

## Product sheet

### Safety Matches

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Safety Matches are defined as products according to REACH (EG 1907/2006). According to Article 31 of REACH, Safety Data Sheets are not required for products.

#### 1 COMPANY INFORMATION

Producer:	Swedish Match Industries AB
Address:	Västra Drottningvägen 15 Box 84 522 22 TIDAHOLM
Telephone number:	+46 502-165 00
Fax nr:	+46 502-165 55
E-mail:	<a href="mailto:jonas.nordqvist@swedishmatch.com">jonas.nordqvist@swedishmatch.com</a>
Emergency telephone number:	112
Company emergency telephone number:	<a href="tel:+4650216500">+46 502 16500</a>
Available during non-office hours:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

#### 2 HAZARDS IDENTIFICATION

Safety matches pose few hazards in normal use. Safety matches will not ignite, under normal circumstances, unless they are rubbed on the specially prepared striking surface provided on the box. Under exceptional circumstances, such as severe impact or heavy striking on a smooth, non thermally conducting surface, safety matches can ignite. Matches do not ignite when heated unless the temperature exceeds 180°C.

The main hazard associated with matches arises because they are readily combustible and misuse may result in burns or uncontrolled fires.

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

Keep out or reach of children.

### 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substance can be found in	Substances	Weight-%	CAS-nr/EG-nr	Classification KIFS	Classification CLP	Comments	
Splint	Aspen wood						
	Monoammonium phosphate		10124-31-9	-	-	Impregnation	
	Paraffin wax		8002-74-2	-	-		
Match head	Potassium chlorate	<10	3811-04-9	O; R9 Xn; R20/22 N; R51-53	Ox. Sol. 1 Acute Tox. 4 * Acute Tox. 4 * Aquatic Chronic 2, H271, H332 H302, H411		
	Uncoloured EFP/Brown EFP	<5	Various	Xn; R48/20	N/A		
	Technical gelatin	<2	9000-70-8	-	-		
	Red phosphorus	<0,3	7723-14-0	F; R11, R16 R52/53	Flam. Sol. 1 Aquatic Chronic 3 H228, H412		
	Red head colour:						
	Bromfluorescein	≤0,1	17372-87-1	Xn; R36	Eye Irrit. 2 H319		
	Blue head colour						
	Acid Blue 1 (Sodium salt)	≤0,01	129-17-9	Xn; R41	Eye Irrit. 1 H318		
Box	Red phosphorus		7723-14-0	F; R11, R16 R52/53	Flam. Sol. 1 Aquatic Chronic 3 H228, H412	Friction	

For abbreviations, please see section 16.

### 4 FIRST AID MEASURES

Unless large quantities of matches are ingested (>10 matches per kilogram of body weight) there is little risk to health following ingestion. If more than this quantity is ingested seek medical attention.

Burns resulting from mishandling should be treated as normal burns. Place injured part under running cold water for 10 minutes. Do not break blisters or remove loose skin. Do not apply ointments or lotions. Dress area with clean, non fluffy, sterile material. If in doubt seek medical attention.

## **5 FIRE FIGHTING MEASURES**

### Extinguishing media:

Use extinguishing media suitable for the environment and the surroundings. Water is the most effective extinguishant for match fires.

### Special hazards arising from the product:

Match fires give off a lot of smoke and small volumes of acid gases like phosphor oxides.

### Advice for firefighters:

Avoid inhalation of smoke. Water can be used to cool down containers and to extinguish flames. Appropriate firefighting equipment should be used. Full fire fighting protective clothing with fresh air breathing mask is recommended.

## **6 ACCIDENTAL RELEASE MEASURES**

If significant quantities of matches are released by breakage of the packaging then remove all sources of ignition, salvage any undamaged product and wet the remaining product before clearing up.

## **7 HANDLING AND STORAGE**

In storage, matches give off no toxic or flammable gases. Matches do not spontaneously catch fire although fires can occur if the product is mishandled. Matches should be stored in a cool dry place away from potential sources of ignition, and other highly flammable materials. They should not be stacked higher than 4.5 meters above the ground.

Adequate space around the product should be left to minimize the chances of impact damage from, for example, maneuvering fork lift trucks. It should be noted that any ignition of matches in intact closed boxes, displays and cases invariably self extinguishes because there is insufficient oxygen in the closed packaging. Only when the case or packaging bursts open is there any danger of sustained combustion taking place.

## **8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

Personal protection: No special personal protection is required when handling matches.

Mitigation of environmental exposure: Prevent leakage from reaching sewers or waters.

## **9 PHYSICAL AND CHEMICAL PROPERTIES**

Flammability: Matches are flammable and may ignite when temperature exceeds 180°C.

Solubility: Approximately 10 mg of each match is soluble in water.

## 10 STABILITY AND REACTIVITY

Matches are perfectly stable under all normal ambient conditions and they have a long shelf life. Safety matches do not ignite when heated unless the temperature exceeds 180°C.

If they become wet and subsequently dry out the burning characteristics of the product may be adversely affected.

## 11 TOXICOLOGICAL INFORMATION

Safety matches contains potassium chlorate (CAS-nr 3811-04-9), which is classified as harmful:

LD50 oral - rat = 1870 mg/kg of body weight

LD50 dermal - rabbit = >2000 mg/kg of body weight

## 12 ECOLOGICAL INFORMATION

Safety matches contain potassium chlorate (CAS-nr 3811-04-9), which is classified as harmful:

LC50 – fish (96h) = 1750 mg/l, Species: Oncorhynchus.

EC50 – daphnia (48h) = 599 mg/l, Species: D. Magna

IC50 – algae (72h) = 0,077 mg/l

The bioavailability is low for potassium chlorate.

Safety matches do not contain any PBT or vPvB substances according to Annex XII of the REACH regulation.

## 13 DISPOSAL CONSIDERATIONS

The waste disposal of the material and its containers must be done according to the national or local regulations. Processing, use or contamination of the product can change the disposal considerations.

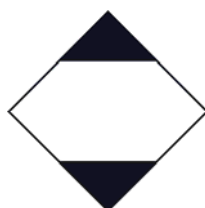
## 14 TRANSPORT INFORMATION

UN number: 1944

Proper shipping name: SAFETY MATCHES

Transport hazard class: 4.1

Label for limited quantities:



Packaging group: III

IMDG marine pollutant: No

Special precautions for user: Tunnel restriction: E

## 15 REGULATORY INFORMATION

Authorization: The product does not contain any substances with subject to authorization according to Annex XIV of the REACH regulation.

Restrictions for use: The product does not contain any restrictions according to Annex XVII of the REACH regulation.

Other EU regulations: N/A

## 16 OTHER INFORMATION

### Hazard codes:

O: Oxidizing

Xn: Harmful

N: Dangerous for the environment

F: Highly flammable

### Risk phrases:

R11: Highly flammable

R16: Explosive when mixed with oxidizing substances

R36: Irritating to eyes

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

### Hazard statements:

H228: Flammable solid

H271: May cause fire or explosion; strong oxidizer

H302: Harmful if swallowed

H319: Causes serious eye irritation

H332: Harmful if inhaled

H411: Toxic to aquatic life with long lasting effects

H412: Harmful to aquatic life with long lasting effects

### Abbreviations:

bw: body weight

EC50: Effect Concentration. The concentration which has an observed or measurable effect on 50% of the population within a specified time range.

LC50: Lethal Concentration. The concentration which is lethal for 50% of the population within a specified time range.

LD50: Lethal Dosage. The dosage which is lethal for 50% of the population.

PBT: Persistent, Bioaccumulative, Toxic substances. A PBT substance meets the criteras of part 1 in Annex XIII of REACH.  
vPvB: Very Persistent, Very Bioaccumulative substances. A vPvB substances meets the criteras of part 2 in Annex XIII in of REACH.

Important litterature references and data sources:

REACH: (EG) nr 1907/2006; CLP: (EG) nr 1272/2008; European chemical Substances Information System (ESIS); Databasen Kemiska ämnen – Prevent; Klassificerings- och märkningsregistret.