



SDS

SAFETY DATA SHEET

Product Name: (as shown on label)	RM-550-IB
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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 #:	RM-550-IB	Manufacturer:	AZ Technology Inc.
Spec/Rev #:	CPS-C-015 Rev. B	Address:	180 West Park Loop NW Huntsville AL, 35806
Usage:	Black Optical Coating	Company Ph.# :	(256) 837-9877
		Emergency #:	(256) 837-9877

Section II - Hazard Identification

Hazard statement and classification	H400 category 1	Very toxic to aquatic life
	H410 category 1	Very toxic to aquatic life with long lasting effects
Signal Word	Caution: Irritant (eye and skin).	
Pictograms:		
Safety Phrases	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Precautionary Statements	P273	Avoid release to the environment.
	P391	Collect spillage.
	P501	Dispose of contents/ container to an approved waste disposal plant.

Section III - Composition/Information on Ingredients

Common Name	CAS#	OSHA PEL	ACGIH TLV	Other Limits Recommended
Silicone Oxycarbide	67763-03-5	None established	None established	None
Potassium Silicate	1312-76-1	N/A	N/A	5 mg/m ³ (per PQ Corp.)
Distilled Water	N/A	N/A	N/A	

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 15 minutes with copious amounts of water, occasionally lifting upper and lower lids. Obtain medical attention.
Ingestion:	Consult physician; gastric lavage may be necessary.
Important symptoms or effects including acute or delayed :	Prolonged or repeated exposure may aggravate pre-existing skin, central nervous system, liver, kidney, and/or intestinal tract conditions.
Treatment Recommendations (if applicable):	Consult a physician in all cases.

Section V - Fire-Fighting Measures

Suitable Extinguishing Media	Foam, dry chemical
Unsuitable Extinguishing Media	Water may be ineffective, DO not use water jet.
Flash Point Method	N/A
Specific Hazards Arising from the Chemical	Avoid oxidizing agents, concentrated mineral acids, hydrofluoric acid.
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.

Section VII - Handling and Storage

Safe handling precautions	Prevent inhalation of vapors. Wear NIOSH/MSHA approved respiratory protection equipment.
Safe storage recommendations (including incompatibilities)	Store below 80°F in dry location.

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 HEPA type respirator, splash proof goggles.

Section IX - Physical and Chemical Properties

Appearance	Black Liquid	Flammability/Explosive Limits	UEL 33%
Odor	None	Odor Threshold	None Given
PH	None Given	Vapor Pressure	None Given
Melting Point	None Given	Vapor Density	>1
Freezing Point	None Given	Relative Density	None Given
Flash Point	Non Combustable	Solubility	None Given
Boiling Point	None Given	Evaporation rate	None Given
Viscosity	None Given	Flammability (solid, gas)	None
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, concentrated mineral acids, hydrofluoric acid
Stability	Stable under normal conditions
Polymerize thresholds	Will not Occur.

Section XI - Toxicological Information

	Product/ingredient name	
Acute Toxicity	Silicone Oxycarbide	Potassium Silicate
Oral LD50: Rat	Not Available	> 5,000 mg/kg
Inhalation LC50: Rat	Not Available	> 2.06 g/m ³
Dermal LD50: Rabbit	Not Available	> 5,000 mg/kg
Chronic Toxicity:	Repeated and prolonged exposure may be harmful.	Not Available
Corrosion Irritation:	May cause mild skin and eye irritation.	Mist may cause irritation.

Sensitization:	Non Sensitizer	Non Sensitizer
Single Target Organ (STOT):	Not Available	Not Classified
Numerical Measures:	Not Available	Not Available
Carcinogenicity:	Not Carcinogenic	No Structure Alerts
Mutagenicity:	Not Available	No Evidence of Genotoxicity
Reproductive Toxicity:	Not Available	No Evidence of Reproductive Toxicity
Aspiration Hazard:	Not Available	Not Classified

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
Potassium Silicate	Fish LC50- >146 mg/l/48hr EC50 >146 mg/l/24hr	Inorganic. Soluble silicates, upon dilution, rapidly depolymerize into molecular species indistinguishable from natural dissolved silica.	Inorganic. The substance has no potential for bioaccumulatio n.	N/A	Not Classified	The Alkalinity of this material will have a local effect on ecosystems sensitive to changes in ph.
Silicone Oxycarbide	Not Available	Not Available	Not Available	Not Available	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#	N/A
UN Proper Shipping Name	N/A
Transport Hazard Class	N/A
Packing Group Number (if applicable, based on Environmental hazards (marine pollutant?)	N/A
International Maritime Dangerous Goods Code (IMDG))	N/A
Guidance on Bulk Transport	N/A

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