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

<u>Emergency Overview</u> 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

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

Classification

Acute toxicity - Oral Category 4

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

<u>Substance</u>

Not applicable.

<u>Mixture</u>

| Chemical Name | CAS No | Weight-% | Hazardous Material | Date HMIRA filed |
|---------------|--------|----------|---------------------|--------------------|
| | | | Information Review | and date exemption |
| | | | Act registry number | granted (if |

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| | | | (HMIRA registry #) | applicable) |
|-----------|-----------|----|--------------------|-------------|
| PVC Resin | 9002-86-2 | 11 | - | - |

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

None.

Impact

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.

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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.

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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 - | Canada - Ontario - Occupational Exposure Limits - Ceilings | Quebec |
|---------------|---|---|---|--------|
| | | Ceilings | | |

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| PVC Resin | TWA: 1 mg/m ³ | TWA: 1 mg/m ³ | |
|---------------|---|---|--|
| 1 40 1 (00111 | 1 | 1 | |
| 9002-86-2 | | | |

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.

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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

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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

Property Values Remarks • Method

Dynamic Viscosity Not determined

Explosive properties No information available. Oxidising properties No information available.

Other Information

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

10. STABILITY AND REACTIVITY

Reactivity No information available.

Chemical Stability Stable under normal conditions.

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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

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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) >30

Unknown acute toxicity No information available

Component Information

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

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Ned Signal Flate

| 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

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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 | - | Х |

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

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exemptions and special circumstances

<u>DOT</u>

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

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 Not applicable

(ODS)

Persistent Organic Pollutants Not applicable

Export Notification requirements Not applicable

International Inventories

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

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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

NFPA Health Hazards Not Flammability 1 Instability Not Special Hazards Not

determined determined determined

Health Hazards Not Flammability 1 Physical hazards Not Personal Protection

determined determined 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

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Revision Note: No information available.

Disclaimer

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End of Safety Data Sheet

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