

Material Safety Data Sheet

Selenourea, 99.9+ %

ACC# 95350

Section 1 - Chemical Product and Company Identification

MSDS Name: Selenourea, 99.9+%

Catalog Numbers: AC213170000, AC213170010, NC9186362, NC9203122, XXAC21317-26GR, XXAC21317-50GR

Synonyms: Carbamimidoseleonic acid

Company Identification:

Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
630-10-4	Selenourea	99.9+	211-129-9

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: grey solid.

Danger! May be fatal if swallowed. Poison! Causes eye and skin irritation. May cause respiratory and digestive tract irritation. May cause central nervous system effects. Air sensitive. May cause liver and kidney damage. Moisture sensitive.

Target Organs: Kidneys, central nervous system, liver, spleen.

Potential Health Effects

Eye: Causes eye irritation.

Skin: Causes skin irritation.

Ingestion: May be fatal if swallowed. Poison by ingestion. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause liver and kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May cause kidney, liver and spleen damage. May cause loss of nails and hair. May cause tetanic and clonic spasms.

Inhalation: May cause respiratory tract irritation. May cause effects similar to those described for ingestion.

Chronic: Chronic inhalation may cause effects similar to those of acute inhalation. Chronic ingestion may cause effects similar to those of acute ingestion.

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.

Skin: Get medical aid. Immediately flush skin with plenty of 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 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.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Flash Point: Not available.

Autoignition Temperature: Not available.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: Not published.

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. Avoid generating dusty conditions.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use only in a well-ventilated area. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

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: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Selenourea	0.2 mg/m ³ TWA (as Se) (listed under Selenium compounds).	0.2 mg/m ³ TWA (as Se, except Selenium hexafluoride) (listed under Selenium compounds).	0.2 mg/m ³ TWA (as Se) (listed under Selenium compounds).

OSHA Vacated PELs: Selenourea: 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: Solid

Appearance: grey

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: 214 - 215 deg C

Decomposition Temperature: > 200 deg C

Solubility: very soluble in water

Specific Gravity/Density: Not available.

Molecular Formula: CH₄N₂Se

Molecular Weight: 123.02

Section 10 - Stability and Reactivity

Chemical Stability: Stability unknown.

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

Incompatibilities with Other Materials: Strong oxidizing agents, acids, chromium trioxide, potassium bromate.

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide, selenium/selenium oxides.

Hazardous Polymerization: Has not been reported

Section 11 - Toxicological Information

RTECS#:

CAS# 630-10-4: YU1820000

LD50/LC50:

CAS# 630-10-4:

Dermal, guinea pig: LD50 = >50 mg/kg;

Oral, rat: LD50 = 50 mg/kg;

Carcinogenicity:

CAS# 630-10-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No data available.

Teratogenicity: No data available.

Reproductive Effects: No data available.

Mutagenicity: EPA TSCA Section 8(b) CHEMICAL INVENTORY On EPA IRIS database EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, JANUARY 1996

Neurotoxicity: No data 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: CAS# 630-10-4: waste number P103.

RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	SELENIUM COMPOUND, N.O.S.	No information available.
Hazard Class:	6.1	
UN Number:	UN3283	
Packing Group:	II	

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 630-10-4 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

CAS# 630-10-4: 1000 lb final RQ; 454 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313

This material contains Selenourea (listed as Selenium compounds), 99.9+%, (CAS# 630-10-4) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

CAS# 630-10-4 (listed as Selenium 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# 630-10-4 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# 630-10-4 can be found on the following state right to know lists: California, (listed as Selenium compounds), New Jersey, Pennsylvania, Massachusetts.

California Prop 65

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 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

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WGK (Water Danger/Protection)

CAS# 630-10-4: No information available.

Canada - DSL/NDSL

CAS# 630-10-4 is listed on Canada's NDSL List.

Canada - WHMIS

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# 630-10-4 (listed as Selenium compounds) is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information
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MSDS Creation Date: 9/02/1997

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.