

Material Safety Data Sheet

Prepared by: DW

Section I	Material Identification		
Product Name:	Wooden Stick Strike on Box Matches (SOB) (AKA: Safety Matches)		
USA - DOT Information:	MATCHES, SAFETY, UN 1944		
Manufactures Name:	Jarden Home Brands, 1800 Cloquet Ave., Cloquet, MN 55720		
Telephone Number:	(218) 879-6700		
Chemtrec Emergency No:	(800) 424-9300		
Section II	Hazardous Ingredient	S	
Match:	<u>% By Weight</u>	PEL	
Potassium Chlorate	<1.0%	NE	
Sulfur	<1.0%	NE	
Striker Strip:			
Amorphous Red Phosphorous	<1.0%	NE	
	NE = None Established TWA = Time Weighted Average	PEL = Permissible Exposure Limits PPM = Parts per Million	
	TWA = Time Weighted Average CEIL = Ceiling Limit	PPM = Parts per Million STEL = Short Term Exposure Limit	
Section III	Physical Data		
Boiling Point:	-	Specific Gravity: 1.3 g/cc (Matches)	
Freezing Point:		rcent Volatile by Volume: NA	
Vapor Pressure (mm Hg):		Evaporation Rate: NA	
Vapor Density (Air=1):	NA	Solubility in Water: 7.1 g/cc (Matches)	
Section IV	Fire and Explosion Hazard Data		
Flash Point:	NA Auto Ignition Temperature: > 300°F		
	101 710		
Extinguishing Media:	Water.		
• •	Water.	m excessive heat, crushing, or dropping. Smoke from fire	
• •	Water. Combustible, may ignite from may be irritating to lungs an	n excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the	
Unusual Fire and Explosion:	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible	n excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect.	
• •	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible Match: Carbon monoxide, o	m excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect. carbon dioxide, oxides of sulfur.	
Unusual Fire and Explosion:	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible Match: Carbon monoxide, o	n excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect.	
Unusual Fire and Explosion: Combustion byproducts:	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible Match: Carbon monoxide, of Striker: Phosphine, oxides	m excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect. carbon dioxide, oxides of sulfur.	
Unusual Fire and Explosion: Combustion byproducts: Section V	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible Match: Carbon monoxide, of Striker: Phosphine, oxides of Health Hazard Data	m excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect. carbon dioxide, oxides of sulfur.	
Unusual Fire and Explosion: Combustion byproducts: Section V General: <u>HMIS Rating:</u>	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible Match: Carbon monoxide, of Striker: Phosphine, oxides of Health Hazard Data <u>NFPA Rating:</u>	m excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect. carbon dioxide, oxides of sulfur.	
Unusual Fire and Explosion: Combustion byproducts: Section V General: <u>HMIS Rating:</u> Health = 1	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible Match: Carbon monoxide, of Striker: Phosphine, oxides of Health Hazard Data <u>NFPA Rating:</u> Health = 1	m excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect. carbon dioxide, oxides of sulfur.	
Unusual Fire and Explosion: Combustion byproducts: Section V General: <u>HMIS Rating:</u> Health = 1 Flammability = 3	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible Match: Carbon monoxide, of Striker: Phosphine, oxides of Health Hazard Data <u>NFPA Rating:</u> Health = 1 Flammability = 3	m excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect. carbon dioxide, oxides of sulfur.	
Unusual Fire and Explosion: Combustion byproducts: Section V General: <u>HMIS Rating:</u> Health = 1 Flammability = 3 Reactivity = 2	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible Match: Carbon monoxide, of Striker: Phosphine, oxides of Health Hazard Data <u>NFPA Rating:</u> Health = 1 Flammability = 3 Reactivity OX (oxidizer) = 2	m excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect. carbon dioxide, oxides of sulfur. of phosphorous, phosphoric acid (in presence of water).	
Unusual Fire and Explosion: Combustion byproducts: Section V General: <u>HMIS Rating:</u> Health = 1 Flammability = 3 Reactivity = 2 NOTE: Normal use of this pro	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible Match: Carbon monoxide, of Striker: Phosphine, oxides of Health Hazard Data <u>NFPA Rating:</u> Health = 1 Flammability = 3 Reactivity OX (oxidizer) = 2 duct produces fumes (smoke	m excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect. carbon dioxide, oxides of sulfur.	
Unusual Fire and Explosion: Combustion byproducts: Section V General: <u>HMIS Rating:</u> Health = 1 Flammability = 3 Reactivity = 2	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible Match: Carbon monoxide, of Striker: Phosphine, oxides of Health Hazard Data <u>NFPA Rating:</u> Health = 1 Flammability = 3 Reactivity OX (oxidizer) = 2 duct produces fumes (smoke r Exposure:	n excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect. carbon dioxide, oxides of sulfur. of phosphorous, phosphoric acid (in presence of water).	
Unusual Fire and Explosion: Combustion byproducts: Section V General: <u>HMIS Rating:</u> Health = 1 Flammability = 3 Reactivity = 2 NOTE: Normal use of this pro	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible Match: Carbon monoxide, of Striker: Phosphine, oxides Health Hazard Data <u>NFPA Rating:</u> Health = 1 Flammability = 3 Reactivity OX (oxidizer) = 2 duct produces fumes (smoke r Exposure: Eyes - tearing, stinging, red	n excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect. carbon dioxide, oxides of sulfur. of phosphorous, phosphoric acid (in presence of water).	
Unusual Fire and Explosion: Combustion byproducts: Section V General: <u>HMIS Rating:</u> Health = 1 Flammability = 3 Reactivity = 2 NOTE: Normal use of this pro Signs and Symptoms of Ove	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible Match: Carbon monoxide, of Striker: Phosphine, oxides of Health Hazard Data <u>NFPA Rating:</u> Health = 1 Flammability = 3 Reactivity OX (oxidizer) = 2 duct produces fumes (smoke r Exposure: Eyes - tearing, stinging, red Inhalation - coughing, sorem	n excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect. carbon dioxide, oxides of sulfur. of phosphorous, phosphoric acid (in presence of water).	
Unusual Fire and Explosion: Combustion byproducts: Section V General: <u>HMIS Rating:</u> Health = 1 Flammability = 3 Reactivity = 2 NOTE: Normal use of this pro	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible Match: Carbon monoxide, of Striker: Phosphine, oxides of Health Hazard Data <u>NFPA Rating:</u> Health = 1 Flammability = 3 Reactivity OX (oxidizer) = 2 duct produces fumes (smoke r Exposure: Eyes - tearing, stinging, red Inhalation - coughing, soren nized as Being Aggravated	 m excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect. carbon dioxide, oxides of sulfur. of phosphorous, phosphoric acid (in presence of water).) which may irritate eyes and/or lungs. ness. ess in respiratory tract, chest tightness, difficulty breathing. by Exposure:	
Unusual Fire and Explosion: Combustion byproducts: Section V General: <u>HMIS Rating:</u> Health = 1 Flammability = 3 Reactivity = 2 NOTE: Normal use of this pro Signs and Symptoms of Ove	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible Match: Carbon monoxide, of Striker: Phosphine, oxides of Health Hazard Data <u>NFPA Rating:</u> Health = 1 Flammability = 3 Reactivity OX (oxidizer) = 2 duct produces fumes (smoke r Exposure: Eyes - tearing, stinging, red Inhalation - coughing, soren nized as Being Aggravated Fumes from ignition could a	n excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect. carbon dioxide, oxides of sulfur. of phosphorous, phosphoric acid (in presence of water).	
Unusual Fire and Explosion: Combustion byproducts: Section V General: <u>HMIS Rating:</u> Health = 1 Flammability = 3 Reactivity = 2 NOTE: Normal use of this pro Signs and Symptoms of Ove Conditions Generally Recog	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible Match: Carbon monoxide, of Striker: Phosphine, oxides of Health Hazard Data <u>NFPA Rating:</u> Health = 1 Flammability = 3 Reactivity OX (oxidizer) = 2 duct produces fumes (smoke r Exposure: Eyes - tearing, stinging, red Inhalation - coughing, soren nized as Being Aggravated Fumes from ignition could a None known.	n excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect. carbon dioxide, oxides of sulfur. of phosphorous, phosphoric acid (in presence of water).	
Unusual Fire and Explosion: Combustion byproducts: Section V General: <u>HMIS Rating:</u> Health = 1 Flammability = 3 Reactivity = 2 NOTE: Normal use of this pro Signs and Symptoms of Ove Conditions Generally Recog	Water. Combustible, may ignite from may be irritating to lungs an burning rate of combustible Match: Carbon monoxide, of Striker: Phosphine, oxides Health Hazard Data <u>NFPA Rating:</u> Health = 1 Flammability = 3 Reactivity OX (oxidizer) = 2 duct produces fumes (smoke r Exposure: Eyes - tearing, stinging, red Inhalation - coughing, soren nized as Being Aggravated Fumes from ignition could a None known. Inhalation of fumes from ign	 m excessive heat, crushing, or dropping. Smoke from fire d eyes. Contains oxidizers, which may increase the materials with flare-burning effect. carbon dioxide, oxides of sulfur. of phosphorous, phosphoric acid (in presence of water).) which may irritate eyes and/or lungs. ness. ess in respiratory tract, chest tightness, difficulty breathing. by Exposure: ggravate respiratory ailments. ited material, thermal burns from ignited material. 	

Section VI	First Aid	
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.	
Section VII	Reactivity Data	
Stability: Stable X	Unstable	
Conditions to Avoid:	Do not store with readily oxidizable substances, phosphorous, acids, bases, finely	
	divided metals or organic materials.	
Incompatibility:	Avoid mixing with oxidizing agents, phosphorous, acids, bases, finely divided metals	
	or organic materials.	
Hazardous Decomposition of		
	Match: Oxides of carbon, oxides of sulfur.	
	Striker: Oxides of phosphorous.	
Hazardous Polymerization:	None known.	
Section VIII	Spill or Leak Procedures	
Steps to be taken if materia	•	
	If packaging is open and contents are spilled, be prepared to wet down with water if	
	crushing or dropping are possible during cleanup.	
	If packaging is intact, packaging is designed to smother unintended ignition.	
Waste Disposal Methods:	Incinerate or bury in landfill according to applicable Federal, State and local regulations.	
Section IX	Special Protection Information	
Precautions to be Taken in Handling and Storing: Store in a cool, dry location, away from heat, open flames or		
	sparks, or flammable materials.	
Other Precautions:	Do not crush or drop. KEEP AWAY FROM CHILDREN.	
Other Safety Information:	This packaging is designed to be self-extinguishing, and should smother any	
	unintended ignition, provided the packaging is intact and closed.	
Section X	Shipping Information	
Shipping Description:	(as per United States DOT Regulations 49 CFR and subparts173.186.)	
	MATCHES, SAFETY, 4.1, UN 1944, PGIII	
Hazardous Material Class:	4.1 Flammable Solid	
Northern American Emergency Response Guidebook 2000: Guide 133 for First Responders During the Initial		
	Phase of a Dangerous Goods/Hazardous Materials Incident.	

NOTE: According to 49 CFR 173.186 (c) Safety matches and wax "Vesta" matches must be tightly packed in securely closed inner packagings to prevent accidental ignition under conditions normally incident to transportation, and further packed in outer fiberboard, wooden, or other equivalent outer packagings. These matches in outer packagings not exceeding 23 kg (50 pounds) gross weight are not subject to any other requirement (except marking) of this subchapter. These matches may be packed in the same outer packagings with materials not subject to this subchapter.

DISCLAIMER:

Jarden Home Brands believes that the information contained herein is accurate as of the date of the MSDS, HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OF COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. The information is supplied solely for your information and consideration, and Jarden Home Brands assumes no responsibility from the use or reliance thereon. It is the responsibility of the user of Jarden Home Brands products to comply with all applicable Federal, State, and local laws and regulations.