

# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date: July 25, 2014

Revision: July 25, 2014

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** Lightning® Bi-Chromatic™ Magnetic Fingerprint Powder
- **Article number:** 1-0165 (1003951), 1-0175 (1003958), 1-0178 (1003960)
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
Safariland, LLC  
13386 International Parkway  
Jacksonville, FL 32218  
Customer Care (800) 347-1200
- **1.4 Emergency telephone number:**  
ChemTel Inc.  
(800)255-3924, +1 (813)248-0585



## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
The following classifications are applicable only to OSHA (USA) regulations and not the specific CLP regulation: Combustible Dust, Carc. 2.  
May form combustible dust concentrations in air. (USA GHS Only)  
Carc. 2 H351: Suspected of causing cancer.  
The product is not classified as hazardous according to the CLP regulation.

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- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
- **Information concerning particular hazards for human and environment:**  
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.  
The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

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- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
This product does not have a classification according to the CLP regulation.  
The following Hazard Statements are applicable only according to OSHA regulations within the United States. These Statements are not applicable for the CLP regulation (1272/2008/EC) in the EU.  
Combustible Dust, H351.

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- **Hazard pictograms**



health hazard (US GHS only)

- **Signal word**

Applicable only within the United States (USA)  
WARNING

- **Hazard-determining components of labelling:**

iron  
Carbon black

- **Hazard statements**

Not applicable within the EU; applicable only for North America.  
May form combustible dust concentrations in air. (USA GHS Only)  
H351: Suspected of causing cancer.

- **Precautionary statements**

Applicable only within the United States (USA)  
P281 Use personal protective equipment as required.  
P202 Do not handle until all safety precautions have been read and understood.  
P308+P313 IF exposed or concerned: Get medical advice/attention.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Hazard description:**

- **WHMIS-symbols:**

D2A - Very toxic material causing other toxic effects



- **NFPA ratings (scale 0 - 4)**



Health = 0  
Fire = 0  
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = 0  
Fire = 0  
Reactivity = 0

- **HMIS Long Term Health Hazard Substances**

None of the ingredients is listed.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

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· **vPvB:** Not applicable.

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## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

· **Description:** Mixture of substances listed below with nonhazardous additions.

### Dangerous components:

None in reportable quantities.

CAS: 7439-89-6 EINECS: 231-096-4	iron substance with a Community workplace exposure limit	> 80%
CAS: 1333-86-4 EINECS: 215-609-9	Carbon black substance with a Community workplace exposure limit	10-20%
CAS: 7429-90-5 EINECS: 231-072-3 Index number: 013-002-00-1	aluminium powder (stabilised)  F R11-15  Flam. Sol. 1, H228; Water-react. 2, H261	< 1,0%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

· **General information:** No special measures required.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Clean with water and soap.

· **After eye contact:**

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Do not induce vomiting; call for medical help immediately.

### 4.2 Most important symptoms and effects, both acute and delayed

Slight irritant effect on eyes.

Gastric or intestinal disorders when ingested.

Coughing

· **Hazards** May be harmful if inhaled.

### 4.3 Indication of any immediate medical attention and special treatment needed

If necessary oxygen respiration treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

· **For safety reasons unsuitable extinguishing agents:** None.

### 5.2 Special hazards arising from the substance or mixture

May form combustible dust concentrations in air.

Formation of toxic gases is possible during heating or in case of fire.

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- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information** No further relevant information available.

## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
Wear protective equipment. Keep unprotected persons away.  
For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Send for recovery or disposal in suitable receptacles.  
Dispose contaminated material as waste according to item 13.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Use only in well ventilated areas.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Avoid storage near extreme heat, ignition sources or open flame.  
Protect from humidity and water.
- **Information about storage in one common storage facility:**  
Store away from foodstuffs.  
Do not store together with acids.  
Store away from oxidizing agents.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.
- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

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· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

**7439-89-6 iron**

EV (Canada)	Long-term value: 1* 5** mg/m <sup>3</sup> as iron; *salts, water-soluble; **welding fume
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**1333-86-4 Carbon black**

PEL (USA)	Long-term value: 3,5 mg/m <sup>3</sup>
REL (USA)	Long-term value: 3,5* mg/m <sup>3</sup> *0,1 in presence of PAHs; See Pocket Guide Apps.A+C
TLV (USA)	Long-term value: 3* mg/m <sup>3</sup> *inhalable fraction
EL (Canada)	Long-term value: 3 mg/m <sup>3</sup> IARC 2B
EV (Canada)	Long-term value: 3,5 mg/m <sup>3</sup>

**7429-90-5 aluminium powder (stabilised)**

PEL (USA)	Long-term value: 15*; 15** mg/m <sup>3</sup> *Total dust; ** Respirable fraction
REL (USA)	Long-term value: 10* 5** mg/m <sup>3</sup> *Total dust **Respirable fraction
TLV (USA)	Long-term value: 1* mg/m <sup>3</sup> as Al; *as respirable fraction
EL (Canada)	Long-term value: 1,0 mg/m <sup>3</sup> metal and insoluble compounds, respirable
EV (Canada)	Long-term value: 5 mg/m <sup>3</sup> aluminium-containing (as aluminium)

- **DNELs** No further relevant information available.
- **PNECs** No further relevant information available.
- **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Do not inhale dust / smoke / mist.

Avoid contact with the eyes.

Avoid close or long term contact with the skin.

· **Respiratory protection:**

Not required under normal conditions of use.

Use suitable respiratory protective device when high concentrations are present.

For spills, respiratory protection may be advisable.

- **Protection of hands:** Not required under normal conditions of use.

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- **Eye protection:**



Safety glasses

- **Body protection:**

Not required under normal conditions of use.

Protection may be required for spills.

- **Limitation and supervision of exposure into the environment** No special requirements.

- **Risk management measures** No special requirements.

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

**Form:** Powder

**Colour:** Black

- **Odour:** Odourless

- **Odour threshold:** Not determined.

- **pH-value:** Not applicable.

- **Change in condition**

**Melting point/Melting range:** Not Determined.

**Boiling point/Boiling range:** Undetermined.

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not determined.

- **Auto/Self-ignition temperature:** Not determined.

- **Decomposition temperature:** Not determined.

- **Self-igniting:** Product is not self-igniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**

**Lower:** Not determined.

**Upper:** Not determined.

- **Vapour pressure:** Not applicable.

- **Density at 20 °C:** 2,6 g/cm<sup>3</sup>

- **Relative density** Not determined.

- **Vapour density** Not applicable.

- **Evaporation rate** Not applicable.

- **Solubility in / Miscibility with water:**

Insoluble.

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- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - Dynamic:** Not applicable.
  - Kinematic:** Not applicable.
- **9.2 Other information** No further relevant information available.

## SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.  
May form combustible dust concentrations in air.
- **10.3 Possibility of hazardous reactions**  
As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion.  
Reacts with oxidizing agents.  
Reacts with strong acids.  
Reacts with strong alkali.  
Toxic fumes may be released if heated above the decomposition point.
- **10.4 Conditions to avoid** Store away from oxidizing agents.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**  
Carbon monoxide and carbon dioxide  
Toxic metal oxide smoke

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
  - **on the skin:** No irritant effect.
  - **on the eye:** Slight irritant effect on eyes.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.  
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.

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- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
The product contains heavy metals. Avoid transfer into the environment. Specific preliminary treatments are necessary
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Smaller quantities can be disposed of with household waste.  
Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.  
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## SECTION 14: Transport information

- **14.1 UN-Number**
- **DOT, ADR, ADN, IMDG, IATA** Not Regulated
- **14.2 UN proper shipping name**
- **DOT, ADR, ADN, IMDG, IATA** Not Regulated
- **14.3 Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class** Not Regulated
- **14.4 Packing group**
- **DOT, ADR, IMDG, IATA** Not Regulated
- **14.5 Environmental hazards:**
- **Marine pollutant:** No
- **14.6 Special precautions for user** Not applicable.
- **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

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· UN "Model Regulation": -

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## SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- SARA

### · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

### · Section 313 (Specific toxic chemical listings):

7429-90-5 | Aluminum metal

### · TSCA (Toxic Substances Control Act):

All ingredients are listed.

### · Proposition 65 (California):

#### · Chemicals known to cause cancer:

1333-86-4 | Carbon black

#### · Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

#### · Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

#### · Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

#### · Carcinogenic Categories

##### · EPA (Environmental Protection Agency)

None of the ingredients is listed.

##### · IARC (International Agency for Research on Cancer)

1333-86-4 | Carbon black

2B

##### · TLV (Threshold Limit Value established by ACGIH)

1333-86-4 | Carbon black

A4

7429-90-5 | Aluminum metal

A4

##### · NIOSH-Ca (National Institute for Occupational Safety and Health)

1333-86-4 | Carbon black

#### · Canada

##### · Canadian Domestic Substances List (DSL)

All ingredients are listed.

##### · Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

##### · Canadian Ingredient Disclosure list (limit 1%)

1333-86-4 | Carbon black

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7429-90-5	Aluminum metal
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· **Other regulations, limitations and prohibitive regulations**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

· **Substances of very high concern (SVHC) according to REACH, Article 57**

None of the ingredients is listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H228 Flammable solid.

H261 In contact with water releases flammable gases.

R11 Highly flammable.

R15 Contact with water liberates extremely flammable gases.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

Flam. Sol. 1: Flammable solids, Hazard Category 1

Water-react. 2: Substances and Mixtures which, in contact with water, emit flammable gases, Hazard Category 2

· **Sources**

SDS Prepared by:

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