

MATERIAL SAFETY DATA SHEET

PHERO TECH INC. 7572 PROGRESS WAY DELTA, BC CANADA V4G 1E9	EMERGENCY NUMBERS Canutec: (613) 996-6666 Phero Tech: (604) 940-9944
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SECTION 1 - MATERIAL IDENTIFICATION

PRODUCT NAME: S-(-)-Verbenone SYNONYMS: 2-Pinen-4-one 4,6,6,-Trimethylbicyclo[3.1.1]Hept-3-en-2 one CAS #: 1196-01-6 UN #: N/A RTECS #: TK5075000	FORMULA: C ₁₀ H ₁₄ O FORMULA WT: 150.24
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SECTION 2 - COMPONENTS

Ingredients	% W/W	CAS or UN#	TLV	HAZARD	LD ₅₀ /LC ₅₀
Verbenone	97	1196-01-6	N/A	Irritant	250 mg/kg Mouse Intraperitoneal
Cyasorb UV-5411	1	3147-75-9	N/A	Irritant	>10 gm/kg Rat Oral

Only selected RTECS data presented here. See actual entry for complete details

SECTION 3 - PHYSICAL DATA FOR MATERIAL

APPEARANCE: Colorless or light yellow liquid ODOR DESCRIPTION: Piney, Camphoraceous VAPOR PRESSURE (20°C, mm Hg): N/A VAPOR DENSITY (AIR = 1): >1 SPECIFIC GRAVITY @ 25°C (WATER = 1): 0.974	SOLUBILITY IN WATER: Insoluble BOILING POINT: 227°C % VOLATILES: 99 FREEZING POINT: 6.5°C
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SECTION 4 - FIRE & EXPLOSION HAZARD OF MATERIAL

FLASH POINT (CC): 85°C EXTINGUISHING MEDIA: CO ₂ , dry chemical powder, alcohol or polymer foam. UNUSUAL FIRE & EXPLOSION HAZARD: None known HAZARDOUS COMBUSTION PRODUCTS: CO, CO ₂	FLAMMABLE LIMITS LOWER EXPLOSION LIMIT: N/A UPPER EXPLOSION LIMIT: N/A AUTO-IGNITION TEMP: N/A SENSITIVE TO MECHANICAL IMPACT: N/A SENSITIVE TO STATIC DISCHARGE: N/A
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SECTION 5 - REACTIVITY DATA

STABILITY:	Yes.
CONDITIONS TO AVOID:	Presents no special hazard
MATERIALS TO AVOID:	Strong oxidizing agents.
HAZARDOUS POLYMERIZATION:	No

SECTION 6 - PREVENTIVE MEASURES

RESPIRATORY PROTECTION:	If vapour concentration is high, due to heat, use an approved organic vapor respirator.
VENTILATION:	General mechanical ventilation
PROTECTIVE GLOVES:	Hydrocarbon resistant.
EYE PROTECTION:	Splash-proof safety glasses or goggles
OTHER PROTECTIVE EQUIPMENT:	Safety shower, eye wash
SPILL OR LEAK PROCEDURES:	Contain spilled material. Remove sources of ignition. Wear self-contained breathing apparatus, rubber boots and gloves. Cover with carbon absorbent, place in closed container.
WASTE DISPOSAL METHOD:	Incineration or sanitary landfill in accordance with local, provincial/state and federal regulations.
HANDLING PROCEDURES:	DO NOT BREATHE VAPOURS, get in eyes or on skin. Wash thoroughly after handling.
STORAGE REQUIREMENTS:	Store in tightly closed container in a cool, dry place. Keep from heat, sparks or flame.

SECTION 7 - HEALTH HAZARD & FIRST AID MEASURES

Carcinogen	<input type="checkbox"/>	Mutagen	<input type="checkbox"/>	Teratogen	<input type="checkbox"/>
Reproductive Toxin	<input type="checkbox"/>	Synergist	<input type="checkbox"/>	Not Fully Investigated	X

SKIN:	Flush contaminated area with water for at least 20 minutes. If irritation occurs, seek medical attention.
EYE:	Immediately flush eyes with water for at least 20 minutes, holding the eyelids open. Seek medical attention immediately.
INHALATION:	Remove to fresh air. Oxygen may be given if necessary. Seek medical attention immediately.
INGESTION:	If conscious, have victim drink water or milk to dilute material in stomach. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Seek medical attention immediately.
PRIMARY ROUTE OF ENTRY:	Ingestion , inhalation or skin absorption
EFFECT OF ACUTE EXPOSURE:	Full strength liquid is irritating to eyes, mucous membrane and upper respiratory tract
EFFECT OF CHRONIC EXPOSURE:	N/A

PREPARATION DATE:	February 25, 2008
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ADDITIONAL INFORMATION:	Firefighters should use self-contained breathing apparatus.
SOURCES USED:	RTECS

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