



SDS

SAFETY DATA SHEET

Product Name: MLS-85-SB
(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 #:	MLS-85-SB	Manufacturer:	AZ Technology Inc.
Spec/Rev #:	CPS-C-011 Rev. B	Address:	180 West Park Loop NW Huntsville AL, 35806
Usage:	Black Organic Optical 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
Carbon Black	8021-99-6	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 ³	983 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 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. Symptoms include: depression, drowsiness, impaired vision, ataxia, and 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 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

Ventilation and/or enclosure recommendations	Use with adequate ventilation. Local exhaust recommended. Safety shower and eye bath should be within direct access.
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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	Black liquid	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				
	Xylene	Isopropanol	Silicone Resin	Carbon Black	Aminopropylsilane
Acute Toxicity					
Oral LD50: Rat	4,300 mg/kg	5,050 mg/kg	> 5,000 mg/kg	> 5,000 mg/kg	2,295 mg/kg
Inhalation LC50: Rat	5,000 ppm	Not Available	> 40 mg/l	Not Available	> 1.49 mg/l
Dermal LD50: Rabbit	Not Available	12,800 mg/kg	> 5,000 mg/kg	Not Available	> 2,000 mg/kg
Chronic Toxicity:	Not Available	Long term or repeated exposure to this material defats the skin.	Not Available	Not Available	Not Available
Corrosion Irritation:	Mild skin irritant. Severe eye irritant.	Not Available	Causes skin and eye irritation	Non Irritant	Mild skin irritant. Severe eye irritant.

Sensitization:	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.
Single Target Organ (STOT):	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.
Numerical Measures:	Not Available	Not Available	Not Available	Not Available	Not Available
Carcinogenicity:	Not Available	Not Carcinogenic	Not Carcinogenic	Not Available	Not Carcinogenic
Mutagenicity:	Not Available	Not Available	Not Mutagenic	Not Available	Not Mutagenic
Reproductive Toxicity:	Not Available	Not Available	Suspected of damaging fertility or the unborn child.	Not Available	None
Aspiration Hazard:	Not Available	Not Available	None	Not Available	None

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
Xylene	Not Available	Not Available	LogPow:- 3.12 BcF: 8.1 to 25.9 Potential low	Not Available	Not Available	None
Isopropanol	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
Silicon Resin	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
Carbon Black	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
Aminoprop- ylsilane	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

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 Environmental hazards (marine pollutant? International Maritime Dangerous Goods Code (IMDG))	Y344
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