

# MATERIAL SAFETY DATA SHEET

MSDS No. EW190334  
Revised Date: 2012/04/26

CODE: 191-03343, 191-03348, 193-03342, 194-07135, 194-12221, 195-03341, 195-07481, 197-03345, 197-07485, 199-03344

**IDENTITY** Sodium Sulfate

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

PRODUCT IDENTIFIER : Sodium Sulfate  
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 : Not classified.  
PRECAUTIONARY STATEMENTS : \_  
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EU CLASSIFICATION: Not classified dangerous according to Directive 67/548/EEC

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY : Sodium sulfate  
SYNONYMS : Sodium sulfate, anhydrous  
FORMULA : Na<sub>2</sub>SO<sub>4</sub>  
MOLECULAR WEIGHT : 142.04  
CAS NUMBER : 7757-82-6  
TSCA INVENTORY : Listed  
EINECS No. : 231-820-9  
EC INDEX NUMBER : Not listed

## 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 irritation persists, consult a physician.  
SKIN CONTACT : Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.  
EYE CONTACT : Remove any contact lenses at once. Flush eyes well with flooding amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.  
INGESTION : Rinse mouth, give plenty of water to dilute the substance. Never give anything by mouth to an unconscious person. Consult a physician.

## 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA : Carbon dioxide, dry chemical powder, foam, water  
FIRE & EXPLOSION HAZARDS : Toxic and irritating dust, fumes 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.

## 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. This material is hygroscopic.

CONDITIONS FOR SAFE STORAGE : Store away from sunlight in well-ventilated dry place at room temperature. Keep container tightly closed.

INCOMPATIBILITIES : Strong acids, aluminum, magnesium

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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) ; Recommended

INDIVIDUAL PROTECTION MEASURES ;

Respiratory protection :Use a NIOSH/MSHA or European Standard EN149 approved respirator if the vapor concentrations exceed regulatory guidelines.

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, crystals - crystalline powder

ODOUR : Odourless

pH : Not available

MELTING POINT : 888 °C= 1630 °F

INITIAL BOILING POINT : Not available

FLASH POINT : Not available

FLAMMABILITY (solid, gas) : Not available

EXPLOSIVE LIMITS : Not available

VAPOR PRESSURE : Not available

SPECIFIC GRAVITY : 2.671 (at 4 °C= 39 °F)

SOLUBILITY IN ;

WATER : Freely soluble

ALCOHOL : Practically insoluble

PARTITION COEFFICIENT (log Po/w) :Not available

DECOMPOSITION TEMPERATURE : Not available

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## 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY : Stable under recommended storage conditions.

CONDITIONS TO AVOID : Sunlight, heat, moisture

INCOMPATIBLE MATERIALS : Strong acids, aluminum, magnesium

HAZARDOUS DECOMPOSITION PRODUCTS :Sulfur oxides and sodium compounds

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## 11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY(oral/dermal/inhalation) : LD50(ori,mouse): 5989mg/kg(SKEZAP 4,15,1963)

LD50(ivn,rabbit): 1220mg/kg(NIIRDN,-,1257,1990)

SKIN CORROSION/IRRITATION : Not available

EYE DAMAGE/EYE IRRITATION : Not available

RESPIRATORY OR SKIN SENSITIZATION :Not available

GERM CELL MUTAGENICITY : Not available

REPRODUCTIVE TOXICITY : TDLo(ori,mouse): 14gm/kg(8-12 D preg);Effects on newborn(TCMUD8,6,361,1986)

TDLo(par,mouse): 60mg/kg(8 D preg)(Effects on embryo(JPMSAE,62,1626,1973)

STOST (SINGLE EXPOSURE) : Not available

STOST (REPEATED EXPOSURE) : Not available

ASPIRATION HAZARD : Not available

CARCINOGENICITY : TDLo(scu,mouse): 806mg/kg/26W-I(IVIVE4,1,39,1987)

ADDITIONAL INFORMATION ;

NTP : Not listed

IARC : Not listed

OSHA : Not listed  
ACGIH :Not listed  
EPA GENETOX PROGRAM 1988, Negative:Cell transform,-SA7/SHE

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## 12. ECOLOGICAL INFORMATION

ECOTOXICITY : LC50(mosquito fish) : 17500mg/L/48hr  
PERSISTENCE AND DEGRADABILITY :Not available  
BIOACCUMULATION POTENTIAL : Not available  
MOBILITY IN SOIL : Not available  
OTHER ADVERSE EFFECTS : Not available

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## 13. DISPOSAL CONSIDERATION (INCLUDING CONTAINER)

Flush with a lot of water to dilute 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 : Not Restricted.  
MARINE POLLUTANT : No  
DOT(Department of Transportation) :Not a Hazardous Material for DOT shipping.

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## 15. REGULATORY INFORMATION

US REGULATIONS ;  
Mass. Subst. List, Penn. Haz. Subst. List  
EPA : CERCLA RQ= Not listed  
EPCRA TPQ= Not listed  
FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION  
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.