

SAFETY DATA SHEET

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NGHS / English



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1. IDENTIFICATION

Product identifier

Product Name Safety Matches

Other means of identification

Product Code(s) Strike on box, book, penny, kitchen, long reach

Recommended use of the chemical and restrictions on use

Recommended Use Matches

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Identification Royal Oak Enterprises LLC

Address 1 Royal Oak Avenue
Roswell
Georgia
30076
US

Telephone Phone:800-241-3955

E-mail mhuetter@royal-oak.com

Emergency telephone number

Company Emergency Phone Number 800-424-9300

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Carcinogenicity	Category 1A



Specific target organ toxicity (single exposure)	Category 2
Specific target organ toxicity (repeated exposure)	Category 1
Flammable solids	Category 2

Appearance No information available**Physical state** Solid**Odor** No information available**GHS Label elements, including precautionary statements****Danger****Hazard statements**

Harmful if inhaled

May cause cancer

May cause damage to organs

Causes damage to organs through prolonged or repeated exposure

Flammable solid

**Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Ground/bond container and receiving equipment

Use explosion-proof electrical/ ventilating/ lighting/ equipment

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

May be harmful if swallowed. Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Unknown acute toxicity

91.7 % of the mixture consists of ingredient(s) of unknown toxicity

83.7 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
 91.7 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
 83.7 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
 83.7 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
 83.7 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Supplier Trade Secret	-	0 - 10%	-	-
Supplier Trade Secret	-	0 - 10%	-	-
Supplier Trade Secret	-	0 - 10%	-	-

4. FIRST AID MEASURES

Description of first aid measures

General advice	IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Inhalation	Remove to fresh air. IF exposed or concerned: Get medical advice/attention. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. If symptoms persist, call a physician.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms Coughing and/ or wheezing. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO₂). Water spray. Alcohol resistant foam.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Hazardous Combustion Products Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge Yes.

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Avoid generation of dust. Do not breathe dust.

Other Information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Keep out of drains, sewers, ditches and waterways.

Methods for cleaning up Take precautionary measures against static discharges. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE



Precautions for safe handling**Advice on safe handling**

Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities**Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up. Keep out of the reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Limits**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH	
Supplier Trade Secret	TWA: 0.025 mg/m ³ respirable fraction	TWA: 0.1 mg/m ³ (vacated)	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust	
Supplier Trade Secret	-	(vacated) TWA: 0.1 mg/m ³ Phosphorus (yellow)		
Chemical name	Alberta	British Columbia	Ontario TWAEV	Quebec
Supplier Trade Secret	TWA: 0.025 mg/m ³	TWA: 0.025 mg/m ³	TWA: 0.10 mg/m ³	TWA: 0.1 mg/m ³
Supplier Trade Secret	TWA: 0.1 mg/m ³			TWA: 0.1 mg/m ³

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992). See section 15 for national exposure control parameters.

Appropriate engineering controls**Engineering controls**

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Tight sealing safety goggles.

Hand protection

Wear suitable gloves. Impervious gloves.



Skin and body protection	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Do not breathe dust. Wear suitable gloves and eye/face protection. Take off contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid
Appearance	No information available
Odor	No information available
Color	No information available
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH	No data available	None known	
Melting / freezing point	No data available	None known	
Boiling point / boiling range	No data available	None known	
Flash Point	No data available	None known	
Evaporation Rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limit in Air		None known	
Upper flammability limit	No data available		
Lower flammability limit	No data available		
Vapor pressure	No data available	None known	
Vapor density	No data available	None known	
Relative density	No data available	None known	
Water Solubility	No data available		
Solubility(ies)	No data available	None known	
Partition coefficient: n-octanol/water	NA		
Autoignition temperature	No data available	None known	
Decomposition temperature	No data available	None known	
Kinematic viscosity	No data available	None known	
Dynamic viscosity	No data available	None known	

Other Information

Explosive properties	No information available
Oxidizing properties	No information available
Softening Point	No information available
Molecular Weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available
Bulk Density	No information available
Particle Size	No information available
Particle Size Distribution	No information available

10. STABILITY AND REACTIVITY

Reactivity	No information available.
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Chemical stability	Stable under normal conditions.
Possibility of Hazardous Reactions	None under normal processing.
Hazardous Polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Heat, flames and sparks. Excessive heat.
Incompatible materials	None known based on information supplied.
Hazardous Decomposition Products	Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. Toxic by inhalation. (based on components).
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Coughing and/ or wheezing. Difficulty in breathing.
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Numerical measures of toxicity

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	3,810.10 mg/kg
ATEmix (inhalation-gas)	9,168.75 ppm
ATEmix (inhalation-dust/mist)	3.06 mg/L
ATEmix (inhalation-vapor)	6.11 mg/L

Unknown acute toxicity	91.7 % of the mixture consists of ingredient(s) of unknown toxicity
	83.7 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
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Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Supplier Trade Secret	= 1870 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.1 mg/L (Rat) 4 h
Supplier Trade Secret	= 3030 µg/kg (Rat) > 15000 mg/kg (Rat)	-	= 4.3 mg/L (Rat) 1 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Supplier Trade Secret	A2	Group 1	Known	X

Legend**ACGIH (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity	No information available.
STOT - single exposure	Based on the classification criteria of the Globally Harmonized System as adopted in the country or region with which this safety data sheet complies, this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE). May cause damage to organs.
STOT - repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Supplier Trade Secret	-	96h LC50: = 13500 mg/L (Pimephales promelas) 96h LC50: = 1750 mg/L (Oncorhynchus mykiss)	-	-
Supplier Trade Secret	-	96h LC50: 0.001 - 0.004 mg/L (Lepomis macrochirus) 96h LC50: 0.0017 - 0.0035 mg/L (Lepomis macrochirus) 96h LC50: 0.011 - 0.028	-	48h EC50: 0.025 - 0.037 mg/L (Daphnia magna) 48h EC50: = 0.03 mg/L (Daphnia magna)

		mg/L (Pimephales promelas) 96h LC50: 0.015 - 0.032 mg/L (Oncorhynchus mykiss) 96h LC50: > 100 mg/L (Brachydanio rerio)		
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Persistence and Degradability No information available.

Bioaccumulation There is no data for this product.

Mobility No information available.

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

US EPA Waste Number D001

California Waste Codes 141

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste
Supplier Trade Secret	Toxic Ignitable Reactive

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 III
 Description UN1944, MATCHES, SAFETY, 4.1, III

ICAO

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

IATA

UN-No. UN1944
 Proper Shipping Name MATCHES, SAFETY
 Hazard Class 4.1
 Packing Group III
 ERG Code 3L
 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-I
 Description UN1944, MATCHES, SAFETY, 4.1, III

RID

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
 ADR/RID-Labels 4.1

ADR

UN-No. UN1944
 Proper Shipping Name MATCHES, SAFETY
 Hazard Class 4.1
 Packing Group III
 Classification code F1
 Tunnel restriction code (E)
 Description UN1944, MATCHES, SAFETY, 4.1, III, (E)

ADN

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

Classification code	F1
Special Provisions	293
Description	UN1944, MATCHES, SAFETY, 4.1, III
Hazard Labels	4.1
Limited Quantity	5 KG

15. REGULATORY INFORMATION

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

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AICS	Contact supplier for inventory compliance status.

Legend

TSCA	- United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL	- Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS	- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS	- Japan Existing and New Chemical Substances
KECL	- Korean Existing and Evaluated Chemical Substances
PICCS	- Philippines Inventory of Chemicals and Chemical Substances
AICS	- Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Supplier Trade Secret -		0 - 10%	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances



Supplier Trade Secret	1 lb			X
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CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Supplier Trade Secret	1 lb	1 lb	RQ 1 lb final RQ RQ 0.454 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Supplier Trade Secret -	carcinogen, 10/1/1988 (airborne particles of respirable size)
Supplier Trade Secret -	carcinogen, 9/28/2007
Supplier Trade Secret -	carcinogen, 2/27/1987 Developmental Female Reproductive Male Reproductive

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Supplier Trade Secret	X	X	X		
Supplier Trade Secret	X	X	X		X
Supplier Trade Secret	X	X	X	X	X

16. OTHER INFORMATION

NFPA Health hazards 3 Flammability 2 Instability 0 Physical and Chemical Properties -
HMIS Health hazards 3 * Flammability 2 Physical hazards 0 Personal Protection X
Chronic Hazard Star Legend * = Chronic Health Hazard

Prepared By Product Stewardship
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 Latham, NY 12110
 1-800-572-6501

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Revision Date 14-Dec-2018

Revision Note No information available

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