Material Safety Data Sheet

8-Methoxypsoralen, 99%

ACC# 02963

Section 1 - Chemical Product and Company Identification

MSDS Name: 8-Methoxypsoralen, 99%

Catalog Numbers: AC214150000, AC214150010, AC214150050

Synonyms: Methoxsalen; 8-MOP; 5-Benzofuranacrylic acid, 6-hydroxy-7-methoxy-, delta-lactone; 6-Hydroxy-7-methoxy-5benzofuranacrylic acid delta-lactone; 7H-Furo(3,2-g)(1)benzopyran-7-one, 9-methoxy-; 8-Methoxy-(furano-3'.2':6.7-coumarin); 8-Methoxy-2',3',6,7-furocoumarin; 8-Methoxy-4',5',6,7-furocoumarin; 8-Methoxypsoralene; 8-MP; 9-Methoxy-7H-furo(3,2-g)benzopyran-7one; 9-Methoxyfuro[3,2-q]chromen-7-one; 9-Methoxypsoralen

Company Identification:

Acros Organics N.V. One Reagent Lane Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01 For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
298-81-7	8-Methoxypsoralen	99	206-066-9

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white needles.

Danger! Corrosive. Causes eye and skin burns. Harmful. May be harmful if swallowed. May cause severe digestive tract irritation with possible burns. May cause severe respiratory tract irritation with possible burns. Light sensitive. This product contains 8-Methoxypsoralen, a chemical known to the state of California to cause cancer. This product, in combination with UVA radiation has been proven to cause cancer, and is rated by IARC as a Group 1 carcinogen. Alone, this product does not show sufficient evidence to be a carcinogen.

Target Organs: Blood, central nervous system, eyes.

Potential Health Effects

Eye: Causes eye burns. May cause chemical conjunctivitis and corneal damage.

Skin: Causes skin burns. Contact with the skin may cause photosensitivity. May cause skin rash (in milder cases), and cold and clammy

skin with cyanosis or pale color. May cause erythema (redness) and blistering.

Ingestion: May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. May cause perforation of the digestive tract. May be harmful if swallowed. May cause systemic effects. May cause nausea, insomnia, nervousness, and depression. May cause liver damage in sufficient quantities.

Inhalation: Causes chemical burns to the respiratory tract. Aspiration may lead to pulmonary edema. May cause systemic effects.

Chronic: Effects may be delayed.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid imme diately. Do NOT allow victim to rub eyes or keep eyes closed. Extensiv e irrigation with water is required (at least 30 minutes). Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

Flash Point: Not applicable.

Autoignition Temperature: Not applicable. Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 3; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Store protected from light. Discard contaminated shoes.

Storage: Corrosives area. Keep containers tightly closed. Store protected from light. Store in a cool, dry area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Exposure Ellines					
Chemical Name	ACGIH	NIOSH	OSHA - Final PELs		
8-Methoxypsoralen	none listed	none listed	none listed		

OSHA Vacated PELs: 8-Methoxypsoralen: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Needles Appearance: white Odor: None reported.

pH: 5.5

Vapor Pressure: Not available. Vapor Density: Not available. Evaporation Rate:Not available. Viscosity: Not available. Boiling Point: Not available.

Freezing/Melting Point:148.00 - 150.00 deg C Decomposition Temperature:Not available.

Solubility: practically insoluble

Specific Gravity/Density:Not available.

Molecular Formula:C12H8O4 Molecular Weight:216.19

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. May decompose when exposed to light.

Conditions to Avoid: Incompatible materials, light, strong oxidants.

Incompatibilities with Other Materials: Strong oxidizing agents, direct light.

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 298-81-7: LV1400000

LD50/LC50: CAS# 298-81-7:

Oral, mouse: LD50 = 423 mg/kg; Oral, rat: LD50 = 791 mg/kg;

Carcinogenicity:

CAS# 298-81-7:

• ACGIH: Not listed.

• California: carcinogen, initial date 2/27/87 (with ultraviolet A therapy)

NTP: Known carcinogenIARC: Group 1 carcinogen

Epidemiology: In combination with UVA radiation, this substance is classified by IARC as a Group 1 (proven human carcinogen). Alone,

this product does not have sufficient data to be considered a carcinogen. **Teratogenicity:** Teratogenic effects have occurred in experimental animals.

Reproductive Effects: Adverse reproductive effects have occurred in experimental animals.

Mutagenicity: Mutagenic effects have occurred in humans.

Neurotoxicity: No information found

Other Studies:

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	DOT regulated - small quantity provisions apply (see 49CFR173.4)	TOXIC LIQUID ORGANIC NOS (8-METHOXYPSORALEN)
Hazard Class:		6.1
UN Number:		UN2810
Packing Group:		II

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 298-81-7 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 298-81-7 can be found on the following state right to know lists: California.

California Prop 65

The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:

WARNING: This product contains 8-Methoxypsoralen, a chemical known to the state of California to cause cancer. California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XN C

Risk Phrases:

R 22 Harmful if swallowed.

R 34 Causes burns.

R 40 Limited evidence of a carcinogenic effect.

Safety Phrases:

S 25 Avoid contact with eyes.

- S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S 28A After contact with skin, wash immediately with plenty of water

WGK (Water Danger/Protection)

CAS# 298-81-7: No information available.

Canada - DSL/NDSL

CAS# 298-81-7 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of E, D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

Section 16 - Additional Information

MSDS Creation Date: 9/02/1997 **Revision #8 Date:** 10/03/2005

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 Fisher 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 Fisher has been advised of the possibility of such damages.