

## SAFETY DATA SHEET

In accordance with the criteria of Regulation No 1907/2006 (REACH) as amended

### MATCHES, SAFETY

Date: 24.11.2014

Revision: 29.04.2015

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

##### 1.1. Product identifier

MATCHES, SAFETY

##### Trade name:

Grill matches; Fireplace matches; Christmas matches; Lightens matches; Occasional matches; Marketing matches; Household matches for general use.

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

**Relevant identified uses:** For kindling fire.

**Uses advised against:** Not determined.

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

**Producer:** P.P.H "B.L. MATCH" S.C. B. Sagatowicz, L. Kamieniarz

**Address:** Poland; PL 75-900 Koszalin; Koszalińska 31

**Telephone/Fax:** +48 94 346 91 16 / +48 94 345 05 92

**E-mail address** of the person responsible for the SDS: reach@isotop.pl

##### 1.4. Emergency telephone number

112 (emergency call), 999 (emergency telephone number)

#### SECTION 2: Hazards identification

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

**Classification according to Regulation 1272/2008/EC:**

**Hazards to man:** Not classified.

**Hazards to environment:** Product is not classified as hazardous for environment.

**Hazard from physical and chemical properties:** Not classified.

##### 2.2. Label elements

**Hazard pictograms, signal words:** None.

**Hazard statements:** None.

**Precautionary statements:** None.

**The names of hazardous ingredients on the label:** None.

##### 2.3. Other hazards

No information on meeting the criteria for PBT or vPvB in accordance with Annex XIII of Regulation 1907/2006 (REACH). Tests have not been carried out.

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

##### 3.1. Substances

Not applicable.

##### 3.2. Mixtures

Contains a paraffin wax, an organic adhesive and silica fillers.

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#### A. Match-head composition

<b>Substance name:</b>	<b>Potassium chlorate</b>
<b>Concentration [%]:</b>	≤2
<b>CAS Number:</b>	3811-04-9
<b>EC Number:</b>	223-289-7
<b>Index Number:</b>	017-004-00-3
<b>Classification 67/548/EEC:</b>	O; R9 Xn; R20/22 N; R51/53
<b>Classification 1272/2008/EC:</b>	Ox. Sol. 1; H271 Acute Tox. 4; H302 Acute Tox. 4; H332 Aquatic Chronic 2; H411
<b>The registration number:</b>	The substance is subject to the transitional period.

Contains colophony [CAS: 8050-09-7]; zinc oxide [CAS: 1314-13-2]

#### B. Striking surface

<b>Substance name:</b>	<b>Red phosphorus</b>
<b>Concentration [%]:</b>	≤1
<b>CAS Number:</b>	7723-14-0
<b>EC Number:</b>	231-768-7
<b>Index Number:</b>	015-002-00-7
<b>Classification 67/548/EEC:</b>	F; R11 R16 R52/53
<b>Classification 1272/2008/EC:</b>	Flam. Sol. 1; H228 Aquatic Chronic 3; H412
<b>The registration number:</b>	The substance is subject to the transitional period.

In section 16 stated the importance of R-, H-phrases and symbols.

#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

**Inhalation:** Remove to fresh air. If necessary, get medical attention.

**Skin contact:** In case of thermal burn seek medical advice.

**Eye contact:** Remove any contact lenses. Wash contaminated eyes with plenty of cool water with the eyelid hold with open for 15 minutes. Get medical attention if necessary.

**Ingestion:** Rinse mouth with water, give 2-3 glasses of water for drinking. Do not induce vomiting. Get medical attention if necessary.

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

**Inhalation:** Inhalation of products emitting from the burned match may cause upper respiratory tract irritation, coughing.

**Skin contact:** Contact with fire may cause thermal burns.

**Eye contact:** In case of direct contact with products emitting from the burned match may cause irritation, redness and tearing.

**Ingestion:** In case of pieces of product ingestion may cause a digestive tract mucous membranes irritation, nausea.

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

Remove affected person from the environment contaminated by the product. In the event of health problems, consult your doctor or the center of toxicological concern. Provide the information contained in the SDS. If unconscious, do not give anything by mouth.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media:** Sand, water spray, foam, powder, carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media:** Water jet.

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

Combustible product. During combustion may produce hazardous products also contains: carbon monoxide and phosphorus oxides. Avoid inhalation of combustion products, because they may pose a health risk.

#### 5.3. Advice for firefighters

Use generally personal protection typical in case of fire. Wear full protective equipment and self-contained breathing apparatus with independent air circulation in direct fire area. Containers exposed to fire or high temperature if possible remove from the danger zone. Collect mechanically. Keep out of drains, surface waters and soil against pollution. Water from fire-fighting treat as hazardous pollution and accumulate in separate containers. Close the danger zone within a radius of 50 m.

### SECTION 6: Accidental release measures

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

**For non-emergency personnel:** Should restrict access to non-emergency personnel to the area of failure until the completion of the disposal of the product. Wear appropriate personal protective equipment. Avoid sources of ignition.

**For emergency responders:** Wear appropriate personal protective equipment. Provide adequate ventilation. Avoid sources of ignition.

#### 6.2. Environmental precautions

Secure the gullies. Prevent contamination of surface water and ground. In the event of any serious pollution of the environment, notify the appropriate administrative authority, control and rescue services. Dispose of used packaging to deliver to eligible organizations.

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

Keep damaged packaging. Product should be collected and putted in a substitute container, reused or referred to the destruction.

#### 6.4. Reference to other sections

Disposal - see Section 13. Personal protective equipment - see Section 8.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

When you have all the activities carried out with the product: avoid sources of ignition, no smoking.

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

Keep in properly labeled, factory sealed containers, with a label which complies with current regulations. Store in a cool, dry and well-ventilated area. Keep out of reach of children. Avoid ignition sources. Protect from direct sunlight, sources of heat, mechanical forces.

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Avoid humidity above 75%. Store at temperature 8°C-30°C. Avoid contact with oxidising agents.

#### 7.3. Specific end use(s)

For kindling fire.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Substance name	TWA	STEL	BLV
<b>Zinc oxide - converted to Zn - fumes</b> [CAS: 1314-13-2]	5 mg/m <sup>3</sup> (Poland)	10 mg/m <sup>3</sup> (Poland)	-
<b>Dust containing's free (crystalline) silica &lt;2%</b>	10 mg/m <sup>3</sup> (inhalable fraction/ Poland)	-	-
<b>Paraffin wax, fume</b> [CAS: 8002-74-2]	2 mg/m <sup>3</sup> (inhalable fraction) (Poland)	-	-
	2 mg/m <sup>3</sup> (UK)	6 mg/m <sup>3</sup> (UK)	-

**Legal basis:** Ordinance on maximum permissible concentration and intensity of harmful factors in the work environment in accordance with national limit values.  
EH40/2005 Workplace exposure limits, second edition, published 2011, ISBN 978 0 7176 6446 7.

**Monitoring procedures:** Use methods described in European Standards.

#### 8.2. Exposure controls

Mandatory general regulations on occupational health under conditions of production process. Do not allow the crossing of the environment, the workplace concentration limits for hazardous constituents.

**Eye/face protection:** Under normal conditions of use is not required.

**Skin Protection:** Not required.

**Respiratory protection:** Under normal conditions of use is not required.

**Thermal Hazards:** Usually not required.

Used personal protective equipment should meet the requirements of local/regional/national laws. The employer must provide personal protective equipment appropriate to the type of work and meeting all requirements, including maintenance and cleaning.

Concentrations should be monitored hazardous substances in the workplace in accordance with recognized test methods. Mode, method, type and frequency of testing and measurement of harmful factors in the working environment should meet the requirements of local/regional/national laws.

**Environmental exposure controls:** Shouldn't be allowed to reach large quantities of ground water, sewage, waste water or soil.

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#### SECTION 9: Physical and chemical properties

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

<b>Appearance:</b>	Wooden sticks partially saturated paraffins from a solidified mass igniter approximately 0.5-0.7 cm stick
<b>Odour:</b>	Odourless
<b>Odour threshold:</b>	Not established
<b>pH:</b>	Not applicable
<b>Melting point/freezing point:</b>	Not applicable
<b>Initial boiling point and boiling range:</b>	Not applicable
<b>Flash point:</b>	Not established
<b>Evaporation rate:</b>	Not applicable
<b>Flammability (solid, gas):</b>	Combustible
<b>Upper/lower flammability or explosive limits:</b>	Not applicable
<b>Vapour pressure:</b>	Not applicable
<b>Vapour density:</b>	Not established
<b>Relative density:</b>	Not established
<b>Solubility:</b>	Not established
<b>Partition coefficient: n-octanol/water:</b>	Not established
<b>Auto-ignition temperature:</b>	>180°C
<b>Decomposition temperature:</b>	Not established
<b>Viscosity:</b>	Not applicable
<b>Explosive properties:</b>	Not applicable
<b>Oxidising properties:</b>	Not applicable

##### 9.2. Other information

None.

#### SECTION 10: Stability and reactivity

##### 10.1. Reactivity

Under normal conditions of use and storage is not reactive.

##### 10.2. Chemical stability

Stable under normal conditions.

##### 10.3. Possibility of hazardous reactions

Not applicable.

##### 10.4. Conditions to avoid

Protect from heat, open flames, combustible materials, mechanical forces. Avoid humidity.

##### 10.5. Incompatible materials

Not specified.

##### 10.6. Hazardous decomposition products

Not applicable.

#### SECTION 11: Toxicological information

##### 11.1. Information on toxicological effects

###### Acute toxicity:

**Potassium chlorate** [CAS: 3811-04-9]

LD<sub>50</sub> (ingestion, rat) 1870 mg/kg

LD<sub>Lo</sub> (human) 1000 mg/kg

LD<sub>50</sub> (skin, rabbit) >2000 mg/kg

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**Colophony** [CAS: 8050-09-7]

LD<sub>50</sub> (ingestion, rat) 2800 mg/kg

LD<sub>50</sub> (skin, rat) >2000 mg/kg

**Red phosphorus** [CAS: 7723-14-0]

LD<sub>50</sub> (ingestion, rat) >15000 mg/kg

**Irritation:** Not classified.

**Corrosivity:** Not classified.

**Sensitisation:** Not classified.

**Repeated dose toxicity:** Not specified.

**Carcinogenicity:** Not classified.

**Mutagenicity:** Not classified.

**Toxicity for reproduction:** Not classified.

**Inhalation:** Inhalation of products emitting from the burned match may cause upper respiratory tract irritation, coughing.

**Skin contact:** Contact with fire may cause thermal burns.

**Eye contact:** In case of direct contact with products emitting from the burned match may cause irritation, redness and tearing.

**Ingestion:** In case of pieces of product ingestion may cause a digestive tract mucous membranes irritation, nausea.

## SECTION 12: Ecological information

### 12.1. Toxicity

Product is not classified as hazardous for environment.

#### Acute toxicity:

**Potassium chlorate** [CAS: 3811-04-9]

Toxicity to fish:

LC<sub>50</sub> (*Leuciscus idus*) 3500 mg/l

LC<sub>50</sub> (*Oncorhynchus mykiss*) 1750 mg/l/96h

Toxicity to aquatic invertebrates:

EC<sub>50</sub> (*Daphnia magna*) 880 mg/l/48h

### 12.2. Persistence and degradability

Not determined.

### 12.3. Bioaccumulative potential

Not determined.

### 12.4. Mobility in soil

Insoluble in water.

### 12.5. Results of PBT and vPvB assessment

Not applicable.

### 12.6. Other adverse effects

Not determined.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

During removal of waste comply with the regional/national laws.

#### Community legislation:

- Directive **2008/98/EC** of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives as amended.

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- European Parliament and Council Directive **94/62/EC** of 20 December 1994 on packaging and packaging waste as amended.

**Disposal methods for the product:** Don't introduce into the environment. Disposal in accordance with the local/national legislation.

**Disposal methods for used packing:** Empty containers give for appropriate rubbish dump or for disposal in accordance with the local/national legislation. Dispose of uncleanable containers like of the product.

#### SECTION 14: Transport information

##### 14.1. UN number

UN 1944

##### 14.2. UN proper shipping name

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##### 14.3. Transport hazard class(es)

4.1

##### 14.4. Packing group

III

##### 14.5. Environmental hazards

No.

##### 14.6. Special precautions for user

During cargo handling should be used with personal protective equipment - see Section 8. Avoid source of ignition and mechanical forces.

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

Not applicable.

#### SECTION 15: Regulatory information

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

**Regulation (EC) No 1907/2006** of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.

**Regulation (EC) No 1272/2008** of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 as amended.

**Commission Regulation (EU) No 453/2010** of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

**Directive 2008/98/EC** of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives as amended.

**European Parliament and Council Directive 94/62/EC** of 20 December 1994 on packaging and packaging waste as amended.

##### 15.2. Chemical safety assessment

There are no data on the chemical safety assessment.

#### SECTION 16: Other information

Matches meet the requirements of standard EN 1783:2000.

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#### The full text of statements R and H under Sections 2 and 3:

R9 - Explosive when mixed with combustible material.

R11 - Highly flammable.

R16 - Explosive when mixed with oxidizing substances.

R20/22 - Harmful by inhalation and if swallowed.

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

H228 - Flammable solid.

H271 - May cause fire or explosion; strong oxidiser.

H302 - Harmful if swallowed.

H332 - Harmful if inhaled.

H411 - Toxic to aquatic life with long lasting effects.

H412 - Harmful to aquatic life with long lasting effects.

#### Key to abbreviations and acronyms:

Acute Tox. 4 - Acute toxicity (oral, inhalation), Hazard Category 4.

Aquatic Chronic 2, 3 - Hazardous to the aquatic environment - Chronic Hazard, Category 2, 3.

BLV - Biological limit values.

EC<sub>50</sub> - Effective concentration 50%.

F - Highly flammable.

Flam. Sol. 1 - Flammable solids, Hazard Category 1.

LC<sub>50</sub> - Median lethal concentration.

LD<sub>50</sub> - Median lethal dose.

LD<sub>L0</sub> - Lowest dose of a substance reported to have caused death in humans or animals.

N - Dangerous for the environment.

O - Oxidising.

Ox. Sol. 1 - Oxidising Solids, Hazard Category 1.

STEL - Short-term exposure limit.

TWA - 8 hours' time-weighted average.

Xn - Harmful.

**Training advice:** Before use read the SDS.

#### Sources of key data:

Manufacturer's a striking surface SDS of 31<sup>th</sup> January 2014.

Manufacturer's match-head composition SDS of 31<sup>th</sup> January 2014.

SDS of the match-head and striking surface ingredients.

The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are also treated as aid to safety in transport, storage and usage of the product. This does not free the user from the responsibility of improper usage of the information above also of improper compliance with the law norms in the field.

Prepared by ISOTOP s.c. Consulting Company; [www.isotop.pl](http://www.isotop.pl); e-mail: [reach@isotop.pl](mailto:reach@isotop.pl)

SDS from 24.11.2014 (Version 1) has been revised in sections 2.2 and 16. Changes have been underlined.