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



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| **SECTION 2: Hazards identification** |

# 2.1 Classification of the substance or mixture

* **1.1 Product identifier**
* **Trade name: Lightning® Black Magnetic Fingerprint Powder**
* **Article number:** 1-0160 (1003946), 1-0170 (1003935), 1-0176 (1003959)
* **1.2 Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

* **Application of the substance / the mixture:** Laboratory chemicals
* **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.

+1 (800)255-3924, +1 (813)248-0585

## Classification according to Regulation (EC) No 1272/2008

May form combustible dust concentrations in air. (USA and Canada GHS Only) The product is not classified as hazardous according to the CLP regulation.

# 2.2 Label elements

## Labelling according to Regulation (EC) No 1272/2008 Not Regulated

* **Hazard pictograms** Not Regulated
* **Signal word** Not Regulated

## Hazard-determining components of labelling: None.

* **Hazard statements**

May form combustible dust concentrations in air. (USA and Canada GHS Only) The product is not classified as hazardous according to the CLP regulation.

## Additional information:

Safety data sheet available on request.

## NFPA ratings (scale 0 - 4)

Health = 1

0

1 0

Fire = 0

Reactivity = 0

## HMIS-ratings (scale 0 - 4)

Health = 0

REACTIVITY 0

0

FIRE

HEALTH 0

Fire = 0

Reactivity = 0

(Cont'd. on page 2)

(Cont'd. from page 1)

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

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| **SECTION 3: Composition/information on ingredients** |

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| · **Components:** |
| CAS: 7439-89-6EINECS: 231-096-4 | iron | substance with a Community workplace exposure limit | 50-100% |
| CAS: 1333-86-4EINECS: 215-609-9 | carbon black | substance with a Community workplace exposure limit | 15-25% |

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| **SECTION 4: First aid measures** |

# 4.1 Description of first aid measures

· **3.2 Mixtures**

· **Additional information:** For the wording of the listed Hazard Statements refer to section 16.

* **General information:** Take affected persons out into the fresh air.

## After inhalation:

Supply fresh air; consult doctor in case of complaints.

Provide oxygen treatment if affected person has difficulty breathing.

In case of irregular breathing or respiratory arrest provide artificial respiration.

## After skin contact:

Brush off loose particles from skin. Clean with water and soap.

If skin irritation continues, consult a doctor.

## 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; call for medical help immediately.

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

Slight irritant effect on eyes. Coughing

Gastric or intestinal disorders when ingested.

* **Hazards:** No further relevant information available.

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

Contains metallic iron. Consult literature for specific antidotes. If necessary oxygen respiration treatment.

Medical supervision for at least 48 hours.

(Cont'd. on page 3)

(Cont'd. from page 2)

* **5.1 Extinguishing media**
* **Suitable extinguishing agents:**

Water in flooding quantities. Foam

Dry sand Limestone powder

* **For safety reasons unsuitable extinguishing agents:** None.
* **5.2 Special hazards arising from the substance or mixture** Formation of toxic gases is possible during heating or in case of fire. May form combustible dust concentrations in air.
* **5.3 Advice for firefighters**
* **Protective equipment:**

Wear self-contained respiratory protective device. Wear fully protective suit.

* **Additional information:** No further relevant information available.
* **6.1 Personal precautions, protective equipment and emergency procedures**

Use respiratory protective device against the effects of fumes/dust/aerosol. Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

* **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. Clean the affected area carefully; suitable cleaners are: Warm water and cleansing agent

* **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.

* **7.1 Precautions for safe handling**

Any unavoidable deposit of dust must be regularly removed. Use only in well ventilated areas.

* **Information about fire - and explosion protection:** May form combustible dust concentrations in air.

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| **SECTION 5: Firefighting measures** |

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| **SECTION 6: Accidental release measures** |

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| **SECTION 7: Handling and storage** |

· **8.1 Control parameters**

* **DNELs:** No further relevant information available.
* **PNECs:** No further relevant information available.
* **8.2 Exposure controls**
* **Personal protective equipment:**
* **General protective and hygienic measures:** No further relevant information available.
* **Respiratory protection:**

Not required under normal conditions of use.

Use suitable respiratory protective device in case of insufficient ventilation.

Use suitable respiratory protective device when high concentrations are present. For spills, respiratory protection may be advisable.

NIOSH or EN approved organic vapour respirator equipped with a dust/mist prefilter should be used.

(Cont'd. on page 5)

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* **7.2 Conditions for safe storage, including any incompatibilities**
* **Storage:**
* **Requirements to be met by storerooms and receptacles:**

Protect from humidity and water.

Avoid storage near extreme heat, ignition sources or open flame.

* **Information about storage in one common storage facility:**

Do not store together with oxidising and acidic materials. Protect from humidity and water.

Store away from foodstuffs.

* **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles. This product is hygroscopic.
* **7.3 Specific end use(s)** No further relevant information available.

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| **SECTION 8: Exposure controls/personal protection** |

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| · **Ingredients with limit values that require monitoring at the workplace:** |
| **7439-89-6 iron** |
| EV (Canada) | Long-term value: 1\* 5\*\* mg/m³as iron;\*salts, water-soluble;\*\*welding fume |
| **1333-86-4 carbon black** |
| PEL (USA)REL (USA) TLV (USA)EL (Canada)EV (Canada) | Long-term value: 3,5 mg/m³Long-term value: 3,5\* mg/m³\*0,1 in presence of PAHs;See Pocket Guide Apps.A+CLong-term value: 3\* mg/m³\*inhalable fractionLong-term value: 3 mg/m³ IARC 2BLong-term value: 3,5 mg/m³ |

## Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

## 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.

Sensibilisation by the components in the glove materials is possible.

## 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.

## For the permanent contact gloves made of the following materials are suitable:

Butyl rubber, BR Neoprene gloves Natural rubber, NR Nitrile rubber, NBR

## Eye protection:

Safety glasses

* **Body protection:** Protective work clothing
* **Limitation and supervision of exposure into the environment:** No special requirements.
* **Risk management measures:** No special requirements.

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| **SECTION 9: Physical and chemical properties** |

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| * **9.1 Information on basic physical and chemical properties**
* **Appearance**

**Form:** Powder**Colour:** Black* **Odour:** Odourless
* **Odour threshold:** Not determined.
 |
| * **pH-value:** Not applicable.
* **Melting point/Melting range:** Not determined.
* **Boiling point/Boiling range:** Not determined.
 |
| · **Flash point:** Not applicable. |
| · **Flammability (solid, gaseous):** Not determined. |

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| · **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 (68 °F):** 7,53 g/cm³ (62,838 lbs/gal)* **Relative density:** Not determined.
* **Vapour density:** Not applicable.
* **Evaporation rate:** Not applicable.
 |
| · **Solubility in / Miscibility with****water:** Soluble. |
| · **Partition coefficient (n-octanol/water):** Not determined. |
| * **Viscosity**

**Dynamic:** Not applicable.**Kinematic:** Not applicable.* **9.2 Other information** No further relevant information available.
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| **SECTION 10: Stability and reactivity** |

(Cont'd. on page 7)

* **10.1 Reactivity** No further relevant information available.
* **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 acids, alkalis and oxidising agents.

* **10.4 Conditions to avoid** Store away from oxidising agents.
* **10.5 Incompatible materials** No further relevant information available.
* **10.6 Hazardous decomposition products**

Carbon monoxide and carbon dioxide Toxic metal oxide smoke

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| **SECTION 11: Toxicological information** |

# 11.1 Information on toxicological effects

* **Acute toxicity:** Based on available data, the classification criteria are not met.

## LD/LC50 values relevant for classification: None.

* **Primary irritant effect**
* **Skin corrosion/irritation:** Based on available data, the classification criteria are not met.
* **Serious eye damage/irritation:** Slight irritant effect on eyes.
* **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.

## Carcinogenic categories

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| · **IARC (International Agency for Research on Cancer):** |
| 1333-86-4 | carbon black | 2B |
| · **NTP (National Toxicology Program):** |
| None of the ingredients are listed. |
| · **OSHA-Ca (Occupational Safety & Health Administration):** |
| None of the ingredients are listed. |

* **Probable routes of exposure:**

Inhalation. Ingestion. Skin contact. Eye contact.

* **Acute effects (acute toxicity, irritation and corrosivity):** From product as supplied: None.
* **Repeated dose toxicity:** From product as supplied: None.
* **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

## Carcinogenicity:

Carbon black in this product contains <0.1% polycyclic aromatic hydrocarbons and is not classifiable as a suspect carcinogen.

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

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

(Cont'd. on page 8)

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| **SECTION 12: Ecological information** |

* **13.1 Waste treatment methods**
* **Recommendation**

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.

On the basis of the necessary technical regulations and after consultation with the disposal agent and the relevant authorities, can be disposed of with domestic waste or incinerated with domestic waste.

* **Uncleaned packaging:**
* **Recommendation:** Disposal must be made according to official regulations.
* **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

(Cont'd. from page 7)

* **12.5 Results of PBT and vPvB assessment**
* **PBT:** Not applicable.
* **vPvB:** Not applicable.
* **12.6 Other adverse effects** No further relevant information available.

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| **SECTION 13: Disposal considerations** |

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| **SECTION 14: Transport information** |

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| * **14.1 UN-Number**
* **DOT, ADR, IMDG, IATA** Not Regulated
 |
| * **14.2 UN proper shipping name**
* **DOT, ADR, IMDG, IATA** Not Regulated
 |
| * **14.3 Transport hazard class(es)**
* **DOT, ADR, 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 Marpol and the IBC Code** Not applicable. |

(Cont'd. on page 9)

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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**

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| · **Section 355 (extremely hazardous substances):** |
| None of the ingredients are 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):**

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| · **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 are listed. |
| · **Chemicals known to cause developmental toxicity:** |
| None of the ingredients are listed. |

* **Carcinogenic Categories**

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| · **EPA (Environmental Protection Agency)** |
| None of the ingredients are listed. |
| · **IARC (International Agency for Research on Cancer)** |
| 1333-86-4 | carbon black | 2B |
| · **NIOSH-Ca (National Institute for Occupational Safety and Health)** |
| 1333-86-4 | carbon black |

* **Canada**

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| · **Canadian Domestic Substances List (DSL)** |
| All ingredients are listed. |
| · **Canadian Ingredient Disclosure list (limit 0,1%)** |
| None of the ingredients are listed. |
| · **Canadian Ingredient Disclosure list (limit 1%)** |
| 1333-86-4 | carbon black |

* **Labelling according to Regulation (EC) No 1272/2008** GHS label elements

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| · **Substances of very high concern (SVHC) according to REACH, Article 57** |
| None of the ingredients are listed. |

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| **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.

(Cont'd. from page 9)

· **Other regulations, limitations and prohibitive regulations**

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

## Abbreviations and acronyms:

ADR: 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 Harmonised System of Classification and Labelling of Chemicals 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) DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health

## Sources

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