

# MATERIAL SAFETY DATA SHEET

MSDS No. EW191084  
Revised Date: 2008/05/28

CODE: 190-03195, 190-10844, 192-10843, 194-10842, 196-03192, 196-10841, 198-03191, 198-10845

## IDENTITY Sodium Selenite

### 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTIFIER : Sodium Selenite  
MANUFACTURER : Wako Pure Chemical Industries, Ltd.  
SUPPLIER : SUPPLIER(In JAPAN) : Wako Pure Chemical Industries, Ltd.  
ADDRESS : 1-2, Doshomachi 3-chome, Chuo-ku, Osaka, 540-8605, Japan  
TELEPHONE NUMBER & EMERGENCY TELEPHONE NUMBER: (06)6203-3741

SUPPLIER(In U.S.A.) : Wako Chemicals USA, Inc.  
ADDRESS : 1600 Bellwood Road, Richmond, VA 23237, U.S.A.  
TELEPHONE NUMBER : (804)271-7677  
EMERGENCY TELEPHONE NUMBER : (800)424-9300 (CHEMTREC)

SUPPLIER(In EUROPE) : Wako Chemicals GmbH, Germany  
ADDRESS : Fuggerstrasse 12 ,D-41468 Neuss, GERMANY  
TELEPHONE NUMBER & EMERGENCY TELEPHONE NUMBER : (02131)311-0

RECOMMENDED USE : Research use only.

### 2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION : Skin corrosion/irritation: Category 2  
Serious eye damage/eye irritation: Category 2A  
Acute toxicity-Oral: Category 2  
Germ cell mutagenicity: Category 2  
Toxic to reproductive: Category 2  
Specific target organ systemic toxicity Single exposure: Category 2<respiratory organ><liver><heart><nervous system>  
Specific target organ systemic toxicity Repeated exposure: Category 2<central nervous system><blood><kidney><liver>  
Hazardous to the aquatic environment -Acute hazard: Category 1  
Hazardous to the aquatic environment -Chronic hazard: Category 1

HAZARD SYMBOL :



**DANGER**

HAZARD STATEMENTS : Causes skin irritation  
Causes serious eye irritation  
Fatal if swallowed  
Suspected of causing genetic defects  
May damage fertility or the unborn child  
May cause damage to organs.<respiratory organ><liver><heart><nervous system>  
May cause damage to organs through prolonged or repeated exposure<central nervous system><blood><kidney><liver>  
Very toxic to aquatic life  
Very toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS : Avoid release to the environment if this is not the intended use.  
Do not eat, drink or smoke when using this product.  
Use personal protective equipment as required.  
Wash thoroughly after handling.  
Wear eye/face protection as specified by the manufacturer/supplier or the competent authority.  
Call a POISON CENTER or doctor/physician if exposed or you feel unwell.  
Collect spillage.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water.  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
Rinse mouth.  
Wash contaminated clothing before reuse.  
Store locked up.  
Dispose of contents/container to a located point (in accordance with local/regional/national/international regulation).

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY : Sodium Selenite  
FORMULA : Na<sub>2</sub>SeO<sub>3</sub>  
MOLECULAR WEIGHT : 172.94  
CAS NUMBER : 10102-18-8  
TSCA INVENTORY : Listed  
EINECS No. : 233-267-9  
EC INDEX NUMBER : 034-003-00-3

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#### 4. FIRST AID MEASURES

GENERAL ADVICE : Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.

INHALATION : Move victim to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, administer artificial respiration. Maintain normal body temperature with a blanket. If irritation persists, transport to a hospital immediately.

SKIN CONTACT : Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, transport to a hospital immediately.

EYE CONTACT : Remove any contact lenses at once. Flush eyes well with a large amount of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, transport to a hospital immediately.

INGESTION : Rinse mouth, give plenty of water to dilute the substance. Never give anything by mouth to an unconscious person. Transport to a hospital immediately.

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#### 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA : Carbon dioxide, dry chemical powder, foam, water

FIRE & EXPLOSION HAZARDS : Toxic, irritating dust or smoke may be emitted.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS : Firemen should wear normal protective equipment (full bunker gear) and positive-pressure self-contained breathing apparatus.

CAUTION : Evacuate personnel to a safe area.

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#### 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS : Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid raising dust and avoid contact with skin and eyes.

ENVIRONMENTAL PRECAUTIONS : Prevent spills from entering sewers, watercourses or low areas.

METHODS FOR CLEANING UP : Do not touch spilled material without suitable protection (See section 8). After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose of contaminated clothing.

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#### 7. HANDLING AND STORAGE

PRECAUTION FOR SAFE HANDLING : Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection.

CONDITIONS FOR SAFE STORAGE : Store away from sunlight in a cool ( <25 °C = 77 °F ) well-ventilated dry place. Keep container tightly closed.

See also the indication described on label for handling.

INCOMPATIBILITIES : Oxidizers and acids

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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES : Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.

VENTILATION : Local Exhaust ; Necessary, Mechanical (General) ; Necessary  
Special; Closed system is Necessary.

INDIVIDUAL PROTECTION MEASURES ;

Respiratory protection : Use a NIOSH/MSHA or European Standard EN149 approved respirator

Hand protection : Chemical resistant gloves

Eye protection : Safety glasses (goggles)

Skin protection : Protective clothing

CONTROL PARAMETER :

OSHA Final Limits : None established

ACGIH TLV(s) : None established

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#### 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : White, crystalline powder - powder

ODOUR : Not available

pH : Not available

MELTING POINT : 350 °C = 662 °F

INITIAL BOILING POINT : 710 °C = 1310 °F (Dec.)

FLASH POINT : Not available  
FLAMMABILITY (solid, gas) : Not available  
EXPLOSIVE LIMITS : Not available  
VAPOR PRESSURE : Not available  
SPECIFIC GRAVITY : 3.1  
SOLUBILITY IN ;  
WATER : Freely soluble (850 g/L at 20 °C= 68 °F)  
PARTITION COEFFICIENT : Not available  
DECOMPOSITION TEMPERATURE : Not available

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## 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY : Will not occur.  
CONDITIONS TO AVOID : Sunlight, heat  
INCOMPATIBLE MATERIALS : Oxidizers and acids  
HAZARDOUS DECOMPOSITION PRODUCTS : Selenium oxides, sodium oxides, may be formed.

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## 11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY(oral/dermal/inhalation) : LD50(oral,rat): 7mg/kg(TXAPA9 20,89,1971)  
LD50(oral,mouse): 7080µg/kg(GISAAA 35(2),14,1970)  
LD50(ivn,rat): 3mg/kg(EQSSDX 1,1,1975)  
SKIN CORROSION/IRRITATION : Human; redness, pain(ICSC, 1998)(SITTING, 4th, 2002),(HSFS, 2002)  
EYE DAMAGE/EYE IRRITATION : Human; redness, pain(ICSC, 1998)(SITTING, 4th, 2002),(HSFS, 2002),(ACGIH-TLV,2004)  
RESPIRATORY OR SKIN SENSITIZATION : SKIN SENSITIZATION ; Positive(EU-Annex, 2005),(HSDB,2002)  
GERM CELL MUTAGENICITY : Mutation in microorganisms; S.typhimurium; 1µmol/plate(MUREAV 66,175,1979)  
DNA repair; S.typhimurium; 10µg/plate(CALEDQ 10,75,1980)  
DNA damage; human; lymphocyte; 100mmol/L(TCMUD8 23(Suppl 2),53,2003)  
TOXIC TO REPRODUCTION : TDLo(oral,rat): 384mg/kg(male 34weeks (RCOCB8 58,183,1987)  
TDLo(oral,mouse): 999mg/kg(female 1-19 D preg) Reproductive-Fertility-post-implantation  
mortality(e.g.dead and/or resorbed implants per total number of implants) Reproductive - effects on  
Embryo or Fetus - fetotoxicity(except death, e.g., stunted fetus) (JONUAL 109,1646,1979)  
STOST-SINGLE EXPOSURE : The substance irritates the eyes, the skin and the respiratory tract. The substance may cause  
effects on the liver, heart, nervous system and gastrointestinal tract. Medical observation is  
indicated.(ICSC 1998)  
STOST-REPEATED EXPOSURE : Repeated or prolonged contact with skin may cause dermatitis. The substance may have effects on  
the central nervous system, bone and blood.(ICSC 1998)  
ASPIRATION TOXICITY : Not available  
CARCINOGENICITY : Not available  
ADDITIONAL INFORMATION :  
NTP : Not listed  
IARC : Not Classifiable as to Carcinogenicity to Humans (Group 3)  
OSHA : Not listed  
ACGIH : Not listed  
EPA GENETOX PROGRAM 1988, Positive: Histidine reversion-Ames test  
EPA GENETOX PROGRAM 1988, Positive/dose: In vitro SCE-human

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## 12. ECOLOGICAL INFORMATION

ECOTOXICITY : LC50(orange-red killifish): 8.62ppm/96hr  
PERSISTENCE AND DEGRADABILITY : This material is the recalcitrant.  
BIOACCUMULATION POTENTIAL : This material is not high bioaccumulatable.  
MOBILITY IN SOIL : Not available  
OTHER ADVERSE EFFECTS : WGK: 2

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## 13. DISPOSAL CONSIDERATION (INCLUDING CONTAINER)

Dispose in a hazardous-waste site in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations ( contact country, local or state environmental agency for specific rules ).

After contents are completely removed, dispose of its container at hazadous or special waste collection point. (in accordance with local/regional/national/international regulation).

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## 14. TRANSPORT INFORMATION

IATA :  
UN NUMBER : UN2630  
UN PROPER SHIPPING NAME : Selenites  
CLASS or DIVISION : Toxic substances.(Division 6.1)  
PACKING GROUP : PG I

MARINE POLLUTANT : No  
DOT(Department of Transportation) :  
IDENTIFICATION NUMBER : UN2630  
PROPER SHIPPING NAME : Selenites  
HAZARD CLASS : Toxic materials (Class 6.1)

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## 15. REGULATORY INFORMATION

### US REGULATIONS :

Mass. Subst. List , New Jers. RTK Haz. Subst. List , Penn. Haz. Subst. List , NTP Test. Prog., CWA/311 Haz., CERCLA Haz. Subst., SARA III/302 Extre. Haz. Subst., DOT Haz. Mat., DOT Haz. Sub. and Rep. Quant.

EPA : CERCLA RQ= 100 lb  
EPCRA TPQ= 100/10000 lb  
SARA RQ= 100 lb  
OSHA :TQ= Not listed

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## 16. OTHER INFORMATION INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS

No specific notes

The above information is believed to be correct to be the best of our knowledge and information but does not purport to be all inclusive and shall be used only as a guide. This product is intended to be used by expert persons having chemical knowledge and skill, at their own discretion and risk and Wako shall not be held liable for any damageresulting from handling or from contact with the above material.