

Safety Data Sheet

Issue Date: 20-Apr-2015

Revision Date: 22-May-2018

Version 1

1. IDENTIFICATION

Product Identifier

Product Name 15 MM Illuminating Signal Cartridge-Red Signal Flare

Other means of identification

SDS # VER-004-CA
Product Code 014
UPC Code 8 54096 00010 5
Synonyms None
UN/ID No UN0312

Recommended use of the chemical and restrictions on use

Recommended Use Variety of emergency and signaling uses
Uses Advised Against No information available

Details of the supplier of the safety data sheet

Initial Supplier Identifier

ABC Export Import Ltd
25889-38 Th. Ave.
Aldergrove, British Columbia V4W 2R4,
Canada

Emergency Telephone Number

Initial supplier phone number Please enter Initial Suppliers Phone Number here
Emergency Telephone (24 hr) CANUTEC- 1-888-226-8832

2. HAZARDS IDENTIFICATION

Emergency Overview Hazardous components- Contains pyrotechnical composition, a mixture of an oxidizer and a fuel that will rapidly burn when ignited

Appearance All pyrotechnic

Physical state Solid

Odour Odourless

composition is contained in primered 18
mm plastic holes, placed in cardboard
casing

Classification

Acute toxicity - Oral	Category 4
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Label Elements

Signal word

Warning

Hazard statements

Harmful if swallowed



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product

Precautionary Statements - Response

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical Name	CAS No	Weight-%	Hazardous Material Information Review Act registry number	Date HMIRA filed and date exemption granted (if
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PVC Resin	9002-86-2	11	(HMIRA registry #) -	applicable) -
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4. FIRST AID MEASURES

First Aid Measures

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
Skin contact	Wash skin with soap and water.
Inhalation	Remove to fresh air.
Ingestion	Call a POISON CENTRE/doctor/physician if you feel unwell. Rinse mouth.

Most important symptoms and effects

Symptoms Harmful if swallowed.

Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable Extinguishing Media	Flood with water, if small number of spilled pieces is involved. Do not use suffocation methods, composition provides its own oxygen.
Unsuitable extinguishing media	Not determined.
Specific hazards arising from the chemical	Shells initiate quickly and contain their own oxygen. Clear the surrounding area and get away. Avoid fire extinguishing, if at least one shipping carton is involved. Each item projects a flaming ball. Contact with strong acids or bases may cause fire or explosion.
Hazardous Combustion Products	Smoke, oxides of barium, nitrogen, sulfur, aluminum, magnesium, strontium, hydrogen monoxide.
Explosion Data	
Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.
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 Ensure adequate ventilation.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up No smoking, open flames or sparking in vicinity of broken or spilled items. Sweep up carefully spilled items into cardboard container. Do not use vacuum cleaner.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Avoid sources of high temperature, smoking or open flames. Avoid contact with strong acids and alkali bases. Keep shipping cartons cool and dry. Store in dry area, below 71°C (160°F).

Incompatible materials Long exposure to water may cause deterioration. Devices should not get in any contact with strong acids and alkali bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical Name	Canada - Alberta - Occupational Exposure Limits - Ceilings	Canada - British Columbia - Occupational Exposure Limits - Ceilings	Canada - Ontario - Occupational Exposure Limits - Ceilings	Quebec
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PVC Resin 9002-86-2		TWA: 1 mg/m ³	TWA: 1 mg/m ³	
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Appropriate engineering controls

Engineering controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Skin and body protection No special protective equipment required.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Solid

Appearance All pyrotechnic composition is contained in primered 18 mm plastic holes, placed in cardboard casing

Colour No information available

Odour Odourless

Odour Threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting point / freezing point	Not determined	
Boiling Point / Boiling Range	Not determined	
Flash Point	No data available	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	

Flammability Limit in Air

Upper Flammability Limit Not determined

Lower Flammability Limit Not determined

Vapour Pressure Not determined

Vapour Density Not determined

Relative Density Not determined

Water Solubility Not determined

Solubility in other solvents Not determined

Partition Coefficient Not determined

Autoignition temperature 180 °C / 350 °F

Decomposition Temperature Not determined

Kinematic Viscosity Not determined

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
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Dynamic Viscosity	Not determined	
Explosive properties	No information available.	
Oxidising properties	No information available.	

Other Information

Softening Point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk Density	No information available

10. STABILITY AND REACTIVITY

Reactivity No information available.

Chemical Stability Stable under normal conditions.

Possibility of Hazardous Reactions	None under normal processing.
Hazardous Polymerisation	Will not occur.
Conditions to Avoid	Heat and open flame, other sources of ignition.
Incompatible Materials	Long exposure to water may cause deterioration. Devices should not get in any contact with strong acids and alkali bases.
Hazardous Decomposition Products	Smoke, oxides of nitrogen, sulfur, magnesium, hydrogen monoxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye contact	Avoid contact with eyes.
Skin contact	Avoid contact with skin.
Inhalation	Do not inhale.
Ingestion	Harmful if swallowed.

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Numerical measures of toxicity

Acute Toxicity

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

ATEmix (oral) >300

Unknown acute toxicity No information available

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Strontium nitrate 10042-76-9	= 2750 mg/kg (Rat) = 1892 mg/kg (Rat)	-	-
Magnesium	= 230 mg/kg (Rat)	-	-

7439-95-4			
Potassium Nitrate 7757-79-1	= 3015 mg/kg (Rat)	-	-

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

Carcinogenicity Nitrate or nitrite (ingested) under conditions that result in endogenous nitrosation are considered IARC group 2A carcinogens. Group 3 IARC components are "not classifiable as human carcinogens".

Chemical Name	ACGIH	IARC	NTP	OSHA
Strontium nitrate 10042-76-9	-	Group 2A	-	X
PVC Resin 9002-86-2	-	Group 3	-	-
Potassium Nitrate 7757-79-1	-	Group 2A	-	X

Legend

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

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

X - Present

12. ECOLOGICAL INFORMATION

Ecotoxicity An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Persistence/Degradability No information available.

Bioaccumulation No information available.

Other Adverse Effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances

DOT

UN/ID No UN0312
 Proper Shipping Name Cartridges, signal
 Hazard Class 1.4G
 Packing Group II

TDG

UN/ID No UN0312
 Proper Shipping Name Cartridges, signal
 Hazard Class 1.4G
 Packing Group II

IATA

UN/ID No UN0312
 Proper Shipping Name Cartridges, signal
 Hazard Class 1.4G
 Packing Group II

IMDG

UN/ID No UN0312
 Proper Shipping Name Cartridges, signal
 Hazard Class 1.4G
 Packing Group II

15. REGULATORY INFORMATION

REGULATORY INFORMATION

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Export Notification requirements Not applicable

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/E	ENCS	IECSC	KECL	PICCS	AICS
		L	LINCS					
PVC Resin	X	X	X	X	X	X	X	X

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
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA</u>	Health Hazards Not determined	Flammability 1	Instability Not determined	Special Hazards Not determined
<u>HMIS</u>	Health Hazards Not determined	Flammability 1	Physical hazards Not determined	Personal Protection Not determined

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average)
STEL STEL (Short Term Exposure Limit)
Ceiling Maximum limit value
* Skin designation
Issue Date: 20-Apr-2015

Revision Date: 22-May-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