

Material Safety Data Sheet

Mercury(II) sulfide, red, 99.5+%

ACC# 94301

Section 1 - Chemical Product and Company Identification

MSDS Name: Mercury(II) sulfide, red, 99.5+%

Catalog Numbers: AC222690000, AC222690500

Synonyms: Vermilion; Chinese Red; C.I. Pigment 106; C.I. 77766

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
1344-48-5	Mercury(II) sulfide, red	99.5+%	215-696-3

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: red powder.

Danger! Very toxic by inhalation, in contact with skin and if swallowed. May be fatal if inhaled, absorbed through the skin or swallowed. May cause eye and skin irritation. May cause respiratory tract irritation. May cause central nervous system effects. Danger of cumulative effects.

Target Organs: Kidneys, central nervous system.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation. May be fatal if absorbed through the skin.

Ingestion: May be fatal if swallowed. May cause irritation of the digestive tract. May cause central nervous system effects.

Inhalation: May be fatal if inhaled. May cause respiratory tract irritation.

Chronic: May cause kidney injury. Chronic exposure to mercury may cause permanent central nervous system damage, fatigue, weight loss, tremors, personality changes.

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 immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: Treat symptomatically and supportively.

Antidote: The use of Dimercaprol or BAL (British Anti-Lewisite) as a chelating agent should be determined by qualified medical personnel.

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: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Flash Point: Not available.

Autoignition Temperature: Not available.

Explosion Limits, Lower: Not available.

Upper: Not available.

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

Section 6 - Accidental Release Measures

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

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Wash area with soap and water. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Minimize dust generation and accumulation. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

Storage: Do not store in direct sunlight. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Poison room locked.

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

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Mercury(II) sulfide, red	0.1 mg/m ³ TWA (as Hg) (listed under Mercury, aryl and inorganic compounds). Skin - potential significant contribution to overall exposure by the cutaneous route (listed under Mercury, aryl and inorganic compounds).	0.05 mg/m ³ TWA (vapor, except organo alkyls, as Hg) (listed under Mercury compounds). 10 mg/m ³ IDLH (as Hg, not including organo(alkyl) compounds) (listed under Mercury compounds).	0.1 mg/m ³ Ceiling (listed under Mercury, aryl and inorganic compounds).

OSHA Vacated PELs: Mercury(II) sulfide, red: 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: 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: Powder

Appearance: bright red - red

Odor: none reported

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 583.5 deg C subl

Decomposition Temperature: Not available.

Solubility: Insoluble.

Specific Gravity/Density: 8.1000g/cm³

Molecular Formula: HgS

Molecular Weight: 232.65

Section 10 - Stability and Reactivity

Chemical Stability: May decompose when exposed to light.

Conditions to Avoid: Light, dust generation, temperatures above 250°C.

Incompatibilities with Other Materials: Strong oxidizing agents, acids.

Hazardous Decomposition Products: Oxides of sulfur, mercury/mercury oxides.

Hazardous Polymerization: Has not been reported

Section 11 - Toxicological Information

RTECS#:

CAS# 1344-48-5: OX0720000

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 1344-48-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found

Teratogenicity: No information found

Reproductive Effects: No information found

Mutagenicity: No information found

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:	MERCURY COMPOUNDS, SOLID, N.O.S.	MERCURY COMPOUND SOLID NOS (MERCURY SULFIDE)
Hazard Class:	6.1	6.1
UN Number:	UN2025	UN2025
Packing Group:	III	III

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 1344-48-5 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

This material contains Mercury(II) sulfide, red (listed as Mercury compounds), 99.5+%, (CAS# 1344-48-5) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

CAS# 1344-48-5 (listed as Mercury compounds) is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

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. CAS# 1344-48-5 is listed as a Toxic Pollutant under the Clean Water Act.

OSHA:

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

STATE

CAS# 1344-48-5 can be found on the following state right to know lists: California, (listed as Mercury compounds), Pennsylvania, (listed as Mercury compounds), Pennsylvania, (listed as Mercury, aryl and inorganic compounds).

California Prop 65

WARNING: This product contains Mercury(II) sulfide, red, listed as 'Mercury compounds', 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+

Risk Phrases:

R 26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.

R 33 Danger of cumulative effects.

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

WGK (Water Danger/Protection)

CAS# 1344-48-5: No information available.

Canada - DSL/NDSL

CAS# 1344-48-5 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D1A.

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# 1344-48-5 (listed as Mercury compounds) is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information
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MSDS Creation Date: 1/27/1998

Revision #3 Date: 10/31/2003

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.