

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (as Used on Label and List)

Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

FIT-5 Aerosol Generator**Section I**

Manufacturer's name:

ARA Safety Inc.

Emergency Telephone Number:

1-613-996-6666

Address (Number, Street, City, State and ZIP Code)

1295 Johnston Street

Telephone Number for Information:

1-888-955-8883

Vancouver, BC, Canada V6H 3R9

Date Prepared: September 09, 2008

Signature of Preparer (optional)

Section II—Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity, Common Name(s))

	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Disc				
Potassium Nitrate (KNO ₃)	7757-79-1			83-87
Dicyanodiamide (Cyanoguanidine)	461-58-5			13-17
Calcium Sulfate Dihydrate	10101-41-4			1-2

Section III—Physical/Chemical Characteristics**EMERGENCY OVERVIEW**

Caution: Avoid contact and Inhalation. Target organ(s): Blood, Central Nervous System

HMIS RATING

HEALTH: 1*

FLAMMABILITY: 0

REACTIVITY: 3

SPECIAL HAZARD(S): Oxidizer

NFPA RATING

HEALTH: 1*

FLAMMABILITY: 0

REACTIVITY: 3

SPECIAL HAZARD(S): Oxidizer

* Additional chronic hazards present

Section IV—Health Hazard Data

Route(s) of Entry

Inhalation? XX

Skin? XX

Ingestion? XX

Health Hazards (Acute and Chronic)

Target Organs – Blood and Central Nervous System

Carcinogenicity

NTP? No

IARC Monographs? No

OSHA Regulated? Yes

Signs and Symptoms of Exposure:

Absorption into the body leads to the formation of methemoglobin, which in sufficient concentrations may cause cyanosis. On set may be delayed 2 to 4 hours or longer.

Medical Conditions:

Generally Aggravated by Exposure

Emergency and First Aid Procedures:

Inhalation – Remove to fresh air, if breathing becomes difficult, consult physician.

Dermal Exposure:

In case of skin contact, flush with copious amounts of water, for at least 15 minutes. Remove contaminated clothing and shoes – consult physician. Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids with fingers – Consult physician.

Section V— Fire and Explosion Hazard Data			
Flash Point (Method Used): N/A	Flammable Limits	LEL	UEL
Extinguishing Media: Suitable – Water Spray, Carbon Dioxide, Dry Chemical Powder or Appropriate Foam			
Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.			
Unusual Fire and Explosion Hazards: Vigorously Supports Combustion, Oxidizing			
Section VI—Accidental Release Measures			
Steps to Be Taken in Case Material Is Released or Spilled: Evacuate area. Sweep up material, place in appropriate receptacle, label and store for disposal.			
Procedure(s) for Personal Precaution(s): Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves			
Other Precautions: Material is Hygroscopic			
Section VII—Precautions for Safe Handling and Storage			
Precautions to Be Taken in Handling and Storing: Do not breath vapor, do not get in eyes, on skin or clothing, avoid prolonged or repeated exposure.			
Store in suitable dry environment. Keep tightly closed. Keep away from combustible materials, heat, sparks & open flame			
Other Precautions: Material is Hygroscopic			
Section VIII—Control Measures			
Respiratory Protection (Specify Type): Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment indicates air-purifying respirators are appropriate, use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.			
Ventilation	Local Exhaust	Special	
	Mechanical (General)	Other	
Protective Gloves: Compatible chemical resistant gloves	Eye Protection: Chemical safety goggle		
Other Protective Clothing or Equipment: Protective coveralls			
Work/Hygienic Practices: Wash thoroughly after handling. Remove and wash contaminated clothing promptly			
Section IX —Physical/Chemical Characteristics			
Boiling Point	N/A	Specific Gravity (H2O = 1)	2.1 g/cm3
Vapor Pressure (mm Hg)	N/A	Melting Point/Melting Range	400 OC
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility in Water	N/A		
Appearance and Odor:	Physical State: Solid	Color: Red/Burnt Orange with White Crust	
Section X—Reactivity Data			
Stability	Unstable:		Conditions to Avoid: Moisture, High Temperatures
	Stable: XX		
Incompatibility (Materials to Avoid): Strong Reducing Agents, Finely Powdered Metals, Strong Acids and Bases, Organic Materials			
Hazardous Decomposition or Byproducts: Nitrogen Oxides, Potassium Oxides, Carbonates, Carbon Dioxide, Carbon Monoxide, Hydrogen Cyanide, Other Combustion Products To Be Determined			
Hazardous Polymerization	May Occur:		Conditions to Avoid:
	Will Not Occur: XX		
Section XI—Toxicological Data			
ROUTE OF EXPOSURE			
Skin Contact:	May cause skin irritation.		
Skin Absorption:	May be harmful if absorbed through the skin.		
Eye Contact:	May cause eye irritation.		
Inhalation:	Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.		
Ingestion:	May be harmful if swallowed.		

TOXICITY DATA

Potassium Nitrate

Oral Rat LD50 - 3750 mg/kg

Oral Rabbit LD50 - 1901 mg/kg

Dicyanodiamide

Skin, Rabbit LD50 - > 2,000 mg/kg

Inhalation Rat LDLO - > 0.259 mg/kg

Oral Mouse LD50 - 10,000 mg/kg

Intraperitoneal Mouse LD50 - 4 gm/kg

Intraperitoneal Rabbit LD50 - 3 gm/kg

Calcium Sulfate Dihydrate

To the best of our knowledge, the chemical, physical and toxicological properties of calcium sulfate dehydrate have not been thoroughly investigated

Section XII—Ecological Data

NO DATA AVAILABLE

Section XIII —Disposal Considerations

RCRA – D001

Waste Disposal Method: Material is oxidizing solid. Dispose in accordance with all applicable federal, state and local regulations

Section XIV– TRANSPORT INFORMATION

USDOT Proper Shipping Information**Proper Shipping Name: Oxidizing solid, N.O.S.****UN#: UN1479****Hazard Class: 5.1****Packing Group: PG II****Hazard Label: Oxidizer****Sub Class:**

Section XV —Regulatory Information

EU Additional Classification:

Undetermined

U.S. Classification and Label Text:

Indication of Danger: Oxidizing

Risk Statements: Contact with combustible material may cause fire

United States Regulatory Information

SARA LISTED: No

TSCA INVENTORY ITEM: Yes; Potassium Nitrate

Canada Regulatory Information:

WHMIS Classification: Incomplete

Section XVI —Other Information

Warranty:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. ARA Safety shall not be held liable for any damage resulting from handling or from contact with the above product.
