

# IGNITERS



## Material Safety Data Sheet

Doc.: **MSDB-Igniters-R03-engl.doc**

issued by	date	checked by	date	released by	date
Bastian Raphaela	27.11.2017	Janowitz Othmar	27.11.2017	Dürauer Daniela	27.11.2017

Safety Data Sheet according to EC-Directive 91/155/EEC (incl. EC-Directive 2001/58/EC)  
issued on: 27.11.2017 superseded edition of: 12.09.2016

## 1. Identification of the substance/preparation and of the company/undertaking

### **Identification of the product:**

Electric igniter

Trade name: SCHAFFLERFIRE

### **Use of the product:**

Ignition of pyrotechnical substances and products

### **Manufacturer/Supplier:**

Schaffler GmbH&Co KG

Phone: ++43 (0)2638/22441-50

Hauptstraße 1

Fax: ++43 (0)2638/22441-17

A-2722 Winzendorf

E-Mail: office@schaffler.co.at

**Distributor in Canada: Hazmasters, Inc. 651 Harwood Ave N, Unit 4 Ajax, ON L1Z 0K4**

### **Informing Department (Emergency Information):**

Technology Department – Mr. Othmar Janowitz

Mobile Phone: ++43 (0)664/5456347

## 2. Composition/information on ingredients

Pyrotechnic fusehead connected with PVC coated tinned copper wires or copper clad steel wires  
(length from 0,1m-10m)

Net Explosive Quantity: 30mg / piece

## 3. Hazards identification

Hazard designation: dangerous goods 1.4S => low fire danger; no significant explosion risk

Information pertaining to particular dangers for human and environment: stress caused by pressure, hit or shearing forces as well as temperature higher than 160°C may lead to spontaneous ignition.

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## 4. First Aid Measures

General information:	consult medical help immediately after burns or after having inhaled combustion gases
After inhalation:	in case of symptoms which are obviously due to inhalation of combustion gases <ol style="list-style-type: none"><li>1. Move the persons to fresh air</li><li>2. Take care of the persons until the rescue comes</li><li>3. Aerate room</li></ol>
After skin contact:	not applicable
After eye contact:	not applicable
After swallowing:	not applicable

## 5. Fire-fighting measures

Suitable extinguishing device:	dry powder, foam, water, sand
Unsuitable extinguishing device:	not applicable
Special risks:	toxic combustion gases depending on the size of the fire source there could result hydrochloric acid, nitrogen oxide, chloric gas, carbon monoxide/dioxide
Protective equipment for fire fighting:	no special measures required
Warn the public to evacuate the dangerous locality, keep away unauthorized persons	

## 6. Accidental release measures

Personal precautionary measures:	not applicable
Environmental protection measures:	not applicable
Procedures for cleaning/absorption:	not applicable

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## 7. Handling and storage

### **Handling:**

Hints for safe handling: only adequate skilled persons are allowed to work with this product

- use safety glasses & leather gloves
- not for use in hazardous environments where flammable gases or flammable dust may exist
- lower temperature limit: -25°C
- upper temperature limit: +60°C

Hints for fire and explosion protection: protective measure against electrostatic charge

- no smoking
- no open fire-source
- no open voltage-source (e.g.: batteries, mobile phones, Walky Talkies, flashlights, ...)
- don't put it in the power socket

### **Storage:**

Requirements to storerooms and tanks: in the original packing or permitted packing  
in approved buildings and storerooms => in valid quantity

Further information on storage conditions: lower temperature limit: -15°C  
upper temperature limit: +40°C  
max. 75% relative air moisture

Class according to regulation on inflammable liquids: not applicable

## 8. Exposure limitation and personal protective equipment

### **Exposure limits:**

Ingredients with limits, which have to be controlled: not applicable  
Additional hints: keep away from any power source and electromagnetic fields

### **Limiting and monitoring of the exposure:**

Additional hints for the configuration of technical plants: not applicable

Personal protective equipment:

Inhalation protection: not applicable

Hand protection: leather gloves

Eye protection: safety glasses

Body protection: measures against electrostatic charge

General measures for protection and hygiene/information for industrial hygiene: not applicable

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## 9. Physical and chemical properties

### **Appearance:**

Form: not applicable

Colour: not applicable

Odour: not applicable

### **Security relevant data/constitutional change:**

pH-value: not applicable

Melting point/melting range: not applicable

Boiling point/boiling range: not applicable

Flash point: not applicable

Flammability (solid, gaseous) (ignition temperature, self-flammability): > 160°C

Explosion risk (explosion limits lower-upper): not applicable

Oxidizing properties: not applicable

Vapour pressure: not applicable

Vapour density: not applicable

Density: not applicable

Water solubility: not applicable

Fat solubility: not applicable

Viscosity: not applicable

Vaporization cruise: not applicable

## 10. Stability and reactivity

**Conditions to be avoided** (Thermal decomposition/stability): thermal stability up to 105°C

**Substances to be avoided** (hazardous reactions): not applicable

**Hazardous decomposition products:** hydrochloric acid, nitrogen oxide, chloric gas, carbon monoxide/dioxide

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## 11. Toxicological information

### **Acute toxicity:**

LD/LC50-values that are relevant for classification: not applicable

### **Primary irritant effect:**

Inhalation: not applicable

Swallowing: not applicable

Skin-contact: not applicable

Eye-contact: not applicable

### **Subacute to chronic toxicity:**

Sensitisation: not applicable

Narcotic effect: not applicable

Carcinogenicity: not applicable

Mutagenicity: not applicable

Reproduction-toxicity: not applicable

### **Additional toxicological hints:**

There exists the possibility of toxication because of inhalation of combustion gases.

## 12. Ecological information

### **Ecotoxic effects:**

No fired igniters are ecological harmless during their life cycle.

Fired igniters emit blumbiferous emissions at burnout.

Classification of water endagement: classification I (slightly polluting substance)

## 13. Disposal considerations

### **Product:**

Recommendation: Used and unused igniters have to be disposed as hazardous waste.

You have to pay attention to country-specific regulations.

Waste disposal key number: 59101 pyrotechnical waste

### **Packing:**

Recommendation: Disposal must be made according to official regulations

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## 14. Transport information

**Land transport ADR** (road traffic, Directive 94/55/EC) / **RID** (rail traffic, Directive 96/49/EC)  
**(transborder) and GGBG (inland)**

Name: Igniters  
ADR/RID class: 1.4S  
UN-number: 0454  
Packing-group: no classification

### **Transport by river ADN, ADNR**

Name: Igniters  
AND/ADNR class: 1.4S  
UN-number: 0454  
Packing-group: no classification

### **Transport by sea IMDG**

Name: Igniters  
IMDG class: 1.4S  
UN-number: 0454  
Packing-group: no classification

### **Transport by air ICAO-TI / IATA-DGR**

Name: Igniters  
ICAO/IATA class: 1.4S  
UN/ID-number: 0454  
Packing-group: no classification  
Packing instruction: P142

### **Further information**

24h emergency number: Technical Department – Mr. Othmar Janowitz  
Mobile Phone: ++43 (0)664/5456347

## 15. Regulatory information







### Labelling according to EC Directives

Code letter and hazard declaration:

#### Dangerous goods- labelling



R-phrases:

- |     |   |  |
|-----|---|--|
| R5  |    | Heating may cause an explosion                                 |
| R7  |  | Heating may cause fire   |
| R10 |  | Flammable solid  |
| R23 |  | Toxic by inhalation  |
| R44 |  | Risk of explosion if heated under confinement                  |
| R53 |  | May cause long-term adverse effects in the aquatic environment |

S-phrases:

*General*

- |     |  |
|-----|--|
| S2  | Keep out of the reach of children        |
| S53 | Read the identification label before use |

*Prevention*

- |           |  |
|-----------|--|
| P104      | Explosive, flammable, blasting danger, splintering danger                  |
| P201      | Purchase the special instructions before use                               |
| P202      | Read and understand every safety instructions before use                   |
| P241      | Apply explosion proof electric resources, ventilation, lighting            |
| P242,     | Apply only spark proof tools   |
| P243      | Apply precautions again electric charge                                    |
| S18       | Handle and open container with care (do not grind, do not hit, do not rub) |
| S36/37/39 | Wear suitable protective clothing, gloves and eye/face protection          |

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### Reaction

- P370 By fire
- P372 Danger of explosion by burn
- P375 Due to the danger of explosion, firefighting only from far
- P370+ Clean the environment at the burning place
- P381 Remove every ignition source, if it is possible without risk

### Storage

Only in rooms, which are approved for these goods.

### Disposal

- P502 Information about recycling can be asked at the producer

### **National regulations**

Water hazard class: 1 – weak water hazardous

Classification according to VbF: ceased

Accident ordinance nr.: -

## 16. Other information

The information in this data sheet is compiled to the best of one's knowledge and based on the present state of our knowledge at the date of revision. The information characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product in the legal sense.

Contact: Dipl.-Ing. (FH) Othmar Janowitz

Reason for change: company logo & phone no.