# Material Safety Data Sheet Dimethylmercury, 95%

ACC# 99021

# Section 1 - Chemical Product and Company Identification

MSDS Name: Dimethylmercury, 95%

Catalog Numbers: AC317180000, AC317180010, AC317180100

Synonyms: None.
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
593-74-8	Dimethylmercury	95	209-805-3

# Section 3 - Hazards Identification

#### **EMERGENCY OVERVIEW**

Appearance: colorless liquid. Flash Point: 5 deg C.

**Danger!** May be fatal if absorbed through the skin. Flammable liquid and vapor. Causes respiratory tract irritation. May cause skin sensitization by skin contact. Causes eye and skin irritation. May cause central nervous system effects. May cause kidney damage. May cause fetal effects.

Target Organs: Kidneys, central nervous system.

#### **Potential Health Effects**

Eye: Causes eye irritation.

immunologic glomerular disease.

**Skin:** Causes skin irritation. May be fatal if absorbed through the skin. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. If absorbed, causes symptoms similar to those of inhalation. Effects may be delayed. May cause severe dermatitis and burns.

Ingestion: May cause irritation of the digestive tract. May cause effects similar to those for inhalation exposure.

Inhalation: Inhalation of fumes may cause metal fume fever, which is characterized by flu-like symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count. Systemic intoxication is cumulative and has been fatal. May produce numbness and tingling of the lips, hands, and feet (paresthesia) and ataxia (failure of muscular coordination). Exposure may produce speech disturbances, constriction of the visual fields, hearing impairment, and emotional disturbances. Severe intoxication may produce clonic seizures, (which may be irreversible), incontinence, spasticity, jerking of the limbs, head, and shoulders. Severe intoxication may produce emotional disturbances, hypersalivation, tearing, nausea, vomiting, and diarrhea or constipation. Chronic: Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. May cause fetal effects. Chronic exposure to mercury may cause permanent central nervous system damage, fatigue, weight loss, tremors, personality changes. Chronic ingestion may cause accumulation of mercury in body tissues. Chronic exposure to mercury vapors may produce weakness, fatigue, anorexia, loss of weight and gastrointestinal disturbances which is collectively referred to as asthenic-vegetative syndrome or micromercurialism. Chronic exposure to mercury compounds may produce

# Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed.

**Skin:** Get medical aid immediately. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Discard contaminated clothing in a manner which limits further exposure. SPEEDY ACTION IS CRITICAL!

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

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. Vapors may form an explosive mixture with air. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.

**Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight

streams of water.

Flash Point: 5 deg C ( 41.00 deg F) Autoignition Temperature: Not available. Explosion Limits, Lower: Not available.

Upper: N/A

NFPA Rating: (estimated) Health: 4; Flammability: 3; Instability: 0

# Section 6 - Accidental Release Measures

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

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Provide ventilation. A vapor suppressing foam may be used to reduce vapors. Water spray may reduce vapor but may not prevent ignition in closed spaces.

# Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage:** Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

# Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use only under a chemical fume hood.

**Exposure Limits** 

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Dimethylmercury	0.01 mg/m3 TWA (as Hg) (listed under Mercury, alkyl compounds).0.03 mg/m3 STEL (as Hg) (listed under Mercury, alkyl compounds).Skin - potential significant contribution to overall exposure by the cu taneous r oute (listed under Mercury, alkyl compounds).	0.01 mg/m3 TWA (as Hg) (listed under Mercury, alkyl compounds).2 mg/m3 IDLH (as Hg) (listed under Mercury, alkyl compounds).	0.4 mg/m3 Ceiling (listed under Mercury, alkyl compounds).

OSHA Vacated PELs: Dimethylmercury: No OSHA Vacated PELs are listed for this chemical.

**Personal Protective Equipment** 

**Eyes:** Wear chemical splash goggles. 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 plastic-laminate glove (SilverShield) alone or in combination with other gloves.

Clothing: Wear appropriate protective clothing to prevent skin exposure. Wear an impervious apron.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

# Section 9 - Physical and Chemical Properties

Physical State: Liquid Appearance: colorless Odor: faint sweet odor ph: Not available.

Vapor Pressure: Not available.

Vapor Density: 8.0

**Evaporation Rate:**Not available.

Viscosity: Not available.

Boiling Point: 93 - 94 deg C

Freezing/Melting Point:-43 deg C

**Decomposition Temperature:**Not available.

Solubility: Not available.

Specific Gravity/Density:2.9610g/cm3

Molecular Formula:C2H6Hg Molecular Weight:230.67

# Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials, ignition sources, excess heat.

Incompatibilities with Other Materials: Strong oxidizing agents.

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

Hazardous Polymerization: Has not been reported

RTECS#:

CAS# 593-74-8: OW3010000

LD50/LC50: Not available.

Carcinogenicity:

CAS# 593-74-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.
Teratogenicity: No information available.
Reproductive Effects: No information available.
Mutagenicity: No information available.
Neurotoxicity: No information available.

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:	TOXIC LIQUIDS, FLAMMABLE, ORGANIC, N.O.S.	TOXIC LIQUIDS, FLAMMABLE, ORGANIC,		
Hazard Class:	6.1	6.1		
UN Number:	UN2929	UN2929		
Packing Group:	I	I		
Additional Info:		N.O.S.		

# Section 15 - Regulatory Information

# **US FEDERAL**

#### TSCA

CAS# 593-74-8 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# 593-74-8 can be found on the following state right to know lists: New Jersey, Pennsylvania, (listed as Mercury, alkyl compounds), Minnesota, (listed as Mercury, alkyl compounds), Massachusetts, (listed as Mercury, alkyl compounds).

#### California Prop 65

WARNING: This product contains Dimethylmercury, a chemical known to the state of California to cause developmental reproductive toxicity.

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:

T+F

#### Risk Phrases:

R 11 Highly flammable.

R 33 Danger of cumulative effects.

R 39/27 Very toxic: danger of very serious irreversible effects in

contact with skin.

# **Safety Phrases:**

S 13 Keep away from food, drink and animal feeding stuffs.

S 16 Keep away from sources of ignition - No smoking.

S 33 Take precautionary measures against static discharges.

S 36 Wear suitable protective clothing.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 9 Keep container in a well-ventilated place.

S 28A After contact with skin, wash immediately with plenty of water

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#### WGK (Water Danger/Protection)

CAS# 593-74-8: No information available.

#### Canada - DSL/NDSL

CAS# 593-74-8 is listed on Canada's NDSL List.

#### Canada - WHMIS

not available

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**

CAS# 593-74-8 is listed on the Canadian Ingredient Disclosure List.

# Section 16 - Additional Information

MSDS Creation Date: 8/07/1998 Revision #4 Date: 2/09/2005

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.