



Health	3
Fire	1
Reactivity	0
Personal Protection	J

# Material Safety Data Sheet Methoxsalen MSDS

# **Section 1: Chemical Product and Company Identification**

Product Name: Methoxsalen

Catalog Codes: SLM1885

CAS#: 298-81-7

RTECS: LV1400000

TSCA: TSCA 8(b) inventory: Methoxsalen

Cl#: Not available.

**Synonym:** 8-MoP, 8-MP, Ammoidin, Geroxalen, eladinin, Meladinine, Meloxine, Methoxa-dome, Newmeladinin, Oxsoralen, Oxysporalen, Proralone-mop, Xanthotoxin; 8-Methoxypsoralen; 5-Benzofuranacrylic acid, 6-hydroxy-7-methoxy-, delta-lactone; 6-Hydroxy-7methoxy-5-benzofuranacrylic acid delta-lactone; 8-Methoxy-(furano-3'.2':6.7-coumarin); 8-Methoxy-2',3',6,7furocoumarin; 8-Methoxy-4',5',6,7-furocoumarin; 8-Methoxysporalene; 9-Methoxysporalene

**Chemical Name:** 7H-Furo(3,2-g)(1)benzopyran-7-one, 9-methoxy-

Contact Information:

Sciencelab.com, Inc. 14025 Smith Rd. Houston, Texas 77396

US Sales: 1-800-901-7247 International Sales: 1-281-441-4400

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Chemical Formula: C12-H8-O4

# Section 2: Composition and Information on Ingredients

#### Composition:

Name	CAS #	% by Weight
Methoxsalen	298-81-7	100

Toxicological Data on Ingredients: Methoxsalen: ORAL (LD50): Acute: 791 mg/kg [Rat]. 423 mg/kg [Mouse].

# **Section 3: Hazards Identification**

### **Potential Acute Health Effects:**

Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (corrosive), of eye contact (corrosive). Slightly hazardous in case of skin contact (sensitizer). The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by

burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

### **Potential Chronic Health Effects:**

Slightly hazardous in case of skin contact (sensitizer). CARCINOGENIC EFFECTS: Classified 2 (Some evidence.) by NTP. 3 (Not classifiable for human.) by IARC. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage.

# **Section 4: First Aid Measures**

### Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

#### Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

### Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

#### Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

#### Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

#### Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

# Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO2).

### Fire Hazards in Presence of Various Substances:

Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

### Explosion Hazards in Presence of Various Substances:

Slightly explosive in presence of open flames and sparks. Non-explosive in presence of shocks.

# Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

### Special Remarks on Fire Hazards:

COMBUSTIBLE. When heated to decomposition it emits acrid smoke and fumes. As with most organic solids, fire is possible at elevated temperatures.

#### Special Remarks on Explosion Hazards:

Fine dust dispersed in air in sufficient concentrations, and in the presences of an ignition source is a potential dust explosion hazard.

### **Section 6: Accidental Release Measures**

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

#### Large Spill:

Corrosive solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

### Section 7: Handling and Storage

#### **Precautions:**

Keep locked up.. Keep container dry. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

# **Section 8: Exposure Controls/Personal Protection**

#### Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

#### Personal Protection:

Splash goggles. Synthetic apron. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

#### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor and dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

### **Section 9: Physical and Chemical Properties**

Physical state and appearance: Solid.

Odor: Odorless.

Taste: Bitter.

Molecular Weight: 216.19 g/mole

**Color:** White to yellowish. Off-white.

pH (1% soln/water): Not applicable.

Boiling Point: Not available.

Melting Point: 148°C (298.4°F)

Critical Temperature: Not available.

Specific Gravity: Not available.

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

lonicity (in Water): Not available.

Dispersion Properties: See solubility in water, acetone.

#### Solubility:

Soluble in acetone. Very slightly soluble in hot water, diethyl ether. Insoluble in cold water. Sparingly soluble in liquid petrolatum. Soluble in boiling alcohol, acetic acid, vegetable fixed oils, propylene glycol, benzene. Freely soluble in chloroform.

### Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, dust generation, incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Not available.

Special Remarks on Reactivity: Sensitive to light. May decompose on exposure to light.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

# **Section 11: Toxicological Information**

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 423 mg/kg [Mouse].

### **Chronic Effects on Humans:**

CARCINOGENIC EFFECTS: Classified 2 (Some evidence.) by NTP. 3 (Not classifiable for human.) by IARC. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.

# Other Toxic Effects on Humans:

Very hazardous in case of skin contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (corrosive), of eye contact (corrosive). Slightly hazardous in case of skin contact (sensitizer).

Special Remarks on Toxicity to Animals: Not available.

### Special Remarks on Chronic Effects on Humans:

May affect genetic material (mutagenic). May cause adverse reproductive effects and birth defects (teratogenic). May cause cancer

# Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: Causes severe skin irritation and burns. Causes photosensitivity. Exposure to light can result in allergic reactions resulting in dermatologic lesions, which can vary from sunburn like responses to edematous, vesiculated lesions or bullae. Eyes: Causes severe irritation and burns. Inhalation: Harmful if inhaled. Destructive to tissue of mucous membrane. Causes respiratory tract and mucous membrane irritation and burns. Symptoms may include burning senstation, coughing, wheezing, bronchitis, laryngitis (inflammation and edema of the larynx and bronchi), shortness of breath, chemical pneumonitis. Inhalation may be fatal as a result of spasm inflammation and edema of the larynx and bronchi, and chemical pneumonitis. Possible allergic reaction to material if inhaled. Ingestion: Harmful if swallowed. Causes gastrointestinal tract irritation and burns with nausea, vomiting, diarrhea, hypermotility. May affect behavior/central nervous system (convulsions, ataxia, nervousness, insomnia, mental depression, dizziness, headache), liver. Possible allergic reaction if material is ingested. Chronic Potential Health Effects: Repeated or prolonged ingestion may affect the liver (hepatitis, liver damage), blood (hemorrhage), and gastrointestinal tract (nausea, vomiting, hypermotility, diarrhea), endocrine system (pituitary gland, prostate gland). Skin: Repeated or prolonged skin contact may cause premature aging of skin and skin cancer. Prolonged or repeated exposure may cause hypersensitization.

# Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

# Section 13: Disposal Considerations

#### Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

# Section 14: Transport Information

DOT Classification: Class 8: Corrosive material

Identification: : Corrosive solid, n.o.s. (8-Methoxysporalen) UNNA: 1759 PG: III

Special Provisions for Transport: Not available.

# **Section 15: Other Regulatory Information**

#### Federal and State Regulations:

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Methoxsalen California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Methoxsalen California Director's List of Hazardous Substances: Methoxsalen TSCA 8(b) inventory: Methoxsalen

#### **Other Regulations:**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

### Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

### DSCL (EEC):

R22- Harmful if swallowed. R34- Causes burns. R43- May cause sensitization by skin contact. R45- May cause cancer. R46- May cause heritable genetic damage. S22- Do not breathe dust. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection. S46- If swallowed, seek medical advice immediately and show this container or label. S53- Avoid exposure - obtain special instructions before use.

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 1

Reactivity: 0

**Personal Protection:** j

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 1

Reactivity: 0

Specific hazard:

#### **Protective Equipment:**

Gloves. Synthetic apron. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

# **Section 16: Other Information**

References: Not available.

Other Special Considerations: Not available.

Created: 10/09/2005 06:07 PM

Last Updated: 06/09/2012 12:00 PM

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall ScienceLab.com be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if ScienceLab.com has been advised of the possibility of such damages.