

Material Safety Data Sheet

FIRST DEFENSE® X2

May be used to comply with OSHA's Hazard Communication Standard, 29CFR 1910. 1200. Standard must be consulted for specific requirements.

QUICK IDENTIFIER
Common Name: (used on label and list)
5249 - MK4 X2 Stream

SECTION 1 -

Manufacturer's

Name *Defense Technology / Federal Laboratories*

Address

Postal Box 248

Emergency Telephone No.

(800) 424-9300

City, State, and ZIP

Casper, Wyoming 82602

Other Information Calls

(877) 248-3835

Signature of Person Responsible for Preparation (Optional)

Date Prepared

11/01/04

SECTION 2 - HAZARDOUS INGREDIENTS / IDENTITY

Hazardous Component(s) (chemical & common name(s))	OSHA PEL	ACGIH TLV	Other Exposure Limits	% (optional)	CAS NO.
<i>Oleoresin Capsicum (Capsaicinoids)</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>.40%</i>	<i>404-86-4</i>
<i>Propylene Glycol USP</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>		<i>57-55-6</i>
<i>Specially Denatured Alcohol (SDA) 40B</i>	<i>1,000 ppm</i>	<i>1,000 ppm</i>	<i>N/A</i>		<i>64-17-5</i>
<i>Deionized H2O</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>		<i>N/A</i>

**Nitrogen is the exclusive propellant.*

There are no HCFC's or CFC's

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point	<i>>220°</i>	Specific Gravity (H2O = 1)	<i>0.955</i>	Vapor Pressure (mm Hg)	<i>N/A</i>
	Vapor Density (Air = 1)	<i>N/A</i>			
Solubility in Water	<i>Soluble</i>	Reactivity in Water	<i>None</i>		
Appearance and Odor	<i>Creamy / Pungent</i>	Melting Point	<i>N/A</i>		

SECTION 4 - FIRE & EXPLOSION DATA

Flash Point	<i>>220°</i>	Method Used	<i>SW846-1010</i>	Flammable Limits in Air % by Volume	LEL Lower	<i>N/A</i>	UEL Upper	<i>N/A</i>
Auto-Ignition Temperature	<i>>220° F.</i>	Extinguisher Media	<i>Water, foam, dry chemical CO2.</i>					
Special Fire Fighting Procedures	<i>Wear respirator or self-contained breathing apparatus to avoid irritation.</i>							

Unusual Fire and Explosion Hazards *None.*

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SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)

Stability Unstable Conditions
 Stable to Avoid

Incompatibility
(Materials to Avoid) *N/A*

Hazardous
Decomposition Products *N/A*

Hazardous May Occur Conditions
Polymerization Will Not Occur to Avoid

SECTION 6 - HEALTH HAZARDS

1. Acute

2. Chronic

See Signs and Symptoms

See Signs and Symptoms

Signs and Symptoms of Exposure *Ingredients may cause irritation through all routes of entry. Repeated contact may cause dermatitis.*

Ingestion may cause nausea, vomiting, and/or diarrhea.

Medical Conditions Generally Aggravated by Exposure *May cause more severe, temporary, effects on those persons who are asthmatics*

or suffer from emphysema

Chemical Listed as Carcinogen or Potential Carcinogen National Toxicology Program Yes No I.A.R.C. Monographs Yes No OSHA Yes No

Emergency and First Aid Procedures *Provide fresh air. Irrigate with copious amounts of cool water. Obtain medical advice if symptoms persist.*

ROUTES OF ENTRY

- 1. Inhalation *Provide fresh air.*
- 2. Eyes *Irrigate with cool water at least 15 minutes, or until relieved.*
- 3. Skin *Flush with cool water. Wash with mild soap and water.*
- 4. Ingestion *Rinse mouth with water. Ingest milk, or water. Obtain medical advice immediately.*

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL / LEAK PROCEDURES

Precautions to be Taken in Handling and Storage *Store in a cool, dry area. Avoid direct light and heat. Do not expose to temperatures over 120° F.*

Other Precautions *N/A*

Steps to be Taken in Case Material is Released or Spilled *Wipe up small spills with absorbent. With large spills, use respiratory equipment*

to avoid irritation, and collect with an absorbent.

Waste Disposal Methods (Consult Federal, State, and Local Regulations) *Evacuate contents in a safe area, and dispose of container.*

SECTION 8 - SPECIAL PROTECTION INFORMATION / CONTROL MEASURES

Respiratory Protection (Specify Type) *Not required under normal conditions of use.*

Ventilation Yes Local Exhaust Yes Mechanical (General) Special Other

Protective Gloves Eye Protection *To be utilized in a manufacturing environment in*

Other Protective Clothing or Equipment *Not required* *and around machinery. Minimal exposure without protective*

Work/Hygienic Practices *Normal* *eyewear in an officer training environment is acceptable.*

IMPORTANT

Do not leave any blank spaces. If required information is unavailable, unknown, or does not apply, so indicate.