SAFETY DATA SHEET

Version: 4.1 Revision Date: 15.12.2022

Fire Products Plam Bulgaria

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), as amended by Regulation (EC)1272/2008(CLP)&2020/878

Wax/Wood Fire Lighters with match head

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name	Wax/wood based Firelighters with match heads
UFI code	PXR2-E068-400Q-YXMT

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

Identified Use(s)	Product used for the ignition of solid fuels in domestic appliances.
Uses Advised Against	None known.

1.3 Details of the supplier of the safety data sheet

Manufacturer	Fire Products Plam Bulgaria 1,Izgrev str Kostenetz 2030
Telephone	+ 359 2 984 8960; + 359 8888 3707 66
Fax	+ 359 888 370766
E-Mail (competent person)	Stefan.milchev@fireproducts.eu

1.4 Emergency telephone number

Emergency Phone No.	+ 359 888 370766
Languages spoken	English, Office hours 09:00 – 17:00

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008 (CLP)	Flam. Sol. 2, H228

2.2 Label elements

Hazard Pictogram(s)



Signal Word(s)	Warning
Hazard Statement(s)	H228- Flammable solid
Supplemental information	None
Precautionary Statement(s)	P102: Keep out of reach of children. P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

2.3 Other hazards

This substance/mixture does not meet the vPvB criteria of the REACH Regulation, Annex XIII.

Ecological information: The substance/mixture do not contain components that are considered to have the properties of disrupting the endocrine system according to Article 57 letter f) of the Regulation On the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)or Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of Commission at levels of 0.1% or higher.

Toxicological information: The substance/mihture does not contain components considered to have endocrine disrupting properties according to Article 57 (f) of the Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) or Commission Delegated Regulation (EU) 2017/2100 or Regulation (EU)2018/605 of the Commission at levels of 0.1% or higher.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

3.2 Mixtures

EC Classification Regulation (EC) No. 1272/2008 (CLP)
Stick: Firestarter matches are manufactured from mixtures of petrolaum (CAS 8009-03-8).
Head: A mixture of potassium chlorate (CAS 3811-04-9) with animal glue (technical gelatin) together with inert materials to moderate combustion, and minor amounts of red amorphous phosphorus (CAS 7723-14-0) and colourants.

Box: The side panels are coated with special composition containing red amorphous phosphorus (CAS 7723-14-0).

Stick

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	Classification
Petrolatum	**40**	**8009-03-8**	**232-373-2**	**01-2119490412-42-0009**	**Not classified**
Calcium Hydroxide	2	**1305-62-0**	**215-137-3**	**01-2119475151-45-0096**	**Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335**
Preventol ON Extra (2-phenylphenol ; sodium hydroxide)	0,4	**90-43-7 1310-73-2**	**201-993-5 215-185-5**	**01-2119511183-53**	**Skin Irrit. 2,H315 Eye Irrit. 2,H319 STOT SE 3,H335 Aquatic Acute 1,H400**

Match head

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	Classification
Potassium chlorate	**1,7**	**3811-04-9**	**223-289-7**	**01-211949417-18-0000**	**Ox. Sol. 1,H271 Acute Tox. 4 ,H302 Acute Tox. 4 ,H332 Aquatic Chronic 2, H411**
Red Phosphorous	**0,04**	**7723-14-0**	**918-594-3**	**01-2119489913-23-001**	**Flam. Sol. 1,H228 Aquatic Chronic 3,H412**
Boric Acid	**0.003**	**10043-35-3**	**233-139-2**	**01-2119486683-25-0006**	**Repr.1B,H360FD**

Note:
Boric Acid (CAS No.10043-35-3)Substance of very high concern (SVHC) and included in the candidate list for authorisation.

Full text of H- and EUH-statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation — Unlikely route of exposure. Product is a solid. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin Contact — Wash skin with soap and water. If skin irritation occurs: Get medical advice/attention.

Eye Contact — Flush eyes with water for at least 15 minutes while holding eyelids open. If eye irritation persists, get medical advice/attention.

Ingestion — If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

4.2 Most important symptoms and effects, both acute and delayed — Repeated exposure may cause skin dryness or cracking.

4.3 Indication of any immediate medical attention and special treatment needed — Unlikely to be required but if necessary treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media — Extinguish with carbon dioxide, dry chemical, foam or sand.

Unsuitable extinguishing media — Do not use water jet.

5.2 Special hazards arising from the substance or mixture — May produce toxic fumes of Carbon Monoxide and acidic gases such as phosphorus oxides if burning in confined spaces. Avoid breathing vapours.

5.3 Advice for fire-fighters — Fight fire with normal precautions from a reasonable distance. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep containers cool by spraying with water if exposed to fire. Avoic release to the environment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1	**Personal precautions, protective equipment and emergency procedures**	Remove or make safe all sources of ignition. Use personal protective equipment as required. Ensure adequate ventilation.
6.2	**Environmental precautions**	Avoid release to the environment. Do not allow to enter drains, sewers or watercourses.
6.3	**Methods and material for containment and cleaning up**	Sweep up and shovel into waste drums or plastic bags. Transfer to a lidded container for disposal or recovery. Keep away from heat and sources of ignition.
6.4	**Reference to other sections**	See Section: 8,13

SECTION 7: HANDLING AND STORAGE

7.1	**Precautions for safe handling**	Avoid all contact. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Always wash hands before smoking, eating and drinking.
7.2	**Conditions for safe storage, including any incompatibilities**	Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources. Store products enclosed, in original packing.
	Storage temperature	Keep cool. Protect from sunlight.
	Storage life	Stable under normal conditions.
	Incompatible materials	Oxidizinn
7.3	**Specific end use(s)**	See Section: 1.2

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1	**Control parameters**	
8.1.1	**Occupational Exposure Limits**	No Occupational Exposure Limit assigned.
8.1.2	**Biological limit value**	Not established.
8.1.3	**PNECs and DNELs**	Not established.
8.2	**Exposure controls**	
8.2.1	**Appropriate engineering controls**	Ensure adequate ventilation.
8.2.2	**Individual protection measures, such as personal protective equipment (PPE)**	Assumes a good basic standard of occupational hygiene is implemented. Avoid contact with skin and eyes.
	Eye/ face protection	Not normally required.
	Skin protection	Not normally required.
	Respiratory protection	Normally no personal respiratory protection is necessary.
	Thermal hazards	Not applicable

8.2.3	**Environmental Exposure Controls**	Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	20 or 10 pieces of pressed wood-wax blocks with one end coated with the ignition compound
Colour	Brown
Odour	Wood- paraffine odour
Odour threshold	Not established.
pH	Not determined.
Melting point/freezing point	Not determined.
Initial boiling point and boiling range	Not determined.
Flash point	> 180°C (Close cup)
Evaporation rate	Not determined.
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	Not explosive.
Vapour pressure	Not determinated
Vapour density	Not determined.
Solubility(ies)	None. Product is solid.
Partition coefficient: n-octanol/water	Not determined.
Auto-ignition temperature	450 °C
Decomposition Temperature	Not determined.
Viscosity	Not applicable. Product is a solid.
Particle characteristics	Not applicable

9.2 Other information

9.2.1. Information on physical hazard classes

Explosive properties	Readily combustible and misuse may result in burns or uncontrolled fires
Oxidising properties	Not oxidising.

9.2.2. Other safety characteristics — None.

SECTION 10: STABILITY AND REACTIVITY

10.1	**Stability and reactivity**	Stable under normal conditions.
10.2	**Chemical stability**	Stable under normal conditions.
10.3	**Possibility of hazardous reactions**	Hazardous polymerisation will not occur.
10.4	**Conditions to avoid**	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
10.5	**Incompatible materials**	This product should be stored away from sources of strong heat or oxidising chemicals.
10.6	**Hazardous decomposition product(s)**	Carbon monoxide, Carbon dioxide,

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects (Substances in preparations / mixtures)

Acute toxicity

Ingestion	Based upon the available data, the classification criteria are not met.
Inhalation	Based upon the available data, the classification criteria are not met.
Skin Contact	Not classified. Repeated exposure may cause skin dryness or cracking.
Skin corrosion/irritation	Not applicable. Product is a solid.
Serious eye damage/irritation	Based upon the available data, the classification criteria are not met.
Respiratory or skin sensitization	Based upon the available data, the classification criteria are not met.

Germ cell mutagenicity	There is no evidence of mutagenic potential.
Carcinogenicity	No evidence of carcinogenicity.
Reproductive toxicity	No evidence of reproductive effects.
STOT - single exposure	Not applicable. Product is a solid.
STOT - repeated exposure	Based upon the available data, the classification criteria are not met.
Aspiration hazard	Not applicable. Product is a solid.

Components:

Calcium Hydroxide
Acute oral toxicity:
LD50 : (Rat) : >2000 mg/kg.
Acute dermal toxicity:
LD50 : (Rabbit): >2500mg.kg.

Potassium chlorate
Acute inhalation toxicity
LC50:5mg/l
Exposure time:4h
Test atmosphere:dust/mist
Metod:Acute toxicity estimate
Skin corrosion/irritation
Species-Rabbit
Result-No skin irritation
Serious eye damage/eye irritation
Species-Rabbit
Result-No eye irritation

11.2 Other information None.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity Not applicable.

12.2 Persistence and degradibility The product is likely to persist in the environment. Part of the components are biodegradable.

12.3 Bioaccumulative potential Not classified.

12.4 Mobility in soil Not classified.

Components:

Calcium Hydroxide

Biodegradation in soil:
Biodegradation tests in soil are not relevant for inorganic substances.

Potassium chlorate
Mobility-Can be extracted from the soil.

12.5 Results of PBT and vPvB assessment Not classified as PBT or vPvB.

Components:

Calcium Hydroxide
PBT status:PBT assessment does not apply.

The PBT assessment is not applicable to Calcium hidroxide as the substance is inorganic.

Potassium chlorate
PBT assessment does not apply
As the substance is inorganic, PBT assessment is out of scope.

12.6	**Endocrine disruptor properties**	**The substance/mihture does not contain components considered to have endocrine disrupting properties according to Article 57 (f) of the Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals(REACH) or Commission Delegated Regulation (EU) 2017/2100 or Regulation (EU)2018/605 of the Commission at levels of 0.1% or higher.**
12.7	**Other adverse effects**	None

SECTION 13: DISPOSAL CONSIDERATIONS

13.1	**Waste treatment methods**	Disposal should be in accordance with local, state or national legislation.
13.2	**Additional Information**	Large quantities of firestarter matches can be safely disposed by controlled combustion at an approved incinerator.

SECTION 14: TRANSPORT INFORMATION

		ADR/RID	**IMDG**	**IATA/ICAO**
14.1	**UN number**	1944	1944	1944
14.2	**Proper Shipping Name -**	Fire lighter solid	Fire Lighter Solid	Fire lighter Solid
14.3	**Transport hazard class(es)**	4,1	4.1	4.1
14.4	**Packing group**	III	III	III
14.5	**Environmental hazards**	Not classified	Not classified as a Marine Pollutant.	Not classified
14.6	**Special precautions for user**	See Section: 2		
14.7	**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**	No information available.	No information available.	No information available.

SECTION 15: REGULATORY INFORMATION

15.1	**Safety, health and environmental regulations/legislation specific for the substance or mixture**	
15.1.1	**EU regulations**	
	Authorisations and/or Restrictions On Use	None known.
15.1.2	**National regulations**	None known.
15.2	**Chemical Safety Assessment**	Not available.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1, 3,8,11,12,16.

Version: 1.0 Date: 01.12.2015

Version: 2.0 Date: 03.09.2019
Version: 3.0 Date: 01.04.2020
Version:4.0 Date 13.01.2022

References:

Safety Data Sheets for ingoing ingredients.
Existing ECHA registratior for Petrolatum (CAS 8009-03-8). Potassium chlorate (CAS 3811-04-9), Red Phosphorous (CAS 7723-14-0), Calcium Hydroxide (CAS 1305-62-0), Preventol-**(** 2-phenylphenol [90-43-7];

Hazard Statement(s)

H228: Flammable solid
H271-May cause fire or explosion; strong oxidizer.
H315- **Causes skin irritation**
H318- Causes serious eye damage.
H319- **Causes serious eye irritation**
H302- Harmful if swallowed.
H332- **Harmful if inhaled**
H335-Respiratory tract irritation
H360FD- May damage fertility.
H400- Very toxic to aquatic life
H411- Toxic to aquatic life with long lasting effects.
H412-Harmful to aquatic life with long lasting effects

Exposure scenarios- Consumer uses

Potassium chlorate;

Environmental release category (ERC):
ERC8c: Widespread use leading to inclusion into/onto article
Contributing activity / technique for consumers
Technique:
support ignition
Product category (PC):
PC 0: Other: matches
Substance supplied to this use in the form of: in a mixture
Subsequent service life relevant to this use - No
Insignificant release via the following route - Air

Calcium Hydroxide
Environmental release category (ERC):
ERC8c: Widespread use leading to inclusion into/onto article
Product category (PC):
PC 0: Other- matches
Substance supplied to this use in the form of:
in a mixture
Subsequent service life relevant to this use - No
Insignificant release via the following route - Air

Disclaimers

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Annex to the extended Safety Data Sheet (eSDS)
Not available.