

Material Safety Data Sheet

Phenylmercuric Nitrate, 97% (Tit.)

ACC# 31982

Section 1 - Chemical Product and Company Identification

MSDS Name: Phenylmercuric Nitrate, 97% (Tit.)

Catalog Numbers: AC423000000, AC423000250, AC423001000

Synonyms: Mercury, Hydroxy(nitrato)diphenyldi-

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
8003-05-2	Phenylmercuric Nitrate	97	unlisted

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white to off-white powder.

Danger! Corrosive. Causes eye and skin burns. May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns. May cause central nervous system effects. The toxicological properties of this material have not been fully investigated.

Target Organs: Central nervous system.

Potential Health Effects

Eye: Causes eye burns.

Skin: Causes skin burns.

Ingestion: May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. The toxicological properties of this substance have not been fully investigated. Inorganic mercury compounds may cause central and peripheral nervous system effects.

Inhalation: Causes chemical burns to the respiratory tract. The toxicological properties of this substance have not been fully investigated. Acute exposure to high concentrations of mercury vapors may cause severe respiratory tract irritation.

Chronic: 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 immunologic glomerular disease.

Section 4 - First Aid Measures

Eyes: Get medical aid. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

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

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. 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.

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. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

Extinguishing Media: Use agent most appropriate to extinguish fire. Cool containers with flooding quantities of water until well after fire is out. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 1; 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. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Remove all sources of ignition. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Discard contaminated shoes.

Storage: 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: 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
Phenylmercuric Nitrate	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: Phenylmercuric Nitrate: 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: Powder

Appearance: white to off-white

Odor: Not available.

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: 180 deg C

Decomposition Temperature: Not available.

Solubility: Not available.

Specific Gravity/Density: Not available.

Molecular Formula: C₁₂H₁₁Hg₂NO₄

Molecular Weight: 634.39

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, dust generation, excess heat.

Incompatibilities with Other Materials: Strong acids, strong oxidizing agents.

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, mercury/mercury oxides.

Hazardous Polymerization: Has not been reported

Section 11 - Toxicological Information

RTECS#:

CAS# 8003-05-2: OW8575000

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 8003-05-2: 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:	PHENYLMERCURIC NITRATE	No information available.
Hazard Class:	6.1	
UN Number:	UN1895	
Packing Group:	II	

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 8003-05-2 is not listed on the TSCA inventory. It is for research and development use only.

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.

SARA Codes

CAS # 8003-05-2: immediate, delayed.

Section 313

This material contains Phenylmercuric Nitrate (listed as Mercury compounds), 97%, (CAS# 8003-05-2) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

CAS# 8003-05-2 (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# 8003-05-2 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# 8003-05-2 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 Phenylmercuric Nitrate, 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 25 Toxic if swallowed.

R 34 Causes burns.

R 37 Irritating to respiratory system.

R 44 Risk of explosion if heated under confinement.

R 48/24/25 Toxic : danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.

Safety Phrases:

- S 23 Do not inhale gas/fumes/vapour/spray.
- S 24/25 Avoid contact with skin and eyes.
- S 37 Wear suitable gloves.
- 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# 8003-05-2: No information available.

Canada - DSL/NDSL

None of the chemicals in this product are listed on the DSL or NDSL list.

Canada - WHMIS

This product has a WHMIS classification of E, D2A.

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# 8003-05-2 (listed as Mercury compounds) is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information
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MSDS Creation Date: 5/18/1999

Revision #3 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.