

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

### **1.1. Product identifier**

**Name of product** Safetymatches

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

#### **Identified uses**

#### **Sector of uses [SU]**

SU21 - Consumer uses: Private households (= general public = consumers)

#### **Product categories [PC]**

Igniter

### **1.3. Details of the supplier of the safety data sheet**

#### **Manufacturer/distributor**

PyroWillen GmbH  
Schwandstrasse 13, PF 78, CH-3714 Frutigen  
Phone +41 (0)33 671 20 71  
E-Mail info@pyrowillen.com  
Internet www.pyrowillen.com

#### **Advice**

This number is only available at office times.  
Phone +41 (0)33 671 20 71

### **1.4. Emergency telephone number**

#### **Emergency advice**

Swiss toxicological Information Center  
Phone 145 / +41 44 251 51 51

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## **SECTION 2: Hazards identification**

### **2.1. Classification of the substance or mixture**

#### **Hazard statements for physical hazards**

not applicable

#### **Hazard statements for health hazards**

not applicable

#### **Hazard statements for environmental hazards**

not applicable

### **Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]**

#### **Additional hints**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

This mixture is classified as hazardous according to Regulation (EC) No 1272/2008 [GHS].

The safetymatches are considered as one product within the meaning of Article 3 of Regulation (EC) 1907/2006 (REACH) and are therefore not subject to mandatory labelling under Regulation (EC) 1272/2008 (CLP).

### **2.2. Label elements**

#### **Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]**

#### **Hazard statements for physical hazards**

not applicable

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**Hazard statements for health hazards**

not applicable

**Hazard statements for environmental hazards**

not applicable

**Precautionary Statements**

**General**

P102

Keep out of reach of children.

**2.3. Other hazards**

**Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

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

**3.1. Substances**

not applicable

**3.2. Mixtures**

**Hazardous ingredients**

CAS No	EC No	Name	[%]	Classification according to Regulation (EC) No 1272/2008 [CLP/ GHS]
3811-04-9	223-289-7	potassium chlorate		Ox. Sol. 1, H271 / Acute Tox. 4, H332 / Acute Tox. 4, H302 / Aquatic Chronic 2, H411
1314-13-2	215-222-5	zinc oxide		Aquatic Acute 1, H400 / Aquatic Chronic 1, H410

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**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

Upon contact with the eyes and face priority eyes care.

**In case of inhalation**

Remove the casualty into fresh air and keep him immobile.

If intensive inhalation of dust seek medical treatment immediately.

In the event of symptoms refer for medical treatment.

**In case of skin contact**

In case of contact with skin wash off with soap and water.

Harmful effects caused by the product are not expected.

**In case of eye contact**

In case of contact with eyes rinse with plenty of water carefully. In the event of persistent symptoms seek medical treatment.

**In case of ingestion**

Induce the patient to vomit by him self only if fully conscious.

If swallowed seek medical advice immediately and show the doctor packing or label.

If swallowed by mistake drink plenty of water and seek medical treatment.

Rinse out mouth thoroughly with water.

**4.2. Most important symptoms and effects, both acute and delayed**

No information available.

**4.3. Indication of any immediate medical attention and special treatment needed**

No information available.

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**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

Alcohol-resistant foam

Dry powder

Carbon dioxide

Water spray jet

**Unsuitable extinguishing media**

Full water jet

**5.2. Special hazards arising from the substance or mixture**

Fire gas of organic material has to be classed invariably as respiratory poison.

In case of fire formation of dangerous gases possible.

Carbon monoxide (CO)

Carbon dioxide (CO<sub>2</sub>)

**5.3. Advice for firefighters**

**Special protective equipment for fire-fighters**

Use breathing apparatus with independent air supply ( isolated ).

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus.

**Additional information**

Cool endangered containers with water spray jet.

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**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**

Avoid contact with skin and eyes.

Do not breathe dust.

Keep people away and stay on the upwind side.

Avoid dust formation.

Keep away sources of ignition.

**6.2. Environmental precautions**

Do not discharge into the drains/surface waters/groundwater.

**6.3. Methods and material for containment and cleaning up**

Moisten, take up mechanically and send for disposal.

After taking up the material dispose according to regulation.

**6.4. Reference to other sections**

No information available.

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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

No information available.

### 7.2. Conditions for safe storage, including any incompatibilities

No information available.

### 7.3. Specific end use(s)

No information available.

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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Ingredients with occupational exposure limits to be monitored

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
1314-13-2	zinc oxide	8 hours	3a		SUVA
		Short-term	3a		

#### DNEL-/PNEC-values

##### DNEL worker

CAS No	Substance name	Value	Code	Remark
1314-13-2	zinc oxide	0,8 mg/kg bw/day	DNEL long-term inhalative (systemic)	
		5 mg/m3	DNEL long-term inhalative (systemic)	
		83 mg/kg bw/day	DNEL long-term dermal (systemic)	

### 8.2. Exposure controls

#### Respiratory protection

In case of insufficient ventilation or long-term effect use breathing apparatus.

Particle-filtering half mask, filter P2, EN 149

#### Hand protection

No special measures necessary if used correctly.

Chemikalienschutzhandschuhe aus Butylkautschuk der Kategorie III gemäß EN 374.

#### Eye protection

safety goggles EN 166

#### Other protection measures

No special measures necessary if used correctly.

#### Appropriate engineering controls

Avoid the formation and deposition of dust.

Provide suitable extraction at the processing machines.

Care for thorough room ventilation, if necessary provide local air ventilation.

Keep away from sources of ignition - No smoking

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**Appearance**

solid

**Colour**

dark brown

**Odour**

odourless

**Odour threshold**

not determined

### Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
<b>pH value</b>	not determined				
<b>Boiling temperature / boiling range</b>	not determined				
<b>Melting point / Freezing point</b>	not determined				
<b>Flash point</b>	not determined				
<b>Vapourisation rate</b>	not determined				
<b>Flammable (solid)</b>	not determined				
<b>Flammability (gas)</b>	not determined				
<b>Ignition temperature</b>	not determined				
<b>Self ignition temperature</b>	not determined				
<b>Lower explosion limit</b>	not determined				
<b>Upper explosion limit</b>	not determined				
<b>Vapour pressure</b>	not determined				
<b>Relative density</b>	1.1 g/cm <sup>3</sup>				
<b>Vapour density</b>	not determined				
<b>Solubility in water</b>	not determined				
<b>Solubility/other</b>	not determined				
<b>Partition coefficient n-octanol/water (log P O/W)</b>	not determined				
<b>Decomposition temperature</b>	not determined				
<b>Viscosity</b>	not determined				

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**Oxidising properties**

No information available.

**Explosive properties**

No information available.

**9.2. Other information**

No information available.

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**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Self-ignition at high temperatures.

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

No hazardous reactions known.

**10.4. Conditions to avoid**

Keep away sources of ignition.

To avoid thermal decomposition do not overheat.

**10.5. Incompatible materials**

**Substances to avoid**

Reactions with strong oxidising agents.

Self-ignition at high temperatures.

Accumulation of fine dust may entail the risk of a dust explosion in the presence of air.

**10.6. Hazardous decomposition products**

If heated dangerous gases/vapours may arise.

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**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute toxicity/Irritation/Sensitization**

	Value/Validation	Species	Method	Remark
<b>LD50 acute oral</b>	No data available			
<b>LD50 acute dermal</b>	No data available			
<b>LC50 acute inhalation</b>	No data available			
<b>Skin irritation</b>	non-irritant			
<b>Eye irritation</b>	non-irritant			
<b>Skin sensitization</b>	non-sensitizing			

**Safetymatches**

**Aspiration hazard**

No data available

**Additional information**

The product was classified on the basis of the calculation procedure of the Regulation (EU) Nr. 1272/2008 (CLP).

No toxicological data available.

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**SECTION 12: Ecological information**

**12.1. Toxicity**

No information available.

**12.2. Persistence and degradability**

	Elimination rate	Method of analysis	Method	Validation
<b>Biological degradability</b>	The product is not readily biodegradable to OECD criteria but is inherently biodegradable.			not readily degradable

**12.3. Bioaccumulative potential**

No data available

**12.4. Mobility in soil**

No data available

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

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**12.6. Other adverse effects**

**Behaviour in sewage plant**

When discharged into biological sewage treatment plants, interference with the degradation activity of activated sludge is possible, depending on the local conditions and concentrations involved.

**General regulation**

Ecological data are not available.

Product is not allowed to be discharged into aquatic environment.

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**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Waste code No.**

20 03 99

**Name of waste**

municipal wastes not otherwise specified

**Recommendations for the product**

May be taken to household waste disposal or incineration plant, but care for official regulations.

**Recommendations for packaging**

Totally emptied packaging may be treated as household waste.

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**SECTION 14: Transport information**

	ADR/RID	IMDG	IATA-DGR
<b>14.1. UN number</b>	1944	1944	1944

**Safetymatches**

	ADR/RID	IMDG	IATA-DGR
<b>14.2. UN proper shipping name</b>	MATCHES, SAFETY	MATCHES, SAFETY	MATCHES, SAFETY
<b>14.3. Transport hazard class(es)</b>	4.1	4.1	4.1
<b>14.4. Packing group</b>	III	III	III
<b>14.5. Environmental hazards</b>	No	No	No

**14.6. Special precautions for user**

No information available.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No information available.

**Land and inland navigation transport ADR/RID**

Hazard label(s) 4.1

tunnel restriction code E

Classification code F1

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**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**National regulations**

**Water hazard class** 1  
slightly hazardous to waters, self-classification

**15.2. Chemical Safety Assessment**

Chemical safety assessments for substances in this mixture were not carried out.

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**SECTION 16: Other information**

**Recommended uses and restrictions**

National and local regulations concerning chemicals shall be observed.

**Further information**

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

H271 May cause fire or explosion; strong oxidiser.  
H302 Harmful if swallowed.  
H332 Harmful if inhaled.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.