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MSDS No: M00278

## SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product Name:** Sodium Thiosulfate  
**Catalog Number:** 2293766

HACH LANGE GmbH  
Willstätterstrasse 11  
40549 Düsseldorf, Germany  
+49 -(0)211 -52880

Emergency Telephone Numbers:  
(Poison Information Center Main)  
(+49 (0) 6131 19240) 24 HR

**SDS Number:** M00278

**Chemical Name:** Sodium Thiosulfate, Anhydrous

**Chemical Formula:** Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> · 5H<sub>2</sub>O

**Chemical Family:** Reducing Agent

**Use of the substance/preparation:** Laboratory Reagent

**CAS No.:** 10102 -17

**Hazard:** May cause irritation.

**Date of MSDS Preparation:**

**Day:** 12

**Month:** 01

**Year:** 2006

**Additional Emergency Response Numbers:** Austria: +49 (0)6131 19240, Belgium: +32 -(0)70 -245245, France: +33 (0)1 -40370404, Italy: +39 -026101029, Netherlands: +31 -(0)30 -2748888, Switzerland: +41 -(0)1 -2515151

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

#### Sodium Thiosulfate

**EEC Number:** 2318675

**CAS No.:** 10102 -17-7

**Percent Range:** 100,0

**Percent Range Units:** weight / weight

**Ingredient EEC Symbol:** Not applicable

**Ingredient R phrase(s) (R phrase details given in Heading 16):** Not applicable

**TLV:** Not established

**PEL:** Not established

**EU Occupational Exposure Limits:** 3 mg/m<sup>3</sup>, Inhalable dust

### 3. HAZARDS IDENTIFICATION

#### **Emergency Overview:**

**Appearance:** Colorless crystals

**Odor:** None

**EU Symbols :** Not applicable

**R PHRASES:** Not applicable

#### **Protective Equipment:**

#### **Potential Health Effects:**

**Eye Contact (EC):** May cause irritation

**Skin Contact (EC):** No effects are anticipated

**Skin Absorption (EC):** None Reported

**Target Organs (SA E):** None Reported

**Ingestion (EC):** Causes: gastrointestinal tract irritation

**Target Organs (Ing E):** None Reported

**Inhalation:** May cause: irritation of nose and throat

**Target Organs (Inh E):** None Reported

**Medical Conditions Aggravated:** None reported

**Chronic Effects:** None reported

**Cancer / Reproductive Toxicity Information:**

IARC Listed: No

**Additional Cancer / Reproductive Toxicity Information:** None reported  
**Toxicologically Synergistic Products:** None reported

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#### 4. FIRST AID MEASURES

**Eye Contact:** Immediately flush eyes with water for 15 minutes. Call physician.

**Skin Contact (First Aid):** Wash skin with plenty of water. Call physician if irritation develops.

**Ingestion (First Aid):** Give 1 -2 glasses of water. Call physician immediately. Never give anything by mouth to an unconscious person.

**Inhalation:** Remove to fresh air.

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#### 5. FIRE FIGHTING MEASURES

**Flammable Properties:** During a fire, this product decomposes to form toxic gases.

**Hazardous Combustion Products:** Toxic fumes of: sulfur oxides.

**Fire / Explosion Hazards:** May react violently with: strong oxidizers

**Static Discharge:** None reported.

**Mechanical Impact:** None reported

**Extinguishing Media:** Water. Carbon dioxide Dry chemical.

**Extinguishing Media NOT To Be Used:** Not applicable Not applicable Not applicable

**Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

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#### 6. ACCIDENTAL RELEASE MEASURES

**Spill Response Notice:**

Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

**Containment Technique:** Stop spilled material from being released to the environment.

**Clean-up Technique:** Scoop up spilled material into a large beaker and dissolve with water. Flush the spilled material to the drain with a large excess of water. Decontaminate the area of the spill with a soap solution.

**Evacuation Procedure:** Evacuate as needed to perform spill clean-up. If conditions warrant, increase the size of the evacuation.

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#### 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes Do not breathe dust. Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.

**Storage:** Keep away from: oxidizers Protect from: moisture

**Special Packaging Instructions:** Not applicable

**Use of the substance/preparation:** Laboratory Reagent

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#### 8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

**Engineering Controls:** Maintain general industrial hygiene practices when using this product.

**Personal Protective Equipment:**

**Eye Protection:** safety glasses with top and side shields

**Skin / Hand Protection:** disposable latex gloves

**Inhalation Protection:** adequate ventilation

**Precautionary Measures:** Avoid contact with: eyes Do not breathe: dust Wash thoroughly after handling. Keep away from: oxidizers

*TLV:* Not established  
*PEL:* Not established  
*EU Occupational Exposure Limits:* 3 mg/m<sup>3</sup>, Inhalable dust

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## 9. PHYSICAL / CHEMICAL PROPERTIES

*Appearance:* Colorless crystals  
*Physical State:* Solid  
*Odor:* None  
*pH:* of 5% solution = 6,5 - 8  
*Vapor Pressure:* Not applicable  
*Vapor Density (air = 1):* Not applicable  
*Boiling Point:* Not applicable  
*Melting Point:* 48° C 118° F  
*Flash Point:* Not applicable  
*Method:* Not applicable  
*Autoignition Temperature:* Not determined  
*Flammability Limits:*  
*Lower Explosion Limits:* Not applicable  
*Upper Explosion Limits:* Not applicable  
*Specific Gravity (water = 1):* 1,69  
*Evaporation Rate (water = 1):* Not applicable  
*Volatile Organic Compounds Content:* 0,0%  
*Partition Coefficient (n -octanol / water):* Not available  
*Solubility:*  
*Water:* Soluble  
*Acid:* Not determined  
*Other:* Not determined  
*Metal Corrosivity:*  
*Steel:* Not determined  
*Aluminum:* Not determined

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## 10. STABILITY / REACTIVITY

*Chemical Stability:* Stable when stored under proper conditions.  
*Conditions to Avoid:* Heating to decomposition. Excess moisture  
*Reactivity / Incompatibility:* May react violently in contact with: sodium nitrite oxidizers  
*Hazardous Decomposition:* Toxic fumes of sulfur oxides.  
*Hazardous Polymerization:* Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

*Product Toxicological Data:*  
*LD50:* Oral rat LD50 > 8 gm/kg  
*LC50:* None reported  
*Dermal Toxicity Data:* None reported  
*Skin and Eye Irritation Data:* None reported  
*Mutation Data:* None reported  
*Reproductive Effects Data:* None reported  
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*Ingredient Toxicological Data:* --  
Not applicable  
IARC Listed: No

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## 12. ECOLOGICAL INFORMATION

*Product Ecological Information:* Aquatic toxicity: 24000 mg / l / 96 hours / mosquito -fish / TLm / turbid water at 22° -24° C

**Ingredient Ecological Information:** --  
Not applicable

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### 13. DISPOSAL CONSIDERATIONS

**NOTICE (Disposal):** These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information. In Europe: Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

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### 14. TRANSPORT INFORMATION

**I.C.A.O.:**

**I.C.A.O. Proper Shipping Name:** Not Currently Regulated

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**ICAO Hazard Class:** NA

**ICAO Subsidiary Risk:** NA

**ICAO UN/ID Number:** NA

**ICAO Packing Group:** NA

**I.M.O.:**

**I.M.O. Proper Shipping Name:** Not Currently Regulated

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**I.M.O. Hazard Class:** NA

**I.M.O. Subsidiary Risk:** NA

**I.M.O. UN Number:** NA

**I.M.O. Packing Group:** NA

**A.D.R.:**

**A.D.R. Proper Shipping Name:** Not Currently Regulated

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**A.D.R Hazard Class:** NA

**A.D.R. Subsidiary Risk:** NA

**A.D.R. UN -Number::** NA

**A.D.R. Packing Group:** NA

**Additional Information:** This product may be shipped as part of a chemical kit composed of various compatible dangerous goods for analytical or testing purposes. This kit would have the following classification: Proper Shipping Name: Chemical Kit Hazard Class: 9 UN Number 3316

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### 15. REGULATORY INFORMATION

**National Inventories:**

**EEC Inventory Status:** EINECS Listed: Yes

**EEC Number:** 2318675

**EEC LABEL COPY:**

**EU Symbols:** Not applicable

**R PHRASES:** Not applicable

**S PHRASES:** Not applicable

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### 16. OTHER INFORMATION

**References:** TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. The Merck Index, 11th Ed. Rahway, New Jersey: Merck and Co., Inc., 1989. Technical Judgment. Sax, N. Irving. Dangerous Properties of Industrial Materials, 7th Ed. New York: Van Nostrand Reinhold Co., 1989. In-house information. List of Dangerous Substances Classified in Annex I of the EEC Directive (67/548) - Classification, Packaging and Labeling of Dangerous Substances, Amended July 1992. CCINFO RTECS. Canadian Centre for Occupational Health and Safety. Hamilton, Ontario Canada: 30 June 1993. CCINFO MSDS/FTSS. Canadian Centre for Occupational Health and Safety. Hamilton, Ontario Canada: 30 June 1993. Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor).

**R PHRASES:** Not applicable

**Use of the substance/preparation:** Laboratory Reagent

**Revision Summary:** Updates in Section(s) 14,

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**Legend:**

NA - Not Applicable	w/w - weight/weight
ND - Not Determined	w/v - weight/volume
NV - Not Available	v/v - volume/volume

**USER RESPONSIBILITY:** Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

**THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.**

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