



# UNIVAR

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**For Emergency Assistance involving chemicals call - CHEMTREC (800) 424-9300**

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The Version Date for this MSDS is : 08/07/2002

PRODUCT NAME: SODIUM THIOSULFATE  
 MSDS NUMBER: MZS5230  
 EFFECTIVE DATE: 5/22/02  
 SUPERSEDES: 11/21/2001  
 ISSUED BY: 008614

### 1. PRODUCT IDENTIFICATION

SYNONYMS: SODIUM THIOSULFATE, PENTAHYDRATE; THIOSULFURIC ACID,  
 DISODIUM SALT, PENTAHYDRATE  
 CAS NO: 7772-98-7 (ANHYDROUS) 10102-17-7 (PENTAHYDRATE)  
 MOLECULAR WEIGHT: 248.17  
 CHEMICAL FORMULA:  $Na_2S_2O_3 \cdot 5H_2O$

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO	PERCENT	HAZARDOUS
SODIUM THIOSULFATE	7772-98-7	100%	YES

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

CAUTION! MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

#### POTENTIAL HEALTH EFFECTS

##### INHALATION:

MAY CAUSE IRRITATION TO THE RESPIRATORY TRACT. SYMPTOMS MAY INCLUDE COUGHING AND SHORTNESS OF BREATH.

##### INGESTION:

LOW LEVEL OF TOXICITY BY INGESTION. DIARRHEA MAY OCCUR BY INGESTION OF

LARGE QUANTITIES.

SKIN CONTACT:  
IRRITATION MAY OCCUR FROM PROLONGED SKIN CONTACT.

EYE CONTACT:  
CONTACT MAY CAUSE MECHANICAL IRRITATION.

CHRONIC EXPOSURE:  
CHRONIC EXPOSURE MAY CAUSE SKIN EFFECTS.

AGGRAVATION OF PRE-EXISTING CONDITIONS:  
NO INFORMATION FOUND.

#### 4. FIRST AID MEASURES

INHALATION:  
REMOVE TO FRESH AIR. GET MEDICAL ATTENTION FOR ANY BREATHING DIFFICULTY.

INGESTION:  
INDUCE VOMITING IMMEDIATELY AS DIRECTED BY MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION.

SKIN CONTACT:  
WASH EXPOSED AREA WITH SOAP AND WATER. GET MEDICAL ADVICE IF IRRITATION DEVELOPS.

EYE CONTACT:  
WASH THOROUGHLY WITH RUNNING WATER. GET MEDICAL ADVICE IF IRRITATION DEVELOPS.

#### 5. FIRE FIGHTING MEASURES

FIRE:  
NOT CONSIDERED TO BE A FIRE HAZARD.

EXPLOSION:  
NOT CONSIDERED TO BE AN EXPLOSION HAZARD.

FIRE EXTINGUISHING MEDIA:  
USE ANY MEANS SUITABLE FOR EXTINGUISHING SURROUNDING FIRE.

SPECIAL INFORMATION:  
USE PROTECTIVE CLOTHING AND BREATHING EQUIPMENT APPROPRIATE FOR THE SURROUNDING FIRE.

#### 6. ACCIDENTAL RELEASE MEASURES

VENTILATE AREA OF LEAK OR SPILL. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT AS SPECIFIED IN SECTION 8. SPILLS: SWEEP UP AND CONTAINERIZE FOR RECLAMATION OR DISPOSAL. VACUUMING OR WET SWEEPING MAY BE USED TO AVOID DUST DISPERSAL.

#### 7. HANDLING AND STORAGE

KEEP IN A TIGHTLY CLOSED CONTAINER, STORED IN A COOL, DRY, VENTILATED AREA.

PROTECT AGAINST PHYSICAL DAMAGE. ISOLATE FROM INCOMPATIBLE SUBSTANCES. CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTY SINCE THEY RETAIN PRODUCT RESIDUES (DUST, SOLIDS); OBSERVE ALL WARNINGS AND PRECAUTIONS LISTED FOR THE PRODUCT.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

AIRBORNE EXPOSURE LIMITS:  
NONE ESTABLISHED.

VENTILATION SYSTEM:  
IN GENERAL, DILUTION VENTILATION IS A SATISFACTORY HEALTH HAZARD CONTROL FOR THIS SUBSTANCE. HOWEVER, IF CONDITIONS OF USE CREATE DISCOMFORT TO THE WORKER, A LOCAL EXHAUST SYSTEM SHOULD BE CONSIDERED.

PERSONAL RESPIRATORS (NIOSH APPROVED):  
FOR CONDITIONS OF USE WHERE EXPOSURE TO DUST OR MIST IS APPARENT AND ENGINEERING CONTROLS ARE NOT FEASIBLE, A PARTICULATE RESPIRATOR (NIOSH TYPE N95 OR BETTER FILTERS) MAY BE WORN. IF OIL PARTICLES (E.G. LUBRICANTS, CUTTING FLUIDS, GLYCERINE, ETC.) ARE PRESENT, USE A NIOSH TYPE R OR P FILTER. FOR EMERGENCIES OR INSTANCES WHERE THE EXPOSURE LEVELS ARE NOT KNOWN, USE A FULL-FACE POSITIVE-PRESSURE, AIR-SUPPLIED RESPIRATOR.  
WARNING: AIR-PURIFYING RESPIRATORS DO NOT PROTECT WORKERS IN OXYGEN-DEFICIENT ATMOSPHERES.

SKIN PROTECTION:  
WEAR PROTECTIVE GLOVES AND CLEAN BODY-COVERING CLOTHING.

EYE PROTECTION:  
SAFETY GLASSES. MAINTAIN EYE WASH FOUNTAIN AND QUICK-DRENCH FACILITIES IN WORK AREA.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:  
MONOCLINIC, COLORLESS CRYSTALS.

BOILING POINT:  
> 100C (> 212F)

ODOR:MELTING POINT:  
ODORLESS.

48C (118F) LOSES WATER @ 100C (212F)

SOLUBILITY:  
79G/100 ML WATER @ 4C (39F)

VAPOR DENSITY (AIR=1):  
NO INFORMATION FOUND.

DENSITY:  
1.75 NO INFORMATION FOUND.

VAPOR PRESSURE (MM HG):

PH: EVAPORATION RATE (BUAC=1):  
NO INFORMATION FOUND.

NO INFORMATION FOUND.

% VOLATILES BY VOLUME @ 21C (70F):  
0

#### 10. STABILITY AND REACTIVITY

STABILITY:  
STABLE UNDER ORDINARY CONDITIONS OF USE AND STORAGE. STABILITY LIMITED IN SOLUTION.

HAZARDOUS DECOMPOSITION PRODUCTS:  
OXIDES OF SULFUR AND HYDROGEN SULFIDE.

HAZARDOUS POLYMERIZATION:  
WILL NOT OCCUR.

INCOMPATIBILITIES:  
SODIUM NITRATE, HALOGENS, AND OXIDIZING AGENTS. REACTS WITH ACIDS TO  
RELEASE SULFUR DIOXIDE.

CONDITIONS TO AVOID:  
INCOMPATIBLES.

11. TOXICOLOGICAL INFORMATION

NO LD50/LC50 INFORMATION FOUND RELATING TO NORMAL ROUTES OF OCCUPATIONAL  
EXPOSURE.

-----/CANCER LISTS/-----

---NTP CARCINOGEN---	KNOWN	ANTICIPATED	IARC CATEGOR
INGREDIENT			
SODIUM THIOSULFATE (7772-98-7)	NO	NO	NONE

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE:  
NO INFORMATION FOUND.

ENVIRONMENTAL TOXICITY:  
NO INFORMATION FOUND.

13. DISPOSAL CONSIDERATIONS

WHATEVER CANNOT BE SAVED FOR RECOVERY OR RECYCLING SHOULD BE MANAGED IN AN  
APPROPRIATE AND APPROVED WASTE DISPOSAL FACILITY. PROCESSING, USE OR  
CONTAMINATION OF THIS PRODUCT MAY CHANGE THE WASTE MANAGEMENT OPTIONS.  
STATE AND LOCAL DISPOSAL REGULATIONS MAY DIFFER FROM FEDERAL DISPOSAL  
REGULATIONS.

DISPOSE OF CONTAINER AND UNUSED CONTENTS IN ACCORDANCE WITH FEDERAL, STATE  
AND LOCAL REQUIREMENTS.

14. TRANSPORT INFORMATION

NOT REGULATED.

15. REGULATORY INFORMATION

-----/CHEMICAL INVENTORY STATUS - PART 1/-----

INGREDIENT	TSCA	EC	JAPAN	AUSTRALIA
SODIUM THIOSULFATE (7772-98-7)	YES	YES	YES	YES

## -----/CHEMICAL INVENTORY STATUS - PART 2/-----

--CANADA--

INGREDIENT	KOREA	DSL	NDSL	PHIL.
SODIUM THIOSULFATE (7772-98-7)	YES	YES	NO	YES

## -----/FEDERAL, STATE &amp; INTERNATIONAL REGULATIONS - PART 1/-----

-SARA 302- -----SARA 313-----

INGREDIENT	RQ	TPQ	LIST	CHEMICAL CATG
SODIUM THIOSULFATE (7772-98-7)	NO	NO	NO	NO

## -----/FEDERAL, STATE &amp; INTERNATIONAL REGULATIONS - PART 2/-----

INGREDIENT	CERCLA	-RCRA- 261.33	-TSCA- 8(D)
SODIUM THIOSULFATE (7772-98-7)	NO	NO	NO

CHEMICAL WEAPONS CONVENTION: NO      TSCA 12(B): NO      CDTA: NO  
 SARA 311/312: ACUTE: YES      CHRONIC: NO      FIRE: NO      PRESSURE: NO  
 REACTIVITY: NO      (PURE / SOLID)

AUSTRALIAN HAZCHEM CODE: NONE ALLOCATED.  
 POISON SCHEDULE: NONE ALLOCATED.

WHMIS: THIS MSDS HAS BEEN PREPARED ACCORDING TO THE HAZARD CRITERIA OF THE CONTROLLED PRODUCTS REGULATIONS (CPR) AND THE MSDS CONTAINS ALL OF THE INFORMATION REQUIRED BY THE CPR.

## 16. OTHER INFORMATION

## NFPA RATINGS:

HEALTH: 1    FLAMMABILITY: 0    REACTIVITY: 0

## REVISION INFORMATION:

MSDS SECTION(S) CHANGED SINCE LAST REVISION OF DOCUMENT INCLUDE: 3.

## For Additional Information:

Contact: MSDS Coordinator - Univar USA  
 During business hours, Pacific Time - (425) 889-3400

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END OF MSDS