

COLD FIRE® Fire Suppressing Agent

MSDS

Cold Fire is an environmentally friendly fire suppressing agent, specially designed to extinguish Class A, B, and D fires. Cold Fire has a rapid cooling effect, which provides rapid extinguishment, prevention of re-ignition, and the encapsulation of hydrocarbons. The product is safe to store, handle and use, leaves virtually no residue, and is environmentally friendly, non-toxic, non-corrosive, and biodegradable.

Capabilities

	Quickly snuffs out fires. "Cools" burning fuel on contact. Prevents reignition		
Fire Suppressing Power:	by encapsulating fuel source. Retards smoke generation. Cools rapidly.		
Applications:	Class A, B and D fires of all types.		
Cleanup:	None needed. Foam layer dissipates without leaving residue. Product biodegrades rapidly. Oil molecules do not form a tight emulsion with the suppressing solution.		
Dispersant Capability:	Low. Treated oils are not dispersed in water.		

Characteristics

	pH of concentrate is 6.15. Neutral when diluted.
pH:	
Flash Point:	Negligible
Boiling Point:	212°F
Odor:	Mild fresh scent. Does not contain d-limoneses. Clear color.
Water Solubility:	Complete
Shelf Life:	Indefinite when stored in closed containers between 32°F and 120°F.
Dilution Strength:	Use at strengths of 1% to 10% in any type of water.
Residue:	Agent layer dissipates rapidly. Product leaves no residue.

Environmental and Safety Considerations

Biodegradability:	100% in 21 days under ideal conditions.
Hazardous	No components are listed in the NIOSH Recommendations for Occupational
Components:	Health Standards, 1988, or are defined as hazardous by SARA, CERLA, or RCRA. No OSHA PEL's are established for other ingredients.
Handling:	Suppressor is neutral. It will remove oil from the skin and may irritate the eyes if sprayed directly into them. When handling bulk concentrate, eye protection, gloves, and impervious clothing should be worn when there is danger of splashing, prolonged exposure to vapor, or prolonged skin contact, as with all chemicals.
Disposal:	Suppressant itself may be disposed through municipal systems.



SECTION I - IDENTIFICATION

	FIREFREEZE Worldwide, Incorporated
Manufacturer:	
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Phone:	(973) 627-0722
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Date Prepared:	JANUARY 8, 2007
Formulation #:	JG302
Trade Name:	Cold Fire 302
Product:	Class A:B:D fire suppressing agent

SECTION II - INGREDIENTS AND HAZARD CLASSIFICATION

Components are classified trade secret. No components are believed to be hazardous or listed in the NIOSH Recommendations for Occupational Safety and Health Standards, 1988, or are listed as hazardous by SARA, CERCLA, or RCRA. No OSHA PEL's are established for any of the other ingredients.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

	212°F.	Vapor Pressure (mm	Same as water.
Boiling Point:		Hg):	
Solubility in water:	100%	Specific Gravity:	1.02 @ 60°F.
pH: (concentrate)	6.15 (Neutral	Appearance and	Clear liquid, fresh smell.
	when diluted)	Odor:	

SECTION IV - FIRE AND EXPLOSION DATA

Flash Point:	Not applicable	Flammable Limits:	Non-flammable.
LEL:	Not applicable.	UEL:	Not applicable.
Extinguishing Media:	Not applicable.	Special Fire Fighting Procedures:	None.
Unusual Fire and Explosion Hazards:	None.		

SECTION V - REACTIVITY DATA

Stability:	Stable.	Incompatibility:	None.
Hazardous Decomposition	Carbon monoxide	Hazardous Polymerization:	Will not occur.
	and carbon dioxide.		



SECTION VI - HEALTH HAZARD DATA

Signs and Sympto	ms of Exposure
Skin:	Negligible hazard. Not a primary skin irritant. Liquid is neutral with pH 7.5. Dermal irritation testing for 72 hours on albino rabbits showed no erythema and no edema.
Eyes:	Not considered to be a primary ocular irritant.
Inhalation:	Negligible.
Ingestion:	Not considered to be orally toxic.
First Aid	
Eyes:	Immediately flush eyes with water.
Skin:	Rinse with water.
Inhalation:	Negligible. Remove to fresh air.
Ingestion:	Drink water.

Carcinogenicity					
NTP?	No	IARC?	No	OSHA Regulated?	No

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Spill or Leak Procedures	Rinse affected area with water.
Waste Disposal Method	Dispose as non-hazardous waste in accordance with local regulations.
Storage and Handling Precautions	Store in temperatures from 32°F to 120°F in closed containers to prevent evaporation and deterioration. Freezing will not damage material as long as container remains intact.
Other Precautions	Although components have low hazard levels, the product will remove oils from the skin like the common soap. Avoid prolonged skin contact.

SECTION VIII - CONTROL MEASURES

Respiratory Protection	Not required.
<u>Ventilation</u>	Under ordinary conditions of use for its intended purpose, no special ventilation is required.
Protective Gloves	Wear if there is prolonged skin contact.
Eye Protection	Wear if needed to prevent reasonable probability of eye contact.

SECTION IX - HAZARD CLASSIFICATION

	Non-hazardous.	UN Number:	Not applicable.
IMO Hazard Class and			
Number: US DOT Hazard Class:	Not regulated by	US DOT Identification	Not applicable.
	DOT	Number:	itet application



SECTION X - REGULATORY INFORMATION

	Significantly New Alternative Policay Program Listed. Cold Fire is listed by the
<u>EPA SNAP:</u>	EPA as a substitute for Halon 1211 (Class K Fires)
HMIS Rating:	Health: 0 Flammability: 0 Reactivity: 0

SECTION XI- ENVIRONMENTAL DATA

Biodegradability:	Product is 100% biodegradable in an active environment within 21 days.
Toxicity:	In accordance with U.S. EPA Office of Pollution Prevention and Toxics criteria for ranking the acute toxicity of chemicals in the aquatic environment, Cold Fire 302 is considered to be of low concern.

- -96 hour acute toxicity versus freshwater alga (Selenastrum capricornutum) IAW 40 CFR 797.1050 showed ColdFire 302 was algicidal at concentrations above 750 ppm.
- -96 hour acute toxicity versus juvenile rainbow trout (Oncorhynchus mykiss) IAW 49 CFR 797.1400 showed an LC50 of 105 ppm.

^{**}The information presented in this MSDS is believed to be factual. However, nothing contained in this information is to be taken as a warranty of any kind by FIREFREEZE Worldwide, Inc. The user should review any recommendations, in the specific context of the intended use, to determine whether they are appropriate.