



# SDS

## SAFETY DATA SHEET

<b>Product Name:</b> (as shown on label)	<b>MLS-85-SB-C</b>
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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

<b>Part #:</b>	MLS-85-SB-C	<b>Manufacturer:</b>	AZ Technology Inc.
<b>Spec/Rev #:</b>	CPS-C-011 Rev. B	<b>Address:</b>	180 West Park Loop NW Huntsville AL, 35806
<b>Usage:</b>	Conductive Black Organic Optical Coating	<b>Company Ph.# :</b>	(256) 837-9877
		<b>Emergency #:</b>	(256) 837-9877

### Section II - Hazard Identification

<b>Classification of the substance or mixture:</b>	<b>Notice:</b> 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).			
<b>Hazard statements:</b>	Flammable liquid and vapor	May cause respiratory irritation	Causes skin irritation	Causes serious eye irritation	Toxic to aquatic life with long lasting effects
<b>Signal Word:</b>	<b>Danger</b>				
<b>Pictograms:</b>					
<b>Precautionary Statements:</b>	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.
<b>Notice:</b>	
<b>All following Precautionary Statements refer to a nearly negligible percentage of the total coating</b>	
P301+P312+P330	If <b>SWALLOWED</b> call poison center/ doctor/ physician if you feel unwell.
P302+P352	If <b>ON SKIN</b> wash with plenty of soap and water.
P304+P340+P312	If <b>INHALED</b> 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 <b>IN EYES</b> 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
Silicone Oxycarbide	67763-03-5	None established	None established	None
Silicone Resin	N/A	None established	None established	None
Aminopropylsilane	1760-24-3	TWA 200 ppm	TWA 200 ppm	Same
Xylene	1330-20-7	TWA 100 ppm	TWA 100 ppm	Same
Isopropanol	67-63-0	983 mg/m <sup>3</sup>	983 mg/m <sup>3</sup>	Same
Tin Sol	1828-10-5	2.0 mg/m <sup>3</sup>	2.0 mg/m <sup>3</sup>	Same
Antimony Sol	6923-52-0	0.5 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>	Same

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

## Section IV - First-Aid Measures

<b>Inhalation:</b>	Remove to fresh air. Obtain medical attention.
<b>Skin Irritation:</b>	Wash skin with soap and water. Obtain medical attention if irritation persists.
<b>Eye Contact:</b>	Immediately flush eyes for 15 minutes with copious amounts of water, occasionally lifting upper and lower lids. Obtain medical attention.
<b>Ingestion:</b>	Consult physician; gastric lavage may be necessary.
<b>Important symptoms or effects including acute or delayed :</b>	Prolonged or repeated exposure may aggravate pre-existing skin, central nervous system, liver, kidney, and/or intestinal tract conditions. Symptoms include: depression, drowsiness, impaired vision, ataxia, and stupor.
<b>Treatment Recommendations (if applicable):</b>	Consult a physician in all cases.

## Section V - Fire-Fighting Measures

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

## Section VI - Accidental Release Measures

<b>Preventive precautionary measures</b>	Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
<b>Emergency procedures (i.e. evac, consulting experts)</b>	Wear self-contained breathing apparatus pressure-demand NIOSH/MSHA (approved or equivalent) and full protective gear.
<b>Environmental Precautions</b>	Should not be released into environment. Do not flush into surface water or sanitary sewer system.
<b>Containment and Cleanup procedures</b>	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

<b>Safe handling precautions</b>	Prevent inhalation of vapors. Wear NIOSH/MSHA approved respiratory protection equipment for organic vapors.
<b>Safe storage recommendations (including incompatibilities)</b>	Store below 40°F in dry location away from oxidizing agents and combustible materials. Eliminate ignition sources.

## 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

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

## Section IX - Physical and Chemical Properties

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

## Section X - Stability and Reactivity

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

## Section XI - Toxicological Information

	Product/ingredient name				
	Xylene	Isopropanol	Silicone Resin	Silicone Oxycarbide	Aminopropylsilane
<b>Acute Toxicity</b>					
<b>Oral LD50: Rat</b>	4,300 mg/kg	5,050 mg/kg	> 5,000 mg/kg	Not Available	2,295 mg/kg
<b>Inhalation LC50: Rat</b>	5,000 ppm	Not Available	> 40 mg/l	Not Available	> 1.49 mg/l
<b>Dermal LD50: Rabbit</b>	Not Available	12,800 mg/kg	> 5,000 mg/kg	Not Available	> 2,000 mg/kg
<b>Chronic Toxicity:</b>	Not Available	Long term or repeated exposure to this material defats the skin.	Not Available	Repeated and prolonged exposure may be harmful.	Not Available

<b>Corrosion Irritation:</b>	Mild skin irritant. Severe eye irritant.	Not Available	Causes skin and eye irritation.	May cause mild skin and eye irritation.	Mild skin irritant. Severe eye irritant.
<b>Sensitization:</b>	Not Available	Not Available	Not Available	Non Sensitizer	May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>Single Target Organ (STOT):</b>	Not Available	This material may cause dizziness and/or drowsiness.	May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure.	Not Available	Not classified based on available information.
<b>Numerical Measures:</b>	Not Available	Not Available	Not Available	Not Available	Not Available
<b>Carcinogenicity:</b>	Not Available	Not Carcinogenic	Not Carcinogenic	Not Carcinogenic	Not Carcinogenic
<b>Mutagenicity:</b>	Not Available	Not Available	Not Mutagenic	Not Available	Not Mutagenic
<b>Reproductive Toxicity:</b>	Not Available	Not Available	Suspected of damaging fertility or the unborn child.	Not Available	None
<b>Aspiration Hazard:</b>	Not Available	Not Available	None	Not Available	None

Product/ingredient name

<b>Acute Toxicity</b>	<b>Tin Sol</b>	<b>Antimony Sol</b>
<b>Oral LD50: Rat</b>	Not Available	4,480 mg/kg
<b>Inhalation LC50: Rat</b>	Not Available	Not Available
<b>Dermal LD50: Rabbit</b>	Not Available	> 12.800 mg/kg
<b>Chronic Toxicity:</b>	Not Available	Not Available
<b>Corrosion Irritation:</b>	Not Available	Severe skin irritation- 24hr Moderate eye irritation- 24hr
<b>Sensitization:</b>	Not Available	Not Available

<b>Single Target Organ (STOP):</b>	Not Available	Not Available
<b>Numerical Measures:</b>	Not Available	Not Available
<b>Carcinogenicity:</b>	No Component of this product present at levels greater than or equal to 0.1 % is identified as probable, possible or confirmed human carcinogen by IARC.	No Component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
<b>Mutagenicity:</b>	Not Available	Not Available
<b>Reproductive Toxicity:</b>	Not Available	Not Available
<b>Aspiration Hazard:</b>	Not Available	Not Available

## Section XII - Ecological Information (non-mandatory)

<b>Product/ Ingredient name</b>	<b>12.1 Toxicity</b>	<b>12.2 Persistence and degradability</b>	<b>12.3 Bio accumulativ e potential</b>	<b>12.4 Mobility in soil</b>	<b>12.5 Results of PBT and vPvB assessment</b>	<b>12.6 Other adverse effects</b>
<b>Xylene</b>	Not Available	Not Available	LogPow:- 3.12 BcF: 8.1 to 25.9 Potential low	Not Available	Not Available	None
<b>Isopropanol</b>	LC50- Fish: 9,640 mg/l/96hr EC50- Crustaceans: 1,400 mg/l/48hr	This material is expected to be highly biodegradable.	The potential for bioconcentra- tion in aquatic organisms is low.	This Material is expected to have high mobility in soil.	Not Available	Not Available
<b>Silicone Resin</b>	LC50-Fish: 13.5 mg/l/96hr EC50- Crustaceans: 3.2 mg/l/48 hr	This material is readily biodegradable.	LogPow: 3.12- 3.2 BcF: 5.4- 25.9	Not Available	Not Available	Not Available
<b>Silicone Oxycarbide</b>	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
<b>Aminoprop- ylsilane</b>	LC50-Fish: 597 mg/l/96hr EC50- Crustaceans: 81 mg/l/48hr ErC50- Algae: 8.8 mg/l/72hr	Not readily biodegradable.	LogPow: -0.3 BcF: <10	Not Available	Not Available	Not Available
<b>Tin Sol</b>	Not Available	Not Available	Not Available	Not Available	Not required or conducted.	Not Available

<b>Antimony Sol</b>	Not Available	Not Available	Not Available	Not Available	Not required or conducted.	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.
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### Section XIII - Disposal Considerations (non-mandatory)

**Recommendations for:**

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

### Section XIV - Transport Information (non-mandatory)

<b>UN#</b>	UN 1263
<b>UN Proper Shipping Name</b>	Paint Related Material
<b>Transport Hazard Class</b>	3
<b>Packing Group Number (if applicable, based on Environmental hazards (marine pollutant? International Maritime Dangerous Goods Code (IMDG))</b>	Y344
<b>Guidance on Bulk Transport</b>	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