

# Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date July 27, 2015

Reviewed on July 27, 2015

## 1 Identification

- **Product identifier**
- **Trade name:** Lightning® Silver Gray Fingerprint Powder
- **Article number:**  
1-0003 (1003831), 1-0004 (1003833), 1-0011 (1003840), 1-0014 (1003843), 1-0303 (1003992)
- **Recommended use and restriction on use**
- **Recommended use:** Forensics.
- **Restrictions on use:** Contact manufacturer.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
Safariland, LLC  
13386 International Parkway  
Jacksonville, FL 32218  
Customer Care (800) 347-1200
- **Emergency telephone number:**  
ChemTel Inc.  
(800)255-3924, +1 (813)248-0585



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carc. 2                    H351 Suspected of causing cancer. Route of exposure: Inhalation.

Combustible Dust                    May form combustible dust concentrations in air.

- **Additional information:**

There are no other hazards not otherwise classified that have been identified.  
0 percent of the mixture consists of ingredient(s) of unknown toxicity.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS08

- **Signal word** Warning

- **Hazard-determining components of labeling:**

Carbon black

- **Hazard statements**

H351 Suspected of causing cancer. Route of exposure: Inhalation.

May form combustible dust concentrations in air.

- **Precautionary statements**

P201                    Obtain special instructions before use.

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date July 27, 2015

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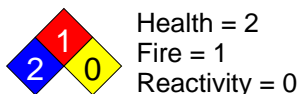
**Trade name: Lightning® Silver Gray Fingerprint Powder**

(Contd. of page 1)

- P202 Do not handle until all safety precautions have been read and understood.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P308+P313 IF exposed or concerned: Get medical advice/attention.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

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



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



\* - Indicates a long term health hazard from repeated or prolonged exposures.

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

7439-89-6	iron	50-100%
1333-86-4	Carbon black ☠ Carc. 2, H351	2.5-10%
7429-90-5	aluminium powder (stabilised) ☠ Flam. Sol. 1, H228; Water-react. 2, H261	≤ 2.5%

- **Additional information:**

For the listed ingredient(s), the identity and exact percentage(s) are being withheld as a trade secret.

### 4 First-aid measures

- **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:**  
Brush off loose particles from skin.  
Wash with soap and water.  
If skin irritation is experienced, consult a doctor.

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date July 27, 2015

Reviewed on July 27, 2015

**Trade name: Lightning® Silver Gray Fingerprint Powder**

(Contd. of page 2)

- **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:**  
Rinse out mouth and then drink plenty of water.  
Do not induce vomiting; immediately call for medical help.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**  
Coughing  
Breathing difficulty  
Gastric or intestinal disorders when ingested.
- **Danger** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
Contains iron powder. Consult literature for specific antidotes.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture**  
May form combustible dust concentrations in air.
- **Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information** No further relevant information available.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation.  
For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.  
For large spills, wear protective clothing.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Dispose contaminated material as waste according to item 13.  
Send for recovery or disposal in suitable receptacles.
- **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.

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date July 27, 2015

Reviewed on July 27, 2015

**Trade name: Lightning® Silver Gray Fingerprint Powder**

(Contd. of page 3)

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Use only in well ventilated areas.  
Any deposit of dust which cannot be avoided must be regularly removed.  
Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:**  
Store away from foodstuffs.  
Do not store together with oxidizing and acidic materials.
- **Further information about storage conditions:**  
Keep containers tightly sealed.  
Protect from humidity and water.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

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

### Components 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
LMPE (Mexico)	Long-term value: 1 mg/m <sup>3</sup>

#### 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>
LMPE (Mexico)	Long-term value: 3* mg/m <sup>3</sup> A3, *fracción inhalable

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

PEL (USA)	Long-term value: 15*; 15** mg/m <sup>3</sup> *Total dust; ** Respirable fraction
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(Contd. on page 5)

## Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)


Printing date July 27, 2015

Reviewed on July 27, 2015

**Trade name: Lightning® Silver Gray Fingerprint Powder**

(Contd. of page 4)

REL (USA)	Long-term value: 10* 5** mg/m <sup>3</sup> as Al*Total dust**Respirable/pyro powd./welding f.
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> respirable, as Al
EV (Canada)	Long-term value: 5 mg/m <sup>3</sup> aluminium-containing (as aluminium)
LMPE (Mexico)	Long-term value: 1* mg/m <sup>3</sup> A4, *fracción respirable

- **Additional information:** No further relevant information available.
  - **Exposure controls**
  - **Engineering measures** Provide adequate ventilation.
  - **Personal protective equipment:**
  - **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.
  - **Engineering controls:** No further relevant information available.
  - **Breathing equipment:**  
Not required under normal conditions of use.  
Use suitable respiratory protective device when high concentrations are present.  
For large spills, respiratory protection may be advisable.
  - **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
  - **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - **Eye protection:**
-  Safety glasses
- **Body protection:** Protective work clothing
  - **Limitation and supervision of exposure into the environment**  
No further relevant information available.

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date July 27, 2015

Reviewed on July 27, 2015

**Trade name: Lightning® Silver Gray Fingerprint Powder**

(Contd. of page 5)

## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · General Information

#### · Appearance:

**Form:** Powder  
**Color:** Silver grey

· **Odor:** Odorless

· **Odor threshold:** Not determined.

· **pH-value:** Not applicable.

#### · Change in condition

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** 3000 °C (5432 °F)

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** May form combustible dust concentrations in air.

· **Auto-ignition temperature:** Not determined.

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not self-igniting.

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

#### · Explosion limits:

**Lower:** Not determined.

**Upper:** Not determined.

· **Oxidizing properties:** Non-oxidizing.

· **Vapor pressure:** Not determined.

· **Density:** Not determined.

· **Relative density:** Not determined.

· **Vapour density:** Not applicable.

· **Evaporation rate:** Not applicable.

#### · Solubility in / Miscibility with

**Water:** Insoluble.

· **Partition coefficient (n-octanol/water):** Not determined.

#### · Viscosity:

**Dynamic:** Not applicable.

**Kinematic:** Not applicable.

· **Other information:** No further relevant information available.

## 10 Stability and reactivity

· **Reactivity:** No further relevant information available.

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date July 27, 2015

Reviewed on July 27, 2015

<b>Trade name: Lightning® Silver Gray Fingerprint Powder</b>
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(Contd. of page 6)

- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **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 strong acids and alkali.  
Reacts with strong oxidizing agents.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

- **Carcinogenic categories**

<b>· NTP (National Toxicology Program)</b>
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None of the ingredients is listed.
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<b>· OSHA-Ca (Occupational Safety &amp; Health Administration)</b>
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None of the ingredients is listed.
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- **Probable Routes of Exposure**

Ingestion.  
Inhalation.  
Eye contact.  
Skin contact.

- **Repeated Dose Toxicity:** Possible risk of irreversible effects.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**  
Carc. 2
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Suspected of causing cancer. Route of exposure: Inhalation.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

(Contd. on page 8)

# Safety Data Sheet

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**Trade name: Lightning® Silver Gray Fingerprint Powder**

(Contd. of page 7)

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. 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 packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

- |  |                 |
|--|-----------------|
| · <b>UN-Number</b>   |                 |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Not Regulated   |
| · <b>UN proper shipping name</b>   |                 |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Not Regulated   |
| · <b>Transport hazard class(es)</b>  |                 |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   |                 |
| · <b>Class</b>   | Not Regulated   |
| · <b>Packing group</b>   |                 |
| · <b>DOT, ADR, IMDG, IATA</b>  | Not Regulated   |
| · <b>Environmental hazards:</b>  | Not applicable. |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | Not Regulated   |

(Contd. on page 9)



# Safety Data Sheet

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Trade name: Lightning® Silver Gray Fingerprint Powder

(Contd. of page 8)

## 15 Regulatory information

- 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):**

None of the ingredients are listed.

- **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 | aluminium powder (stabilised)

A4

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

1333-86-4 | Carbon black

- **State Right to Know Listings**

None of the ingredients is listed.

- **Canadian substance listings:**

- **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

(Contd. on page 10)

# Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date July 27, 2015

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**Trade name: Lightning® Silver Gray Fingerprint Powder**

(Contd. of page 9)

· **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.

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

## 16 Other information

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.

· **Date of preparation / last revision** July 27, 2015 / -

· **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

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)

HMS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

Carc. 2: Carcinogenicity, Hazard Category 2

· **Sources**

Website, European Chemicals Agency ([http://http://echa.europa.eu/](http://echa.europa.eu/))

Website, US EPA Substance Registry Services ([http://http://ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do](http://ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do))

Website, Chemical Abstracts Registry, American Chemical Society (<https://www.cas.org>)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaassen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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