

Material Safety Data Sheet

Selenious acid, 98%

ACC# 91953

Section 1 - Chemical Product and Company Identification

MSDS Name: Selenious acid, 98%

Catalog Numbers: AC198870000, AC198870500, AC198872500

Synonyms:

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
7783-00-8	SELENIUS ACID	98	231-974-7

Hazard Symbols: T

Risk Phrases: 23/25 33

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colorless solid. Poison! May be fatal if swallowed. Causes digestive and respiratory tract irritation. May cause severe skin irritation. May cause severe eye irritation and possible injury. May cause liver and kidney damage. **Danger!** Hygroscopic.

Target Organs: Kidneys, liver.

Potential Health Effects

Eye: May cause severe eye irritation. May result in corneal injury.

Skin: May cause severe skin irritation. Prolonged and/or repeated contact may cause irritation and/or dermatitis.

Ingestion: May be fatal if swallowed. May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns. May cause liver and kidney damage. May cause a garlic odor on the breath along with pallor, nervousness, depression, digestive tract disturbances and possible death.

Inhalation: May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema.

Chronic: Prolonged or repeated skin contact may cause dermatitis. May cause liver and kidney damage. May cause reproductive and fetal effects. Chronic exposure to selenium may cause central nervous system effects, digestive tract disturbances, pallor, garlic breath,

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 soap and water for at least 15 minutes while removing contaminated clothing and shoes.

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 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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Flash Point: Not available.

Autoignition Temperature: Not available.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; 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. Clean up spills immediately, observing

precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood.

Storage: Store in a cool, dry place. Store in a tightly closed container. Poison room locked.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
SELENIUS ACID	none listed	none listed	none listed

OSHA Vacated PELs: SELENIUS ACID: 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. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: colorless

Odor: Not available.

pH: Not available.

Vapor Pressure: 2.7 mbar @ 15 deg C

Vapor Density: Not available.

Evaporation Rate:Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point:70 deg C dec

Decomposition Temperature:Not available.

Solubility: 167 G/100ML WATER (20°C)

Specific Gravity/Density:Not available.

Molecular Formula:H2O3Se

Molecular Weight:128.97

Section 10 - Stability and Reactivity

Chemical Stability: Stable.

Conditions to Avoid: Incompatible materials, exposure to moist air or water.

Incompatibilities with Other Materials: Strong reducing agents - organic materials - finely powdered metals.

Hazardous Decomposition Products: Selenium/selenium oxides.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 7783-00-8: VS7175000

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 7783-00-8:

IARC: IARC Group 3 - not classifiable (listed as Selenium).

Epidemiology: Carcinogenicity: Available animal data are insufficient to allow an evaluation of the carcinogenicity of selenium compounds (The Dictionary of Substances and their Effects, 1992).

Teratogenicity: No data available.

Reproductive Effects: No data available.

Neurotoxicity: No data available.

Mutagenicity: Mutation: cyt-hmn-lym 10 umol/LEPA TSCA Section 8(b) CHEMICAL INVENTORY On EPA IRIS database EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, JANUARY 1996

Other Studies: No data available.

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: CAS# 7783-00-8: waste number U204.

Section 14 - Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
Shipping Name:	SELENIUM COMPOUND, N.O.S.				No information available.
Hazard Class:	6.1				
UN Number:	UN3283				
Packing Group:	III				

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 7783-00-8 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.

SARA

CERCLA Hazardous Substances and corresponding RQs

CAS# 7783-00-8: 10 lb final RQ; 4.54 kg final RQ

SARA Section 302 Extremely Hazardous Substances

CAS# 7783-00-8: 1000 lb TPQ (lower threshold); 10,000 lb TPQ (upper threshold); 10 lb EPCRA RQ

SARA Codes

CAS # 7783-00-8: acute.

Section 313

This material contains SELENIOUS ACID (listed as Selenium), 98%, (CAS# 7783-00-8) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

This material does not contain any hazardous air pollutants. 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. 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# 7783-00-8 can be found on the following state right to know lists: New Jersey, Florida, Pennsylvania, Massachusetts.

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 23/25 Toxic by inhalation and if swallowed.

R 33 Danger of cumulative effects.

Safety Phrases:

S 20/21 When using do not eat, drink or smoke.

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# 7783-00-8: No information available.

Canada - DSL/NDSL

CAS# 7783-00-8 is listed on Canada's DSL List.

Canada - WHMIS

This product does not have a WHMIS classification.

Canadian Ingredient Disclosure List

CAS# 7783-00-8 is listed on the Canadian Ingredient Disclosure List.

Exposure Limits

CAS# 7783-00-8: OEL-ARAB Republic of Egypt:TWA 0.2 mg(Se)/m³ OEL-AUSTRALIA:TWA 0.2 mg(Se)/m³ OEL-BELGIUM:TWA 0.2 mg(Se)/m³ OEL-DENMARK:TWA 0.1 mg(Se)/m³ OEL-FINLAND:TWA 0.1 mg(Se)/m³;STEL 0.3 mg(Se)/m³ OEL-GERMANY:TWA 0.1 mg(Se)/m³ OEL-HUNGARY:STEL 0.1 mg(Se)/m³ OEL-THE NETHERLANDS:TWA 0.2 mg(Se)/m³ OEL-THE PHILIPPINES:TWA 0.2 mg(Se)/m³ OEL-POLAND:TWA 0.1 mg(Se)/m³ OEL-SWEDEN:TWA 0.1 mg(Se)/m³ OEL-SWITZERLAND:TWA 0.1 mg(Se)/m³ OEL-TURKEY:TWA 0.2 mg(Se)/m³ OEL-UNITED KINGDOM:TWA 0.1 mg(Se)/m³ OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

Section 16 - Additional Information

MSDS Creation Date: 9/02/1997

Revision #1 Date: 8/02/2000

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.