





















Unit Safety Coordinator/Supervisor: William Hitchins

Describe the activity. <i>(Inc. how long/ how often this is carried out and quantity substance used)</i>	Production of smoke via compression of food grade mineral oil. Performed daily, for a maximum duration of 240 minutes at a time.		
Location	Indoors and outside.		
Identify the persons at risk:	Employees <input checked="" type="checkbox"/>	Venue Staff <input checked="" type="checkbox"/>	Public <input checked="" type="checkbox"/>
Name the substance(s) involved in the process <i>(A copy of a current safety data sheet is available.)</i>	Diffusion Fluid		
<b>Classification (state the category of danger)</b>			
 <input type="checkbox"/> Very Toxic	 <input type="checkbox"/> Irritant-dermatitis causing	 <input type="checkbox"/> Extremely Flammable	
 <input type="checkbox"/> Toxic	 <input type="checkbox"/> Sensitising	 <input type="checkbox"/> Highly Flammable	
 <input type="checkbox"/> Corrosive	 <input type="checkbox"/> Biological	 <input type="checkbox"/> Flammable	
 <input type="checkbox"/> Harmful-lung damage if swallowed	 <input type="checkbox"/> Oxidising	 <input type="checkbox"/> Environmental -aquatic organisms	
<b>Hazard Type</b>			
<input type="checkbox"/> Gas	<input checked="" type="checkbox"/> Vapour	<input type="checkbox"/> Mist	<input type="checkbox"/> Fume
<input type="checkbox"/> Dust	<input type="checkbox"/> Liquid	<input type="checkbox"/> Solid	Other (State):
<b>Route of Exposure</b>			
<input checked="" type="checkbox"/> Inhalation	<input type="checkbox"/> Skin	<input type="checkbox"/> Eyes	<input type="checkbox"/> Ingestion
<input type="checkbox"/> Other	(State).....		
<b>Workplace Exposure Limits (WELs) please indicate n/a where not applicable</b>			
Long-term exposure level (8hrTWA): N/A	Short-term exposure level (15 mins): N/A		
<b>Risks to Health from Identified Hazards: Note appropriate Risk Phrases</b>			
Inhaled: Acute exposure may result in bronchial irritation Absorbed through skin: Chronic exposure may cause contact or eczematous dermatitis Swallowed: May cause diarrhoea			
<b>Control Measures: Note engineering, PPE, ventilation and other requirements needed</b>			
Systems run for as short a time as possible. All spills and drips cleaned up as they happen.			
<b>Safety Phrases: N/A</b>			

Is health surveillance or monitoring required? Yes  No

**Personal Protective Equipment (state type and standard)**

 <input type="checkbox"/>		 <input type="checkbox"/>	
Dust mask		Visor	
 <input type="checkbox"/>		 <input type="checkbox"/>	
Respirator		Goggles	
 <input type="checkbox"/>		 <input type="checkbox"/>	
Gloves		Overalls	
 <input type="checkbox"/>		 <input type="checkbox"/>	
Footwear		Other	

**First Aid / Emergency Measures**

**Eye Contact:** Wash eyes with large amounts of water/saline solution occasionally lifting upper & lower eyelids until evidence of chemical is clear.

**Skin Contact:** Wash with soap & water.

**Inhaled:** Remove to fresh air.

**Swallowed:** No specific antidote. Treat symptomatically and supportively.

**Fire Extinguishing:** Dry chemical, waterfog, CO2, foam or sand/earth. Closed containers exposed to fire may be cooled with water.

**Measures to be Taken in Case of Spillage:**  
Shut off leak and dyke up large spills. Absorb with an inert material such as sand, earth or vermiculite. Sweep up and dispose of in accordance with local regulations.

**Storage: Note type of storage required**

No special requirements.

**Disposal of Substances & Contaminated Containers**

Hazardous Waste  Put Down Drain  General Skip   
(If Other Please State):

Is exposure adequately controlled? Yes  No

**Risk Rating Following Control Measures**

High  Medium  Low

Assessed by: William Hitchins Position: Technical Manager Date: 6/12/15

# MATERIAL SAFETY DATA SHEET (MSDS)

## REEL EFX DIFFUSION FLUID

**1. Identification of the Chemical Product:**

White Mineral Oil, CAS Number 8012-95-1

**2. Name & Address of the Supplier in Europe:**

A.C. Lighting Ltd  
Unit 3 Spearmast Industrial Park  
Lane End Road  
Sands  
High Wycombe  
Bucks HP12 4JG  
England

Telephone: +44 (0)1494 446000  
Fax: +44 (0)1494 461024  
Email: [sales@aclighting.co.uk](mailto:sales@aclighting.co.uk)  
Internet: <http://www.aclighting.co.uk>

**3. Identification of Any Dangers:**

Inhaled:	Acute exposure may result in bronchial irritation
Absorbed through skin:	Chronic exposure may cause contact or eczematous dermatitis
Swallowed:	May cause diarrhoea

**4. Description of First Aid Treatment to be Given in Case of Emergency:**

Eye Contact:	Wash eyes with large amounts of water/saline solution occasionally lifting upper & lower eyelids until evidence of chemical is clear.
Skin Contact:	Wash with soap & water.
Inhaled:	Remove to fresh air.
Swallowed:	No specific antidote. Treat symptomatically and supportively.

**5. Fire Precautions:**

Flash Point:	Greater than 193 degrees Centigrade (closed cup)
Fire Extinguishing:	Dry chemical, waterfog, CO <sub>2</sub> , foam or sand/earth. Closed containers exposed to fire may be cooled with water.

**6. Measures to be Taken in Case of Spillage:**

Shut off leak and dyke up large spills. Absorb with an inert material such as sand, earth or vermiculite. Sweep up and dispose of in accordance with local regulations.

**7. Precautions to be Taken in Storage & Handling:**

Keep away from heat & flames. Do not store near strong oxidising agents such as hydrogen peroxide, bromide and chromic acid. The maximum storage temperature is 66 degrees Centigrade.

**8. Precautions for Workers to Follow when Handling:**

Respiratory Protection: Under normal use none.  
When concentrations are above 5mg per cubic meter an approved air respirator.

Protective Clothing: Wear oil impervious clothing. Avoid wearing clothing soaked with mineral oil.  
Wear appropriate protective gloves to avoid skin contact.  
Always wear splash proof goggles when dealing with spills

Ventilation: Always ensure adequate ventilation to meet permissible exposure limits (PEL)

**9. Physical & Chemical Properties**

Formula: A mixture of liquid hydrocarbons refined from petroleum.

Chemical Name: White Mineral Oil

Toxic or hazardous Ingredients: None

Odour, Appearance, Colour & Form: An odourless clear viscous liquid.

Specific Gravity: 0.83 to 0.90 (water = 1.0)

Vapour Pressure: In mmHg @ 20 degrees Centigrade – Less than 0.55mm

Boiling Point: 360 degrees Centigrade

Melting Point: Not applicable. Does not melt down under heat.

Evaporation rate: Nil @ 25 degrees Centigrade. (butyl acetate = 1.0)

**10. Stability & Reactivity:**

Keep away from strong oxidisers such as hydrogen peroxide, bromide and chromic acid.

**11. Toxicological Information:**

Non toxic.

**12. Ecological Information:**

No data available. As the substance is not soluble in water do not flush into water or waste system.

**13. Information Concerning Disposal of Waste Product:**

Dispose of in accordance with all local regulations.

**14. Information Concerning Transport of Product:**

Department of Transport: Non regulated.

Reportable Quantity: None

Freight Classification: 65 Petroleum Oil

Special Transportation Notes: None

**15. Information Regarding Conformity to Relevant Regulations:**

No data available for Europe.

The fluid meets the requirements of the US Food & Drug Administration CFR 172.878

The fluid is not suspected to be a cancer agent.