



SDS

SAFETY DATA SHEET

Product Name: RM-400
(as shown on label)

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910200(g). Standards must be consulted for specific requirements.

Section I - Identification

Part #:	MLP-300-AZ	Manufacturer:	AZ Technology Inc.
Spec/Rev #:	CPS-C-026 Rev. B	Address:	180 West Park Loop NW Huntsville AL, 35806
Usage:	Electrically Conductive Thermal Control Coating	Company Ph.# :	(256) 837-9877
		Emergency #:	(256) 837-9877

Section II - Hazard Identification

Classification of the substance or mixture:	Notice: All following Hazard Statements refer to a nearly negligible percentage of the total coating				
	H302	Acute toxicity, Oral (category 4).			
	H332	Acute toxicity, Inhalation (category 4).			
	H315	Skin irritation (category 2).			
	H319	Eye irritation (category 2A).			
	H401	Acute aquatic toxicity (category 2).			
	H411	Chronic aquatic toxicity (category 2).			
Hazard statements:	Flammable liquid and vapor	May cause respiratory irritation	Causes skin irritation	Causes serious eye irritation	Toxic to aquatic life with long lasting effects
Signal Word:	Danger				
Pictograms:					
Precautionary Statements:	P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.			
	P264	Wash skin thoroughly after handling.			
	P270	Do not eat, drink, or smoke when using this product.			
	P271	Use only outdoors or in a well-ventilated area.			
	P273	Avoid release to the environment.			

P280	Wear protective gloves/ eye protection/ face protection.
P332+P313	If skin irritation occurs get medical advice/ attention.
P337+P313	If eye irritation persists get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P391	Collect spillage.
P501	Dispose of contents/ container to an approved waste disposal plant.
Notice:	
All following Precautionary Statements refer to a nearly negligible percentage of the total coating	
P301+P312+P330	If SWALLOWED call poison center/ doctor/ physician if you feel unwell.
P302+P352	If ON SKIN wash with plenty of soap and water.
P304+P340+P312	If INHALED remove person to fresh air and keep at rest in a position comfortable for breathing. Call a poison center/ doctor/ physician if you feel unwell.
P305+P351+P338	If IN EYES rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Section III - Composition/Information on Ingredients

Common Name	CAS#	OSHA PEL	ACGIH TLV	Other Limits Recommended
Zinc Oxide	1314-13-2	10 mg/m ³	10 mg/m ³	
Tin Oxide	18282-10-5	2 mg/m ³	2 mg/m ³	same
Antimony (III) Acetate	6923-52-0	0.5 mg/m ³	0.5 mg/m ³	same
Epoxy Resin	25068-38-6	None establ.	None establ.	n/a
Epoxy Catalyst	Trade Secret	None establ.	None establ.	n/a
Xylene	1330-20-7	651 mg/m ³	651 mg/m ³	same
Butyl Alcohol	71-36-3	300 mg/m ³	300 mg/m ³	same
Ethanol	64-17-5	2460 mg/m ³	2460 mg/m ³	same

AZ Technology reserves all rights to mix percentages and methods, withheld as a trade secret.

Section IV - First-Aid Measures

Inhalation:	Remove to fresh air. Obtain medical attention.
Skin Irritation:	Wash skin with soap and water. Obtain medical attention if irritation persists.
Eye Contact:	Immediately flush eyes for at least 15 minutes with copious amounts of water, occasionally lifting upper and lower lids. Obtain medical attention.
Ingestion:	Wash conscious victims mouth out with water. Gastric lavage may be necessary.

Important symptoms or effects including acute or delayed :	Tin compounds have variable toxicity and are poorly absorbed when ingested. Prolonged exposure to organic solvents may cause depression, drowsiness, impaired vision, ataxia, or stupor.
Treatment Recommendations (if applicable):	Consult a physician in all cases.

Section V - Fire-Fighting Measures

Suitable Extinguishing Media	Foam, dry chemical, CO ₂
Unsuitable Extinguishing Media	Water may be ineffective, Do not use water jet.
Flash Point Method	24°C
Specific Hazards Arising from the Chemical	This material is a flammable liquid and a dangerous fire hazard when exposed to heat, flame, and oxidizers.
Hazardous Decomposition or Byproducts	Oxides of carbon and nitrogen, methyl alcohol.
Protective Equipment and Precautions for Firefighters	Wear positive self-contained breathing apparatus in conjunction with appropriate personal protective equipment.

Section VI - Accidental Release Measures

Preventive precautionary measures	Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
Emergency procedures (i.e. evac, consulting experts)	Wear self-contained breathing apparatus pressure-demand NIOSH/MSHA (approved or equivalent) and full protective gear.
Environmental Precautions	Should not be released into environment. Do not flush into surface water or sanitary sewer system
Containment and Cleanup procedures	Clean up spilled material into a closed container, following all OSHA, EPA, and Federal rules, regulations, and laws. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Section VII - Handling and Storage

Safe handling precautions	Prevent inhalation of vapors. Wear NIOSH/MSHA approved respiratory protection equipment for organic vapors.
Safe storage recommendations (including incompatibilities)	Store below 80°F in dry location away from oxidizing agents and combustible materials. Eliminate ignition sources. Incompatibilities: oxidizing agents, nitric and sulfuric acids (can be explosive).

Section VIII - Exposure Controls/Personal Protection

See Section III chart for: OSHA Permissible Exposure Limits (PELs), American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values (TLVs), other limits and/or recommendations

Ventilation and/or enclosure recommendations	Use with adequate ventilation. Local exhaust recommended. Safety shower and eye bath should be within direct access.
PPE recommended	Protective gloves, long sleeved clothing, rubber boots, Handle in accordance with good personal hygiene and safety practice.
PPE requirement	Use NIOSH/MSHA approved cartridge (organic vapor) HEPA type respirator, splash proof goggles.

Section IX - Physical and Chemical Properties

Appearance	White to straw color	Flammability/Explosive Limits	LEL 1.4% UEL 19%
Odor	Strong organic solvent odor	Odor Threshold	None given
PH	None given	Vapor Pressure	44
Melting Point	None given	Vapor Density	2.6
Freezing Point	None given	Relative Density	None given
Flash Point	24°C	Solubility	Trace in water
Boiling Point	78.3°C	Evaporation rate	None given
Viscosity	None given	Flammability (solid, gas)	Gas
Decomposition temp	None given	Partition Coefficient: n-octanol/water	None given

Section X - Stability and Reactivity

Reactivity (suggested by test data)	No data available
Conditions that should be avoided (Incompatible)	Oxidizing agents, nitric and sulfuric acids (can be explosive). Sources of ignition
Stability	Stable under normal conditions.
Polymerize thresholds	Will not Occur.

Section XI - Toxicological Information

	Product/ingredient name				
	Zinc Oxide	Tin Oxide	Antimony (III) Acetate	Epoxy Resin	Xylene
Acute Toxicity					
Oral LD50: Rat	Not Available	n/a	4,480 mg/kg	3,160 mg/kg	4,300 mg/kg
Inhalation LC50: Rat	Not Available	n/a	n/a	Not Available	5,000 ppm
Dermal LD50: Rabbit	Not Available	Not Available	>12,800 mg/kg	2,500 mg/kg	Not Available
Chronic Toxicity:	Not Available	Not Available	Prolonged skin contact may cause skin irritation and/or dermatitis.	Not Available	Not Available

Corrosion Irritation:	May cause eye and skin irritation.	Not Available	Skin/24hr- Severe irritation Eye/24hr- Moderate irritation	Skin- Irritant Eye-Irritant	Skin- Mild Irritant Eye- Severe Irritant
Sensitization:	Not Available	Not Available	Not Available	Sensitizing	Not Available
Single Target Organ (STOT):	Not Available	Not Available	Not Available	NOAEL 0.004 mg/l	Not Available
Numerical Measures:	Not Available	Not Available	Not Available	Not Available	Not Available
Carcinogenicity:	Not Carcinogenic	None	None	Not Available	Not Available
Mutagenicity:	Zinc components have not been active in genetics assays.	Not Available	Germ cell-Hamster Embryo Morphological transformation	Not Mutagenic	Not Available
Reproductive Toxicity:	Zinc Oxide at 2 to 38 mg/day had no effect on reproduction.	Not Available	Not Available	Toxic	Not Available
Aspiration Hazard:	Not Available	Not Available	Not Available	Not Available	Not Available

Product/ingredient name		
Acute Toxicity	Butyl Alcohol	Ethanol
Oral LD50: Rat	2,460 mg/kg	7,060 mg/kg
Inhalation LC50: Rat	4 hr- 8,000 ppm	20,000 ppm/10hr
Dermal LD50: Rabbit	3,400 mg/kg	Not Available
Chronic Toxicity:	Not Available	Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea, and vomiting.
Corrosion Irritation:	Not Available	Severe eye irritant
Sensitization:	Not Available	Not Available
Single Target Organ (STOT):	Not Available	Central nervous system, Optic nerve, Respiratory system
Numerical Measures:	Not Available	Not Available
Carcinogenicity:	Not Available	IARC- Carcinogenic to Humans ACGIH--Carcinogenic to Animals
Mutagenicity:	Not Available	Mutagenic effects occurred in Animals
Reproductive Toxicity:	Not Available	Toxic
Aspiration Hazard:	Not Available	Not Available

Section XII - Ecological Information (non-mandatory)

Product/ Ingredient name	12.1 Toxicity	12.2 Persistence and degradability	12.3 Bio accumulativ e potential	12.4 Mobility in soil	12.5 Results of PBT and vPvB assessment	12.6 Other adverse effects
Zinc Oxide	It is very toxic to aquatic organisms. Since it takes very long time for zinc oxide to break down, it may cause adverse long-term effects in the aquatic environment.	The products of degradation are less toxic than the product itself.	Not Available	Not Available	Not Available	Not Available
Tin Oxide	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
Antimony Chloride	Not Available	Not Available	Not Available	Not Available	Not Available	Toxic to aquatic life with long lasting effects.
Epoxy Resin	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
Xylene	Not Available	Not Available	LogPow-3.12 BCF-8.1 to 25.9 Potential low	Not Available	Not Available	None
Butyl Alcohol	LC50- Pimephales promelas 1.220 mg/l/96h	Not Available	Not Available	Not Available	Not Available	Not Available
Ethanol	LcC50 = 14200mg/l/96h	Unlikely	Not Available	log Pow -0.32	Not Available	Not Available

Section XIII - Disposal Considerations (non-mandatory)

Recommendations for:

Disposal Container(s)	None
Disposal Method	Dispose of in accordance to local, state, and federal regulations
Sewage Disposal	Avoid dispersal of spilled materials and runoff and contact with soil, waterways, drains and sewers.

Section XIV - Transport Information (non-mandatory)

UN#	UN 1263
UN Proper Shipping Name	Paint Related Material
Transport Hazard Class	3
Packing Group Number (if applicable, based on	Y344

Environmental hazards (marine pollutant? International Maritime Dangerous Goods Code (IMDG))	Yes
Guidance on Bulk Transport	Passenger and Cargo Aircraft

Section XV - Regulatory Information (non-mandatory)

It is the responsibility of each company to comply to proper regional regulations.

Section XVI - SDS History

<u>Line #</u>	<u>Date</u>	<u>Revision</u>	<u>Comments</u>
1	12/31/2015	A	MSDS to SDS
2	6/1/2016	B	Address change