

Material Safety Data Sheet (MSDS)

Section 1: Chemical and Company Identification

Product name: M78-3068UV Conformal Coating

Chemical formula: Mixture

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

Address: Langwan Road, Fine Chemical Industry Zone, Gaolan Port Economic Zone, Zhuhai, China

Postal code: 519050

Email: szwkb@changxiankeji.com

Fax: +86-755-26689087

Telephone: +86-755-26852595 +86-755-26852596 +86-755-26864069

Company emergency telephone: +86-13802269905

National emergency telephone: +86-532-83889090

Section 2: Hazards Identification

Health hazards: Corrosive and sensitizing effects may occur. Exposure may take place through skin contact, inhalation or eye contact.

Effects of exposure: Causes moderate irritation to the eyes, skin and respiratory tract.

Prolonged exposure to vapor may cause drowsiness.

Environmental hazards: Do not discharge into drains, sewers or waterways.

Fire and explosion hazards: This product is not readily flammable.

Section 3: Composition / Information on Ingredients

Substance ☐

Mixture ☒

No.	Component	Concentration (% w/w)	CAS No.
1	Modified polyurethane acrylate	20-50	Trade secret
2	Trimethylcyclohexyl acrylate	20-30	86178-38-3
3	Photoinitiator	1-5	Trade secret
4	Additives	0.1-5	Trade secret
5	Other acrylates	0-35	Trade secret

Section 4: First Aid Measures

Eye contact: Immediately lift the eyelids and rinse with running water for at least 15 minutes.

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Seek medical attention immediately.

Skin contact: Immediately rinse with clean water for at least 15 minutes. Seek medical attention if symptoms persist.

Inhalation: Immediately move the exposed person to fresh air. Seek medical attention if symptoms persist.

Ingestion: Give the exposed person plenty of warm water, induce vomiting and seek medical attention immediately.

Section 5: Firefighting Measures

Specific hazards: The product may burn at high temperatures.

Hazardous combustion products: Carbon dioxide, carbon monoxide, nitrogen oxides and unidentified organic compounds.

Suitable extinguishing media: Carbon dioxide, dry chemical or foam.

Special firefighting methods and protective equipment: Wear self-contained breathing apparatus and suitable protective clothing. Wear neoprene gloves when handling fire residues.

Section 6: Accidental Release Measures

Personal precautions: Follow applicable personal protective precautions.

Environmental precautions: Collect the waste and arrange incineration in a suitable chemical treatment facility.

Emergency procedures: Immediately wipe up the material with cotton cloth moistened with acetone or alcohol, and place the waste in a sealed container.

Protective equipment: Protective gloves and safety goggles.

Methods for containment and cleanup: Immediately wipe up the spilled material with cotton cloth moistened with acetone or alcohol. Place the waste in a sealed container and dispose of it according to established procedures.

Section 7: Handling and Storage

Storage temperature: 0-30°C.

Special sensitivity: Protect from moisture and light.

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Handling precautions: Maintain adequate air circulation. Minimize exposure to sunlight, ultraviolet light and artificial light sources.

Storage precautions: Store tightly sealed at 0-30°C in a dark, cool, dry and well-ventilated area.

Shelf life: Generally six months from the date of manufacture. Product beyond the shelf-life period may be used only after confirming that no abnormality is present.

Section 8: Exposure Controls / Personal Protection

Monitoring methods: Not determined.

Respiratory protection: Maintain adequate air circulation during use.

Engineering controls: Provide enhanced ventilation.

Eye protection: Wear safety goggles.

Skin and body protection: Wear suitable protective clothing and equipment.

Hand protection: Wear corrosion-resistant gloves.

Other protection: Wash hands after handling and maintain good personal hygiene.

Section 9: Physical and Chemical Properties

Appearance: Colorless to pale-yellow transparent liquid.

Odor: No irritating or unpleasant odor.

Melting point / freezing point: Not determined.

Auto-ignition temperature: Not determined.

Flash point: >92°C.

Decomposition temperature: 350°C.

Relative density (water = 1): 1.0-1.1.

Relative vapor density (air = 1): Not applicable.

Saturated vapor pressure: Not applicable.

pH: Not applicable.

Non-volatile content: 100%.

Viscosity: 180 ± 30 mPa·s.

UV curing dose: 1,000-2,000 mJ/cm² at 320-405 nm.

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Moisture-cure time: 24-72 h at 25°C and 50% RH.

Main uses: Protective coating for thick-film circuit systems, porous substrates and printed circuit boards, especially assemblies with shadowed areas.

Section 10: Stability and Reactivity

Stability: Stable when stored and used at normal ambient temperatures.

Incompatible materials: Water.

Conditions to avoid: Open flames and excessive heat.

Hazardous polymerization: Hazardous polymerization may occur at high temperatures.

Section 11: Toxicological Information

Subacute and chronic toxicity: Not determined.

Irritation: Not determined.

Sensitization: Not determined.

Mutagenicity: Not determined.

Teratogenicity: Not determined.

Carcinogenicity: NTP: Not determined. IARC: Not determined. OSHA: Not determined.

Section 12: Ecological Information

Potential environmental effects: Do not discharge into drains, sewers or waterways.

Ecotoxicity: Not determined.

Biodegradability: Not determined.

Bioaccumulative potential: Unknown.

Other adverse effects: Not determined.

Section 13: Disposal Considerations

Waste classification: Industrial solid waste.

Disposal method: Collect the waste and arrange incineration in a suitable chemical treatment facility.

Disposal precautions: Empty containers may retain product residues. Continue to follow this MSDS and applicable warnings after containers have been emptied.

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Section 14: Transport Information

UN number: Not determined.

UN proper shipping name: Not determined.

Transport hazard class: Not determined.

Packing group: Not determined.

Packaging: 1 L or 4 L pails.

Transport precautions: Transport as a general chemical product and comply with applicable national laws and regulations during transportation.

Section 15: Regulatory Information

Environmental compliance: Complies with RoHS and REACH requirements.

Halogen content: Halogen-free; chlorine (Cl) and bromine (Br) contents are each below 700 ppm.

Section 16: Other Information

Disclaimer: This document was prepared with reference to domestic chemical safety management regulations. The information is based on our current knowledge and is applicable to this product as appropriate safety guidance. It does not constitute a warranty of the product's properties.