
MATERIAL SAFETY DATA SHEET



SECTION I - IDENTIFICATION

Manufacturer BioGenesis Enterprises, Inc.
Address 610 W. Rawson Ave. Oak Creek, WI 53154
Trade Name FlameOut™ Fire Suppressor
Product Class A/B/D Fire Suppressing Agent

Emergency Phone (703) 913-9700 **Date Prepared** December 15, 1995 **Reviewed** November 2009

Information Phone (703) 913-9700 **MSDS Control** fFLAME

SECTION II - INGREDIENTS AND HAZARD CLASSIFICATION

<u>Ingredients (CAS)</u>	<u>Percent</u>	<u>OSHA PEL/TLV</u>
--------------------------	----------------	---------------------

Health and environmental testing shows very low hazard levels. No components of this product are believed to be hazardous, are listed in the NIOSH Recommendations for Occupational Safety and Health Standards, 1988, or are listed as hazardous by SARA, CERCLA, or RCRA. No OSHA PELs are established for any of the ingredients.

SECTION III - HAZARD INFORMATION

Treat as inert / Non-hazardous. No toxic / ill effects under normal operating conditions.
Repeated or prolonged exposure is not known to aggravate any medical conditions.

Skin Negligible hazard. Not a primary skin irritant. Liquid is neutral with pH 8. Dermal irritation testing for 72 hours on albino rabbits showed no erythema and no edema.

Eyes Hazard evaluated very low. Eye testing on albino rabbits in a 7 day test showed low levels of corneal irritation after 48 hours with full recovery by day 7, very low levels of iris irritation with complete recovery in 72 hours, moderate conjunctivae irritation after 24 hours with complete recovery by day 7, low to moderate lid swelling with complete recovery by day 7, and extremely low discharge with complete recovery in 72 hours.

Inhalation Hazard evaluated very low.

Ingestion Hazard is extremely low. Material is considered non-toxic. Nausea or diarrhea could occur in extreme cases. Screening tests on rats did not induce any mortality following oral administration at 5,000 mg/l. Oral LD₅₀ value is considered to be greater than 5,000 mg/l.

SECTION IV - FIRST AID MEASURES

Eyes Immediately flush eyes with large amounts of water for at least 15 minutes. Seek medical aid if irritation persists.

Skin Flush affected area and wash with mild soap and water.

Inhalation Remove to fresh air; give CPR if unconscious.

Ingestion Monitor. If diarrhea or nausea occurs, consult a physician.

BioGenesis Enterprises, Inc.

SECTION V - FIRE-FIGHTING MEASURES

<u>Flash Point</u>	Not applicable.	<u>Flammable Limits</u>	Not applicable.
<u>LEL</u>	Not applicable.	<u>UEL</u>	Not applicable.
<u>Extinguishing Media</u>	Not applicable.		
<u>Special Fire Fighting Procedures</u>	None.		
<u>Unusual Fire and Explosion Hazards</u>	None.		

SECTION VI- ACCIDENTAL RELEASE MEASURES

Take care floor surface will be slippery at site of spillage.

Wear standard material's safety attire, including goggles, boots, and gloves. Absorb and dispose of spillage. Material is safe to enter drains. Wash spill site with water once pickup is complete.

SECTION VII- PRECAUTIONS FOR SAFE HANDLING AND USE

Spill or Leak Procedures

Collect with absorbent material or pick up mechanically. Rinse affected area with water.

Waste Disposal Method

Dispose as non-hazardous waste in accordance with local regulations.

Storage and Handling Precautions

Store at ambient temperature in closed container to prevent evaporation. May be stored at temperatures to -5°C without freezing. If frozen by lower temperatures, allow to thaw at room temperature; product will not be damaged.

Other Precautions

Although components have very low hazard levels, the product will remove oils from the skin similar to common soap.

SECTION VIII- EXPOSURE CONTROLS - PERSONAL PROTECTION

Exposure Limits

OSHA PEL	Not established.	ACGIH TEL	Not established.
-----------------	------------------	------------------	------------------

Routes of Entry

Inhalation	Yes	Skin	Yes	Ingestion	Yes
-------------------	-----	-------------	-----	------------------	-----

Respiratory Protection

Not required.

Ventilation

Under ordinary conditions of use for its intended purpose, no special ventilation is required.

Protective Gloves

Wear if there is prolonged contact with skin. Gloves not required for incidental contact.

Eye Protection

Wear if needed to prevent reasonable probability of eye contact.

Work/Hygenic Practices

Observe standard general work practices regarding ingestion, eye contact, and inhalation. Wash after using if there is reasonable probability of contact. Do not wear for prolonged periods non-impervious clothing that becomes wet.

SECTION IX- PHYSICAL/CHEMICAL CHARACTERISTICS

<u>Boiling Point (°F)</u>	212°F	<u>Vapor Pressure (mm Hg)</u>	Same as water.	
<u>Solubility In Water</u>	100%	<u>Specific Gravity</u>	1.09 @ 60°F	<u>pH</u> 7
<u>Appearance and Odor</u>	Straw colored liquid, mild lemon smell. (Note: Contains no d-limonenes.)			

SECTION X- REACTIVITY DATA

<u>Stability</u>	Stable.	<u>Incompatibility</u>	None.	
<u>Hazardous Decomposition Products</u>	Carbon monoxide and carbon dioxide.			
<u>Hazardous Polymerization</u>	Will not occur.			

SECTION XI - TOXICOLOGICAL INFORMATION

Signs and Symptoms of Exposure

<u>Skin</u>	Negligible hazard. Not a primary skin irritant. Liquid is neutral with pH 8. Dermal irritation testing for 72 hours on albino rabbits showed no erythema and no edema.
<u>Eyes</u>	Hazard evaluated very low. Eye testing on albino rabbits in a 7 day test showed low levels of corneal irritation after 48 hours with full recovery by day 7, very low levels of iris irritation with complete recovery in 72 hours, moderate conjunctivae irritation after 24 hours with complete recovery by day 7, low to moderate lid swelling with complete recovery by day 7, and extremely low discharge with complete recovery in 72 hours.
<u>Inhalation</u>	Hazard evaluated very low.
<u>Ingestion</u>	Hazard is extremely low. Material is considered non-toxic. Nausea or diarrhea could occur in extreme cases. Screening tests on rats did not induce any mortality following oral administration at 5,000 mg/l. Oral LD ₅₀ value is considered to be greater than 5,000 mg/l.

Carcinogenicity

<u>NTP?</u>	Not listed	<u>IARC?</u>	Not listed	<u>OSHA Regulated?</u>	Not listed.
--------------------	------------	---------------------	------------	-------------------------------	-------------

SECTION XII- ECOLOGICAL INFORMATION

Aquatic Toxicity Testing

In accordance with U.S. EPA Office of Pollution Prevention and Toxics criteria for ranking the acute toxicity of chemicals in the aquatic environment, FlameOut™ is considered to be of low concern.

- 96 hour acute toxicity versus freshwater alga (Selenastrum capricornutum) IAW 40 CFR 797.1050 showed FlameOut™ 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.

- 48 hour acute toxicity versus water fleas (Daphnia pulex) less than 24 hours old IAW 40 CFR 797.1300 showed an LC₅₀ of 159 ppm.

SECTION XIII- DISPOSAL CONSIDERATIONS

This material is not regarded as hazardous waste. Observe all federal, state, and local environmental regulations. Material may be diluted with water and sent to drains. Material may be disposed of at any non-hazardous landfill that accepts liquids.

SECTION XIV- TRANSPORT INFORMATION

Non-hazardous for road, sea, and airfreight.

SECTION XV - REGULATORY INFORMATION

<u>IMO Hazard Class and Number</u>	Non-hazardous.	<u>US DOT Hazard Class</u>	Not regulated by DOT.
<u>UN Number</u>	Not applicable.	<u>US DOT Identification Number</u>	Not applicable.
<u>IMO Description (IMDG Code):</u>	This product is not a dangerous good as defined by IMO in the IMDG Code for water transportation.		

SECTION XVI - OTHER INFORMATION

None

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 BioGenesis Enterprises, Inc. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.