

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Lightning® Bi-Chromatic™ Fingerprint Powder  
**PRODUCT NUMBER:** 1-0005 (1003835), 1-0006 (1003836), 1-0015 (1003844),  
 1-0305 (1003994) **DATE:** July 15, 2011

TRADE NAME: Lightning Fingerprint Powder- BiChromatic  
 GENERAL USE: Latent Fingerprint Powder  
 CHEMICAL FAMILY: Aluminum based powder  
 PRODUCT DESCRIPTION:  
 Fine, black and silver powder with negligible odor.



**MANUFACTURER**  
**Safariland LLC**


**DATE PREPARED:** July 15, 2011  
**SUPERSEDES:** July 21, 2008

**ADDRESS (NUMBER, STREET, P.O. BOX)**  
 13386 International Parkway

**TELEPHONE NUMBER FOR INFORMATION / Customer Service**  
**800-347-1200**

**(CITY, STATE AND ZIP CODE)** **COUNTRY**  
 Jacksonville, FL. 32218 USA

**CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER**

	<b>1-800-255-3924</b>	<b>01-813-248-0585</b>
	North America Toll Free	International

## SECTION 2 - HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**  
**Not generally flammable - may cause slight irritation to respiratory tract.**

### POTENTIAL HEALTH EFFECTS

**INHALATION:**  
 Dust concentrations above the permissible limit may cause temporary respiratory tract discomfort.

**SKIN:**  
 Possible slight to moderate redness may occur with exposure.

**EYES:**  
 Possible transient irritation. Not classed as a primary irritant.

**INGESTION:**  
 Oral ingestion is not likely to produce adverse effects.

**CARCINOGENICITY:**  
 NTP? **NO** IARC MONOGRAPHS? **NO** OSHA REGULATED? **NO**  
 CALIFORNIA, Prop.65? **NO**

## SECTION 3 - HAZARDOUS INGREDIENTS

Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
<b>Aluminum</b>	<b>5-10</b>	<b>7429-90-5</b>	<b>231-072-3</b>	<b>F</b>	<b>R10, R15</b>
<b>Carbon Black</b>	<b>15-25</b>	<b>1333-86-4</b>	<b>215-609-9</b>	<b>None</b>	<b>None</b>

## SECTION 4 - FIRST AID MEASURES

**INHALATION:**  
 Remove victim to fresh air.

**EYES:**  
 Flush with water for 15 minutes occasionally lifting the eyelids.

**SKIN:**  
 Rinse with copious amounts of water . Wash with soap and water and launder contaminated clothing before re-use.

**INGESTION:**  
 Product is generally non-toxic.

## SECTION 5 - FIRE FIGHTING MEASURES

**GENERAL HAZARDS:**  
 Can pose a dust explosion hazard if dispersed in air. Avoid ignition sources.

**EXTINGUISHING MEDIA:**  
 Dry sand, suffocation of flames

**FIRE FIGHTING PROCEDURES:**  
 Do not use halogenated extinguishing methods. Ring small fire with sand, using non-sparking shovels, eliminate drafts, and let fire extinguish itself.

Possible transient irritation. Not classed as a primary irritant.  
 Aluminum flake powder is considered a flammable solid. It may be ignited by static discharge and burn at extremely high temperatures.

**HAZARDOUS COMBUSTION PRODUCTS:**  
 Combustion produces major amounts of Carbon Monoxide, Carbon Dioxide, Smoke, Soot and minor amounts of Nitrogen oxides and Sulfur oxides.

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## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**  
 Cleaning should be done with a soft brush or sponge, and pickup should be done with non-sparking, conductive scoops. Plastic scoops should not be used because of their tendency to accumulate strong static charges.

## SECTION 7 - HANDLING AND STORAGE

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:**  
 Avoid dust cloud formations. Do not store above 120°F. Keep away from acids, strong alkalis, strong bases and oxidizers. Use and store with adequate ventilation. Keep containers closed when not in use.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

HAZARDOUS COMPONENTS	NIOSH				ACGIH		OSHA	
	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TLV/TWA ppm	TWA mg/m3	STEL ppm	PEL mg/m3
<b>Aluminum</b>		<b>10</b>				<b>10</b>		<b>15</b>
<b>Carbon Black</b>		<b>3.5</b>				<b>3.5</b>		<b>3.5</b>

## PERSONAL PROTECTION

**RESPIRATORY PROTECTION:**  
 Not required in unconfined or well ventilated areas. . Use NIOSH or E.U. EN149 standard approved respirators for areas where general ventilation is not possible.

**PROTECTIVE GLOVES:**  
 Gloves are advised for repeated or prolonged contact.

**EYE PROTECTION:**  
 Safety glasses for prolonged use.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:**  
 Eye wash station in the event of eye contact with material.

**WORK / HYGIENIC PRACTICES:**  
 Employ good, industrial hygiene practices by using adequate ventilation and personal protection, as needed. Where dust cannot be controlled, personal respiratory protection should be employed.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE AND ODOR</b> Fine, silver/red powder with negligible odor.	<b>VAPOR PRESSURE</b> NE
<b>pH</b> NA	<b>SPECIFIC GRAVITY (WATER = 1)</b> 2.6
<b>MELTING POINT</b> NE	<b>SOLUBILITY IN WATER</b> Nil
<b>FLASH POINT</b> NE	<b>VISCOSITY</b> NA
<b>FLAMMABLE LIMITS</b> LEL: 40 mg/l UEL: NE	<b>VAPOR DENSITY (AIR = 1)</b> NE
<b>AUTOIGNITION TEMPERATURE</b> NE	<b>EVAPORATION RATE (WATER = 1)</b> NE

## SECTION 10 - STABILITY AND REACTIVITY

**STABILITY** STABLE X **CONDITIONS TO AVOID:**  
 See Below

**INCOMPATIBILITY (MATERIALS TO AVOID):**  
 Aluminum powder oxidizes when heated at a temperature dependent rate, reacts violently with oxidizers to produce heat, reacts with water and slowly generates heat and hydrogen, and reacts with some acids and alkalis to form hydrogen gas.

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS:**  
 Oxides of Carbon, aluminum oxide fumes

**HAZARDOUS POLYMERIZATION:** Will not occur. **CONDITIONS TO AVOID:** None related to polymerization.

## SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
<b>Aluminum</b>	<b>7429-90-5</b> <b>231-072-3</b>	<b>Not Established</b>	<b>Not Established</b>
<b>Carbon Black</b>	<b>1333-86-4</b> <b>215-609-9</b>	<b>&gt;15,400 mg/kg (oral, rat)</b>	<b>lowest published toxic concentration: 1.66 mg/m3/7 hour</b>

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## SECTION 12 - ECOLOGICAL INFORMATION

No ecological information is available for this product.

## SECTION 13 - DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:**

Dispose of product waste as well as containers in accordance with all local, state and federal regulations.

**AVOID CLOUDS OF ALUMINUM DUST!**

## SECTION 14 - TRANSPORT INFORMATION

**PROPER SHIPPING NAME:** Not regulated for transport.

**DOT HAZARD CLASS / Pack Group:** Not regulated for transport.

**IATA HAZARD CLASS / Pack Group:** Not regulated

**REFERENCE:**

**IMDG HAZARD CLASS:** Not regulated

**UN / NA IDENTIFICATION NUMBER:** Not regulated for transport.

**RID/ADR Dangerous Goods Code:** Not regulated

**LABEL:** None

**UN TDG Class / Pack Group:** Not regulated

**HAZARD SYMBOLS:** None

**Hazard Identification Number (HIN):** None

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

## SECTION 15 - REGULATORY INFORMATION

**TSCA (USA - Toxic Substance Control Act):** No

**SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):** No

Acute Health: No

Chronic Health: No

Fire: No

Sudden Release of Pressure: No

Reactive: No

**313 REPORTABLE INGREDIENTS:** No

**CERCLA (USA - Comprehensive Response Compensation and Liability Act):** Not listed.

**California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986:** Not listed.

**State Right to Know: Carbon: NJ,PA; Aluminum MA, NJ, PA.**

**CPR (Canadian Controlled Products Regulations):** Not listed

**IDL (Canadian Ingredient Disclosure List):** Listed.

**DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List):** Components listed on DSL.

**EINECS (European Inventory of Existing Commercial Chemical Substances):** Referenced.

**WGK Water Quality Index:** 2

RISK PHRASES:	SYMBOL(S) REQUIRED FOR EU LABEL	SAFETY PHRASES:
None	None	None

## SECTION 16 - OTHER INFORMATION

**Legend:** NA= Not applicable, NE= Not established, ND= Not determined.

HMIS HAZARD RATINGS	HEALTH:	1	0 = INSIGNIFICANT
	FLAMMABILITY:	2	1 = SLIGHT
	PHYSICAL HAZARD:	0	2 = MODERATE
	PERSONAL PROTECTIVE EQUIPMENT:	B	3 = HIGH
			4 = EXTREME

**REVISION SUMMARY:**

Revised to E.U. protocols 7/15/2011 supersedes 7/1/2008 issue. JTV

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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.