SAFETY DATA SHEET

Issuing Date: 13-Jul-2012	Revision Date: 10-Jul-2015	Revision No.: 1
	UBSTANCE/PREPARATION AND OF THE COMPANY/	JNDERTAKING
Product identifier		
Product Name	Safety Matches	
Other means of identification		
UN-No.	UN1944	
Synonyms	Strike on Box Matches, Book Matches	
Recommended use of the cher		
Recommended use	Matches	
Uses advised against	No information available	
Details of the summing of the		
Details of the supplier of the sa		
Supplier Name	Jarden Home Brands	
Supplier Address	1800 Cloquet Ave.	
	Cloquet	
	MN	
	55720	
	US	
Supplier Phone Number	Phone:1-800-392-2575	
Supplier Email	JHBCasualEntertainingInfo@jardenhomebrands.com	
Emergency telephone number	CHEMTREC 1-800-424-9300	
	2. HAZARDS IDENTIFICATION	
Classification		

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable solids

Category 2

GHS Label elements, including precautionary statements

	Emerge	ncy Overview	
Signal Word	Warning		
Hazard Statements			
Flammable solids			
Appearance: wooden match	Physical State: So	olid	Odor: none

Precautionary Statements - Prevention

Keep away from heat/sparks/open flames/hot surfaces - No smoking Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Precautionary Statements - Storage

Store in a cool, dry location, away from heat, open flames or sparks, or flammable materials.

Precautionary Statements - Disposal

None

Hazards not otherwise classified (HNOC)

Smoke from fire may be irritating to lungs and eyes.

Unknown Toxicity

11% of the mixture consists of ingredient(s) of unknown toxicity

Other Information

None

Interactions with Other Chemicals

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	
Match:			
Sulfur	7704-34-9	0.8%	
Potassium chlorate	3811-04-9	8%	
Proprietary binders, adhesives & additives	Not Determined	11%	
Monoammonium Phosphate			
treatment added to splint	7722-76-1	trace	
Aspen wood splint	67-65-1	~80%	Note: Exposure to wood dust is not
Box & Striker Strip:			expected during use and handling of this
Amorphous Red Phosphorous	7723-14-0	<1.0%	product

4. FIRST AID MEASURES		
<u>First aid measures</u> Burns:	Treat all thermal burns with appropriate first aid measures for degree of burn	
Respiratory Distress:	Remove to fresh air and seek medical attention for smoke inhalation	
Eyes:	Flush with fresh water for 15 minutes and seek medical attention.	
Ingestion:	While potassium chlorate is classified as a harmful substance, the quantity present in a single match is very low (typically 16 mg in a kitchen match). With an LD50 of 1870 mg/kg of body weight, death may occur after ingestion of around 53 kitchen matches/pound of body weight, i.e. over 1000 matches for a 20 pound child. The quantities of matches are so large that the health risk is considered negligible.	

Most important symptoms and effects, both acute and delayed

Most important symptoms and Coughing and/ or wheezing from smoke inhalation. Difficulty in breathing. **Effects**

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically

Suitable Extinguishing Media

Water is the most effective extinguishant, but dry chemical, CO2, sand, earth, or regular foam can be used.

Unsuitable Extinguishing Media

Not known

Specific Hazards Arising from the Chemical

A large quantity of matches may burn rapidly with flare burning effect.

Uniform Fire Code FLAMMABLE SOLID: INORGANIC

Hazardous Combustion Products

Oxides of carbon, oxides of sulfur

Protective equipment and precautions for firefighters

Move containers from fire area if you can do it without risk

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions The likelihood of match head composition being released into the environment is low. If significant quantities of matches are released by breakage or spillage then remove all potential sources of ignition, salvage any undamaged product and wet down the remaining product before cleaning up.

7. HANDLING AND STORAGE		
Precautions for safe handling	9	
Handling	In storage, matches give off no toxic fumes or flammable gases. Matches do not spontaneously catch fire although fires can occur if the product is mishandled. Handling and storage requirements are such as to minimize sources of ignition, and other highly flammable materials.	
Conditions for safe storage, including any incompatibilities		
Storage	Store in a cool, dry location, away from heat, open flames or sparks, or flammable materials.	
Incompatible Products	None known based on available information	
8.	EXPOSURE CONTROLS/PERSONAL PROTECTION	
Control parameters		
Exposure Guidelines	No special measures are required when handling matches.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Property	ies			
Physical State	Solid		Odor	None
Appearance	Matches		Odor Threshold	no information
Color	Various			available
<u>Property</u>	Value	<u>es</u>	<u>Remark</u>	s/ Method
рН	No da	ta available	None kr	nown
Melting/freezing point	No da	ita available	None kr	nown
Boiling point/boiling range	No da	ita available	None kr	nown
Flash Point	No da	ta available	None kr	nown
Evaporation Rate	No da	ta available	None kr	nown
Flammability (solid, gas)	No da	ita available	None kr	nown
Flammability Limit in Air	No da	ita available	None kr	nown
Upper flammability limit	No da	ita available	None kr	nown
Lower flammability limit	No da	ita available	None kr	nown
Vapor pressure	No da	ita available	None kr	nown
Vapor density	No da	ita available	None kr	nown
Specific Gravity	No da	ita available	None kr	nown
Water Solubility	No da	ita available	None kr	nown
Solubility in other solvents	No da	ta available	None kr	nown
Partition coefficient:				
n-octanol/water	No da	ta available	None kr	nown
Autoignition temperature	No da	ta available	None kr	nown
Decomposition temperature	No da	ta available	None kr	nown
Kinematic viscosity	No da	ta available	None kr	nown
Dynamic viscosity	No da	ta available	None kr	nown
Explosive properties	No da	ita available	None kr	nown
Oxidizing Properties	No da	ita available	None kr	nown
Other information				
Softening Point		ta available	None kr	-
VOC Content (%)		ta available	None kr	
Particle Size		ta available	None kr	
Particle Size Distribution	No da	ta available	None kr	nown

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal ambient conditions. They are liable to spontaneous combustion at temperatures exceeding 350°F

Chemical stability

Stable under recommended storage conditions

Possibility of Hazardous Reactions

If ignited in large quantities matches produce much smoke

Hazardous Polymerization

Hazardous polymerization does not occur

Conditions to avoid

Heat, flames, and sparks

Incompatible materials

None known based on available information

Hazardous Decomposition Products

Oxides of carbon, oxides of sulfur

11. TOXICOLOGICAL INFORMATION		
Information on likely routes of exposure		
Product Information	Product does not present an acute toxicity hazard based on known or supplied information	
Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. Harmful by inhalation. (based on components).	
Eye Contact	Specific test data for the substance or mixture is not available. Expected to be an irritant based on components. Irritating to eyes. May cause redness, itching, and pain. May cause temporary eye irritation.	
Skin Contact	Specific test data for the substance or mixture is not available. Expected to be an irritant based on components. Irritating to skin. Prolonged contact may cause redness and irritation.	
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be harmful if swallowed. (based on components).	

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfur 7704-34-9	>3000 mg/kg (Rat)	>2000 mg/kg (Rabbit)	>9.23 mg/L (Rat) 4h
Potassium chlorate 3811-04-9	=1870 mg/kg (Rat)	<2000 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms Coughing and/ or wheezing from smoke inhalation. Delayed & immediate effects as well as chronic effects from short & long-term exposure Sensitization No information available **Mutagenic Effects** No information available Carcinogenicity Contains no ingredient listed as a carcinogen **Reproductive Toxicity** No information available No information available STOT - single exposure STOT - repeated exposure No information available No known effect based on available information **Chronic Toxicity Target Organ Effects** Respiratory system from smoke inhalation Aspiration Hazard No information available

<u>Numerical measures of toxicity Product Information</u> The following value is calculated based on App A (A.1.3.6.2.4) of the HazCom regulation

ATEmix (oral) 19,299 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated

Persistence and Degradability

No information available

Bioaccumulation

No information available

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods	Should not be released into the environment. Dispose of contents/containers in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated Packaging	Dispose of contents/containers in accordance with local regulations
US EPA Waste Number	D001
California Hazardous Waste Co	odes 181

14. TRANSPORT INFORMATION		
DOT		
UN-No.	UN1944	
Proper Shipping Name	matches, safety	
Hazard Class	4.1	
Packing Group	III	
Description	UN1944, MATCHES, SAFETY, 4.1, III	
Emergency Response		
Guide Number	133	
TDG		
UN-No.	UN1944	
Proper Shipping Name	MATCHES, SAFETY	
Hazard Class	4.1	
Packing Group	III	
Description	UN1944, MATCHES, SAFETY, 4.1, III	
MEX		
UN-No.	UN1944	
Proper Shipping Name	Matches, safety	
Hazard Class	4.1	
Packing Group		
Description	UN1944 Matches, safety, 4.1, III	
ICAO UN-No.	UN1944	
Proper Shipping Name	Matches, safety	
Hazard Class	4.1	
Packing Group	4.1 iii	
Description	WUN1944, Matches, safety, 4.1, III	
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<u>IATA</u>

UN-No.	UN1944
Proper Shipping Name	MATCHES, SAFETY
Hazard Class	4.1
Packing Group	iii
Description	UN1944, MATCHES, SAFETY, 4.1, III

IMDG/IMO

UN-No.	UN1944
Proper Shipping Name	MATCHES, SAFETY
Hazard Class	4.1
Packing Group	iii
EmS No.	F-A, S-1
Description	UN1944, MATCHES, SAFETY,

4.1, III

<u>RID</u>

UN-No.	UN1944
Proper Shipping Name	Matches, safety
Hazard Class	4.1
Packing Group	III
Classification code	F1
Description	UN1944 Matches, safety, 4.1, III

<u>ADR</u>

UN-No.	UN1944
Proper Shipping Name	Matches, safety
Hazard Class	4.1
Packing Group	III
Classification code	F1
Description	UN1944 Matches, safety, 4.1, III

<u>ADN</u>

UN-No.	UN1944
Proper Shipping Name	Matches, safety
Hazard Class	4.1
Packing Group	111
Classification code	F1
Special Provisions	293
Description	UN1944 Matches, safety, 4.1, III
Hazard Labels	4.1
Limited Quantity	LQ9

International Inventories

TSCA	Complies
DSL	all components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List.

US Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	NJ	MA	PA	RI	IL
Potassium chlorate 3811-04-9	х	х	х		
Sulfur 7704-34-9	х	Х	Х		

International Regulations

Canada WHMIS Hazard Class B4 - Flammable solid



16. OTHER INFORMATION				
<u>NFPA</u>	Health Hazards 1	Flammability 4	Instability 2	Physical & Chemical Hazards
<u>HMIS</u>	Health Hazards 1	Flammability 4 Physical Hazard 2		Personal Protection X
Prepared by		Jarden Leisure & Entertainment 9999 East 121st Street Fishers, IN 46037		SCH
Issuing Date		7/13/2012		
Revision Date		7/10/2015		
Revision Note		Updated contact information		

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet