

Safety data sheet
According to 1907/2006 EEC

Printing date 18.02.2016

Version number 1

Revision: 18.02.2016

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

- **Product identifier:** A-3125SPRB
- **Trade name:** SPR black
- **Article number:** A-3125SPRB; 02070; 02077
- **Relevant identified uses of the substance or mixture and uses advised against Forensic Field Test**
- **Application of the substance / the mixture** Detection of finger prints
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Mistral Security INC
7910 Woodmont Ave , Ste 820
Tel: (301) 913-9366
Fax: (301) 913-9369
- **Manufactured for/Distributor:**
Arrowhead Forensics
11030 Strang Line Road, Lenexa, KS 66215
Tel: (913) 894-8388
Fax: (913) 894-8399
- **Further information obtainable from:** Product safety department.

2 Hazards identification

- **Classification of the substance or mixture**



Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

Acute Tox. 5 H333 May be harmful if inhaled.

- **Label elements**

Labelling according to regulation (EC) No 1272/2008:

Hazard pictograms : GHS02

Signal word: Danger

Hazard statements: H222-H229

Precautionary statements:

P101, P102, P103, P210, P251, P211,

P410+P412

Labelling of packages where the contents do not exceed 125 ml:

As written above.

- **GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

- **Hazard pictograms** GHS02

- **Signal word** Danger

- **Hazard statements**

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H333 May be harmful if inhaled.

- **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P251 Pressurized container: Do not pierce or burn, even after use.

P211 Do not spray on an open flame or other ignition source.

(Contd. on page 2)

Safety data sheet
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Version number 1

Revision: 18.02.2016

Trade name: SPR black

(Contd. of page 1)

P304+P312 IF INHALED: Call a POISON CENTER/doctor if you feel unwell.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

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

3 Composition/information on ingredients

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

· **Dangerous components:**

115-10-6	dimethyl ether	 Flam. Gas 1, H220 Press. Gas C, H280	>15%
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- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Avoid prolonged or repeated contact with skin. After handling, always wash hands thoroughly with soap and plenty of water. Get medical attention if irritation develops.
- **After eye contact:**
Rinse opened eye for several minutes under running water.
Get medical attention.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture**
Formation of explosive air/ vapor mixtures are possible.
- **Advice for firefighters**
Move containers from fire area if possible to do so without risk. Use water spray or water to cool unopened containers.

(Contd. on page 3)

Safety data sheet
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Printing date 18.02.2016

Version number 1

Revision: 18.02.2016

Trade name: SPR black

(Contd. of page 2)

· **Protective equipment:**

Fire fighters should wear full protective clothing and self-contained breathing apparatus in positive pressure mode.

* **6 Accidental release measures**

· **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Avoid contact with skin eyes and inhalation of vapors.

Ventilate area of spill.

Beware of vapour accumulation to form explosive concentrations.

Vapour can accumulate in low areas.

· **Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· **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 Handling and storage**

· **Handling:**

· **Precautions for safe handling**

Open and handle receptacle with care.

Do not breathe vapors.

Avoid contact with skin and eyes.

Avoid inhalation of vapor or mist.

Wash thoroughly after handling.

· **Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** Store in a cool location.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:**

Keep container tightly sealed.

Do not seal receptacle gas tight.

Store in cool, dry conditions in well sealed receptacles.

(Contd. on page 4)

Safety data sheet
According to 1907/2006 EEC

Printing date 18.02.2016

Version number 1

Revision: 18.02.2016

Trade name: SPR black

(Contd. of page 3)

- Protect from heat and direct sunlight.
- Store in well ventilated place.
- Keep away from strong oxidizing agents, hydrogen peroxide and strong acids.
- Avoid extreme temperatures .
- Use original container.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Wash hands before breaks and at the end of work.
Keep away from foodstuffs and beverages.
Do not eat, drink or smoke during work time.
Remove soiled or soaked clothing immediately .
Clean skin thoroughly after work; apply skin cream.
During use, provide suitable ventilation.
- **Respiratory protection:**
Suitable respirator.
Be sure to use an approved/ certified or equivalent.
Wear appropriate respirator when ventilation is inadequate.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
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.
- **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.

(Contd. on page 5)

Safety data sheet
According to 1907/2006 EEC

Printing date 18.02.2016

Version number 1

Revision: 18.02.2016

Trade name: SPR black

(Contd. of page 4)

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Wear appropriate long - sleeved clothing to minimize skin contact.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· Form:	Aerosol
· Colour:	According to product specification
· Odour:	Characteristic
· Odour threshold:	Not determined.

· **pH-value:** 5

· **Change in condition**

· Melting point/Melting range:	-141 °C (DME)
· Boiling point/Boiling range:	-24.8 °C (DME)

· **Flash point:** -41 °C (DME)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 240 °C (DME)

· **Decomposition temperature:** Not determined.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Explosion limits:**

· Lower:	3.4 Vol % (DME)
· Upper:	27 Vol % (DME)

· **Vapour pressure:** Not determined.

· **Density:** Not determined.

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with water:** Soluble

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

· **Viscosity:**

· **Dynamic:** Not determined.

(Contd. on page 6)

Safety data sheet
According to 1907/2006 EEC

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Version number 1

Revision: 18.02.2016

Trade name: SPR black

(Contd. of page 5)

Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	16.0 %
VOC (EC)	16.00 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Stable under ordinary conditions of use and storage.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Keep away from heat, open flame and sparks, extreme temperatures.
- **Incompatible materials:** Strong oxidizing agents, hydrogen peroxide and strong acids.
- **Hazardous decomposition products:** Under fire emits irritating and toxic fumes.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** No irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **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
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

(Contd. on page 7)

Safety data sheet
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Trade name: SPR black

(Contd. of page 6)

13 Disposal considerations

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

14 Transport information

- **UN-Number**
- **ADR** UN 1950
- **IMDG, IATA** UN1950
- **UN proper shipping name**
- **ADR, IMDG** Aerosols
- **IATA** Aerosols, flammable
- **Transport hazard class(es)**
- **ADR, IMDG, IATA**
- 
- **Class** 2.1
- **Label** 2.1
- **Environmental hazards:** Not applicable.
- **Special precautions for user** Not applicable.
- **EMS Number:** F-D,S-U
- **Stowage Category** E
- **Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.
- **Transport/Additional information:** EAC:(1)
- **IMDG**
- **Excepted quantities (EQ)** Maximum net quantity per inner packaging: N/A
Maximum net quantity per outer packaging: N/A

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

(Contd. on page 8)

Safety data sheet
According to 1907/2006 EEC

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Trade name: SPR black

(Contd. of page 7)

- *Seveso category P5a FLAMMABLE LIQUIDS*
- *Qualifying quantity (tonnes) for the application of lower-tier requirements 10 t*
- *Qualifying quantity (tonnes) for the application of upper-tier requirements 50 t*
- *National regulations:*

Class	Share in %
Wasser	82.1
NK	16.0

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

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.

All information contained in the present sheet is based on the manufacturer data.

The use of this product is not subject to our direct control : therefore , users must under their own responsibility comply with the current health and safety laws and regulation.

· **Relevant phrases**

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

· **Department issuing MSDS: Product safety department.**

· **Contact:**

Mistral Security INC

7910 Woodmont Ave , Ste 820

Tel: (301) 913-9366

Fax: (301) 913-9369

· **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

IATA: International Air Transport Association

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)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Gas 1: Flammable gases, Hazard Category 1

Aerosol 1: Flammable aerosols, Hazard Category 1

Press. Gas C: Gases under pressure: Compressed gas

Acute Tox. 5: Acute toxicity, Hazard Category 5

- *** Data compared to the previous version altered.**