

Safety Data Sheet

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

Printing date: April 20, 2016

Revision: April 20, 2016

New Zealand Update August 1, 2022

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

1.1 Product identifier

- Trade name: **Lightning® Black Emerald™ Magnetic Fingerprint Powder**
- Product code: 1-0192 (1003974)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Sector of Use

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

· **Application of the substance / the mixture:** Forensic examination.

· **Uses advised against:** Contact manufacturer.

1.3 Details of the supplier of the Safety Data Sheet

· **Manufacturer/Supplier:** Safariland, LLC, 13386 International Parkway, Jacksonville, FL 32218

New Zealand Importer/Supplier: Aorangi Forensic Supplies Ltd

Unit 4/5 Port Rd, Seaview

Wellington, New Zealand

Phone: +64 4 939 1527

1.4 Emergency telephone number: New Zealand

In Case of Emergency Contact: **CHEMCALL: 0800 CHEMCALL (243 622)**

International: ChemTel Inc.1 (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

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.

NFPA ratings (scale 0 - 4)



Health = 0

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)



HEALTH 0 Health = 0

FIRE 0 Fire = 0

REACTIVITY 0 Reactivity = 0

(Cont'd. on page 2)

Safety Data Sheet

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

Printing date: April 20, 2016

Revision: April 20, 2016

Trade name: Lightning® Black Emerald™ Magnetic Fingerprint Powder

(Cont'd. from page 1)

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

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· **Components:**

CAS: 1333-86-4	carbon black	substance with a Community workplace exposure limit	2,5-5%
EINECS: 215-609-9			

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

SECTION 4: First aid measures

· 4.1 Description of first aid measures

- **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)

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OSHA GHS

Printing date: April 20, 2016

Revision: April 20, 2016

Trade name: Lightning® Black Emerald™ Magnetic Fingerprint Powder

(Cont'd. from page 2)

SECTION 5: Firefighting measures

- **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.

SECTION 6: Accidental release measures

- **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.

SECTION 7: Handling and storage

- **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.

(Cont'd. on page 4)

Safety Data Sheet

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Printing date: April 20, 2016

Revision: April 20, 2016

Trade name: Lightning® Black Emerald™ Magnetic Fingerprint Powder

(Cont'd. from page 3)

· **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.

SECTION 8: Exposure controls/personal protection

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

· **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)

Safety Data Sheet

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

Printing date: April 20, 2016

Revision: April 20, 2016

Trade name: Lightning® Black Emerald™ Magnetic Fingerprint Powder

(Cont'd. from page 4)

- **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.

SECTION 9: Physical and chemical properties

- **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.

(Cont'd. on page 6)

Safety Data Sheet
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Printing date: April 20, 2016

Revision: April 20, 2016

Trade name: Lightning® Black Emerald™ Magnetic Fingerprint Powder

(Cont'd. from page 5)

· Auto/Self-ignition temperature:	Not determined.
· Decomposition temperature:	Not determined.
· 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/cm ³ (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.

SECTION 10: Stability and reactivity

- **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

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.

(Cont'd. on page 7)

Safety Data Sheet

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

Printing date: April 20, 2016

Revision: April 20, 2016

Trade name: Lightning® Black Emerald™ Magnetic Fingerprint Powder

(Cont'd. from page 6)

- **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**

· 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.

SECTION 12: Ecological information

- **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.

- **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

(Cont'd. on page 8)

Safety Data Sheet

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Revision: April 20, 2016

Trade name: Lightning® Black Emerald™ Magnetic Fingerprint Powder

(Cont'd. from page 7)

- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· 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.

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.

· 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, 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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(Cont'd. from page 8)

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 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):

· 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

· 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

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

· Other regulations, limitations and prohibitive regulations

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

None of the ingredients are 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.

(Cont'd. on page 10)

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Trade name: Lightning® Black Emerald™ Magnetic Fingerprint Powder

(Cont'd. from page 9)

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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