



Safety Data Sheet

Fog Fluid (Water Based)

Section 1. Identification

Product Identifier	Fog Fluid (Water Based)		
Synonyms	PEG		
Manufacturer Stock Numbers	N/A		
Recommended use	Product is intended for professional Special Effects use only.		
Uses advised against	Use of this material is at the sole risk of the purchaser.		
Manufacturer Contact			
Address	Roger George Rentals 14525 Bessemer St Van Nuys, CA, 91411 USA		
	Phone	Emergency Phone	Fax
	(818) 994-3049	(800) 535-5053 #85740	(818) 994-9432

Section 2. Hazards Identification

Classification	N/A
Signal Word	
Pictogram	
Hazard Statements	N/A
Precautionary Statements	
Response	N/A
Prevention	N/A
Storage	N/A
Disposal	N/A
Ingredients of unknown toxicity	0%

Hazards not Otherwise
Classified

Additional Information

This material is not hazardous under the criteria of the Federal OSHA Hazard
Communication Standard 29CFR 1910.1200.

Section 3. Ingredients

CAS	Ingredient Name	Weight %
107-21-1	1,2-Ethanediol	1% - Max
111-46-6	Ethanol, 2,2'-oxybis-	4% - Max
25322-68-3	Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-	99% - Max

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-Aid Measures

General	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
General advice	First aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists, see section 8 for specific personal protective equipment.
Inhalation	Remove victim to fresh air; if effects occur, consult a physician.
Skin	Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.
Eye	Flush eye with plenty of water for 15 minutes while holding eyelids open. Remove contact lenses. Continue flushing for 15 minutes or until eyes return to normal. Get medical attention if irritation develops or persists.
Ingestion	If swallowed, do NOT induce vomiting. Seek immediate medical attention. Call a physician, hospital emergency room, or poison control center immediately. Never give anything by mouth to an unconscious person.
Note to physician	Absorption may be promoted by damaged skin. J Pharm Sci. 1985 Oct;74 (10):1062-6; Burns Incl Therm Inj 1982 Sep;9(1):49-52. Due to structural analogy and clinical data, this material may have a mechanism of intoxication similar to ethylene glycol. On that basis, treatment similar to ethylene glycol intoxication may be of benefit. In cases where several ounces (60 - 100 ml) have been ingested, consider the use of ethanol and hemodialysis in the treatment. Consult standard literature for details of treatment. If ethanol is used, a therapeutically effective blood concentration in the range of 100 - 150 mg/dl may be achieved by a rapid loading dose followed by a continuous intravenous infusion. Consult standard literature for details of treatment. 4-Methyl pyrazole (Antizol®) is an effective blocker of alcohol dehydrogenase and should be used in the treatment of ethylene glycol (EG), di- or triethylene glycol (DEG, TEG), ethylene glycol butyl ether (EGBE), or methanol intoxication if available. Fomepizole protocol (Brent, J. et al., New England Journal of Medicine, Feb. 8, 2001, 344:6, p. 424-9): loading dose 15 mg/kg intravenously, follow by bolus dose of 10 mg/kg every 12 hours; after 48 hours, increase bolus dose to 15 mg/kg every 12 hours. Continue fomepizole until serum methanol, EG, DEG, TEG or EGBE are undetectable. The signs and symptoms of poisoning include anion gap metabolic acidosis, CNS depression, renal tubular injury, and possible late stage cranial nerve involvement. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. In severe poisoning, respiratory support with mechanical ventilation and positive end expiratory pressure may be

required. Maintain adequate ventilation and oxygenation of the patient. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media	Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. If water must be used, use as a spray only to protect fire fighters or cool containers. Use fog nozzles if water is used.
Unsuitable Extinguishing Media	Do not use direct water stream as it may spread fire. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.
Flammable Properties	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.
Fire fighting instructions	Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance. Sealed containers may rupture when heated. Sensitive to mechanical impact. Keep people away. Isolate fire and deny unnecessary entry. Use water spray to keep fire-exposed containers cool. Fire fight from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Move container from fire area if it can be done without risk. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

Section 6. Accidental Release Measures

General Information	Use proper personal protective equipment as indicated in Section 8.
Environmental Precautions	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.
Clean-up	Contain spilled material if possible. Collect in suitable and properly labeled container. See Section 13, Disposal Considerations, for additional information.

Section 7. Handling and Storage

General Information	Use proper personal protective equipment as indicated in Section 8.
Handling	Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion. Observe reasonable care and cleanliness. Use promptly after opening.
Precautionary Measures	Keep only in the original container.
Storage	Use within 36 months. Avoid prolonged exposure to heat and air. Store in the following material(s): Stainless steel. Polypropylene. Polyethylene-lined container. Teflon. Glass-lined container. Plasite 3066 lined container. Plasite 3070 lined container. 316 stainless steel.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
	1,2-Ethanediol	50 mg/m3	N/A	N/A
	Ethanol, 2,2'-oxybis-	10 mg/m3	N/A	N/A
	Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-	10 mg/m2	N/A	N/A
Personal Protective Equipment	Goggles, Gloves, Respirator, SAFETY GLASSES			
Engineering controls	Local exhaust ventilation may be necessary for some operations. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.			
Eyes	Wear safety glasses with side shields (or goggles) .			
Skin	Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Wear appropriate chemical resistant gloves. Consult a glove supplier for assistance in selecting an appropriate chemical resistant glove. If hands are cut or scratched, use gloves chemically resistant to this material even for brief exposures.			
Other Protection	When prolonged or frequently repeated contact could occur, use protective clothing chemically resistant to this material. Selection of specific items such as faceshield, boots, apron, or full-body suit will depend on the task.			
Respiratory	Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator. Selection of air-purifying or positivepressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus. In confined or poorly ventilated areas, use an approved self-contained breathing apparatus or positive pressure air line with auxiliary self-contained air supply. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.			

Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	Clear/colorless
Odor	Mild
Odor Threshold	N/A
Solubility	Soluble
Partition coefficient Water/n-octanol	N/A
VOC%	N/A
Viscosity	4.1-4.8 cSt @ 98.9 C
Specific Gravity	1.1
Density lbs/Gal	1.127
Pounds per Cubic Foot	N/A
Flash Point	185 C / 365 F
FP Method	Closed cup
Ph	4.5-7
Melting Point	-65 C / 85 F
Boiling Point	>200 C / >392 F

Boiling Range	N/A
LEL	N/A
UEL	N/A
Evaporation Rate	N/A
Flammability	N/A
Decomposition Temperature	N/A
Auto-ignition Temperature	N/A
Vapor Pressure	<0.01 mm HG @ 20 C
Vapor Density	7

Additional Information Volatile Organic Compounds: 11 g/L

Section 10. Stability and Reactivity

Stability	Stable under normal temperatures and pressures.
Conditions to Avoid	Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems.
Incompatibilities	Avoid contact with: Strong acids, Strong bases, Strong oxidizers.
Hazardous Decomposition	Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products may include but are not limited to: Aldehydes, Alcohols, Ethers, Carbon dioxide, Carboxylic acids, Polymer fragments.
Additional Information	The physical data presented above are typical values and should not be construed as a specification.

Section 11. Toxicological Information

Ingestion	Very low toxicity if swallowed. harmful effects not anticipated from swallowing small amounts.
Acute Toxicity	LD50 Oral - rat > 10,000 mg/kg. Prolonged skin contact is unlikely to result in absorption of harmful amounts. Prolonged/repeated exposure to damaged skin (as in burn patients) may result in absorption of toxic amounts. LD50 Dermal - rabbit 20,000 mg/kg. At room temperature, exposure to vapor is minimal due to low volatility; single exposure is not likely to be hazardous. No adverse effects are anticipated from single exposure to mist. For respiratory irritation and narcotic effects: No relevant data found. LC50 Inhalation - rat 6 >2.5 mg/l over 6 hr of dust/mist. No deaths occurred at this concentration.
Skin	Prolonged contact is essentially nonirritating to skin. May cause more severe response if skin is abraded (scratched or cut).
Eyes	May cause slight temporary eye irritation. Corneal injury is unlikely.
Sensitization	Did not cause allergic skin reactions when tested in guinea pigs. Did not cause allergic skin reactions when tested in humans.
Repeated Exposure	Recent findings of kidney failure and death in burn patients, as well as some studies using animal burn models, suggest that polyethylene glycol may have been a factor. The use of topical applications containing this material may not be appropriate in severely burned patients or individuals with impaired renal function. Based on available data, repeated exposures are not anticipated to cause significant adverse effects.
Cancer	Did not cause cancer in long-term animal studies.
Reproductive Toxicity	In animal studies, did not interfere with reproduction.

Mutagenicity	In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.
Aspiration Hazard	Based on physical properties, not likely to be an aspiration hazard.

Section 12. Ecological Information

Toxicity: Fish	Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested). LC50, Pimephales promelas (fathead minnow), static test, 96 Hour, > 10,000 mg/l, OECD Test Guideline 203 or Equivalent.
Toxicity: Invertebrates	LC50, Daphnia magna (Water flea), 48 Hour, > 10,000 mg/l.
Biodegradability	This product is readily biodegradable.
Bioaccumulative Potential	No bioconcentration is expected because of the relatively high water solubility.

Section 13. Disposal

Disposal Considerations	DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER.
Compliance	ALL DISPOSAL MUST BE IN ACCORDANCE WITH ALL FEDERAL, STATE, PROVINCIAL, AND LOCAL REGULATIONS. IF IN DOUBT, CONTACT PROPER AGENCIES. EPA CHARACTERISTIC: D001 FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device.

Section 14. Transport Information

UN Number	N/A
UN Proper Shipping Name	Non-regulated
DOT Classification	N/A
Packing Group	N/A

Section 15. Regulatory Information

OSHA Hazard Communication Standard	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
SARA 311/312	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 311/312.
SARA 313 Components	The following components are subject to reporting levels established by SARA Title III, Section 313: Ethylene glycol - CAS#107-21-1
Pennsylvania Right to Know	Ethylene glycol - CAS#107-21-1
California Prop. 65	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16. Other Information

Revision Date	10/16/2015
Company Policy/Disclaimer	The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. The supplier nor any of its subsidiaries makes no representations as to its accuracy or sufficiency. This information is furnished without warranty of any kind. Conditions of use are beyond Roger George Rentals' control and therefore users must determine

whether the product is suitable for their particular purposes and they assume all risk of their use, handling and disposal of the product, or from the publications or use of, or reliance upon information contained herein. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process in which user assumes all responsibility.