.
Methods for containing and cleaning up spilled chemicals and the disposal materials used:
Small leak It can be adsorbed or absorbed by sand or other non-combustible materials.
Massive leak Construct dikes or dig pits to contain the vapors; cover with foam to reduce vapor hazards.

## Part 7. Handling and Storage

Operating Precautions: Operate in a closed system with enhanced ventilation. Operators must be specially trained and strictly adhere to operating procedures. It is recommended that operators wear self-priming filter respirators (half-face masks) and anti-static work clothes. Keep away from sources of ignition and heat; smoking is strictly prohibited in the workplace. Use explosion-proof ventilation systems and equipment. Prevent vapor leakage into the workplace air. Avoid contact with oxidizers and alkalis. Provide appropriate types and quantities of fire-fighting equipment and leakage emergency response equipment. Smoking is strictly prohibited at the work site. Avoid inhalation of high concentrations.
Storage Precautions: Store in a dark, cool, and well-ventilated warehouse. Keep away from fire and heat sources. Keep containers sealed. Shelf life is generally six months from the date of production at temperatures below 25° C. Warehouse lighting and ventilation systems should be explosion-proof, with switches located outside the warehouse. The use of machinery and tools that may generate sparks is prohibited. The storage area should be equipped with spill response

equipment.

## Part 8 Exposure Controls/Personal Protection

Exposure limits: China has not established standards.

Biological exposure limits: No standards have been established.

Monitoring methods: Methods for determining toxic substances in the air

Engineering controls: The production process is closed and fully ventilated. Safe shower and eyewash stations are provided.

Respiratory protection: For prolonged, high-concentration exposure, a filtering half-face mask can be worn.

Eye protection: Wear protective glasses

Body protection: Wear anti-static work clothes

Hand protection: Wear rubber gloves

Other precautions: Smoking, eating, and drinking are prohibited at the work site. Pay attention to personal hygiene.

## Part 9: Physical and Chemical Properties

Appearance and properties: Yellowish-brown transparent liquid

Relative density: 0.90 ± 0.05

Solid content (%): 33±3

Ignition temperature (° C): 420

Flash point: 25℃

Drying time: 25℃, 55%RH ≤15 minutes

60-80℃ ≤5 minutes

Explosion limit (upper limit), % (vol): 6

(Lower limit), % (vol): 1.2

Recommended drying method: Dry at 60-80℃ for 1-5 minutes, then let it air dry at room temperature.

Optimal performance at room temperature: 7 days

Main applications: Used for printing circuit boards, surface coating of components, and potting of network transformers for moisture protection, insulation, and corrosion prevention.

## Part 10: Stability and Reactivity

Stability: Stable

Incompatible materials: strong oxidizing agents, strong acids.

Conditions to avoid: open flame, high heat, static electricity

Harm of polymerization: Non-polymerization

Decomposition products: carbon monoxide, carbon dioxide

## Part 11: Toxicological Information

| name | result | type | dose | Exposure |
|---|---|---|---|---|
| hydrocarbon solvents | LD50 via oral | rats | 13000mg/kg | |
| Ether ester solvents | TWA | | 50ppm | 8H |

Conclusion/Overview

Skin irritation or corrosion: No data available.

Eye irritation or corrosion: No data available.

Respiratory or skin allergies: No data available

Mutagenicity: No data available.

Carcinogenicity: No data available.

Inhalation hazards: No data available.

## Part Twelve: Ecological Information

Ecotoxicity: No data available.

Durability and degradability: Biodegradability: No data available

Non-biodegradability: No data available

Potential bioaccumulation: Based on the Kow value, the bioaccumulation of this substance is likely to be weak.

Soil mobility: Based on Kow values, this material is likely to migrate.

## Part Thirteen: Waste Disposal

Waste chemicals: Dispose of by incineration

Contaminated packaging: Return the containers to the manufacturer or dispose of them in accordance with relevant national and local regulations.

Disposal Considerations: Waste generation should be avoided or minimized as much

as possible. Significant amounts of residual product waste are disposed of through licensed channels.

Waste disposal contractors handle residues and non-renewable products. The disposal of products, solutions, and their byproducts must comply with environmental protection, waste disposal regulations, and relevant local regulations.

## Part Fourteen: Transportation Information

Packaging category: II

Packaging markings: 


Packaging method: Metal drum, 4L/drum or 20L/drum

Transportation Precautions: Transport vehicles should be equipped with appropriate types and quantities of fire-fighting equipment and leakage emergency handling equipment. Transportation is best done in the early morning or late evening during summer. Tank trucks used for transportation should have grounding chains, and perforated baffles can be installed inside the tank to reduce static electricity generated by vibration. Mixing or transporting with oxidizers, acids, alkali metals, amines, or food chemicals is strictly prohibited. Protect from exposure to sunlight, rain, and high temperatures during transportation. When stopping en route, keep away from sources of ignition, heat sources, and high-temperature areas. Vehicles transporting this item must have flame arresters on their exhaust pipes, and the use of machinery and tools that may generate sparks during loading and unloading is prohibited. When transporting by road, follow the prescribed routes and do not stop in residential areas or densely populated areas. When transporting by rail, shunting is prohibited .

## Part Fifteen: Regulatory Information

The following laws, regulations, rules and standards stipulate the corresponding provisions for the management of this chemical.

**Occupational Disease Prevention and Control Law of the People's Republic of China** : Classification and Catalogue of Occupational Diseases: Not listed

**Hazardous Chemicals Safety Management Regulations** : Listed. List of Easily Explosive Hazardous Chemicals: Not listed. List of Key Monitored Hazardous

Chemicals: Not listed. GB18218-2018 "Identification of Major Hazard Installations of Hazardous Chemicals" (Table 1): Listed. Category: Flammable liquid, Critical quantity (t): 500

**Labor Protection Regulations for Workplaces Using Toxic Substances** : List of Highly Toxic Substances: Not Listed

**Regulations on the Administration of Precursor Chemicals:** Classification and Catalogue of Precursor Chemicals: Not listed

**International Conventions** : Stockholm Convention: Not listed. Rotterdam Convention: Not listed. Montreal Protocol: Not listed.

## Part Sixteen: Other Information

Drafting and Revision Information: May 18, 2024, Technical Department

Training Recommendation: Please provide relevant training to users.

Disclaimer: The above information is not specific to this product and is for reference only. No warranty is provided. It is believed that the above-mentioned industrial safety and hygiene procedures are generally feasible. However, users should assess for themselves whether the above recommendations are appropriate for their individual circumstances.