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MSDS No: M00105

# SAFETY DATA SHEET

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

**Product Name:** Copper Masking Reagent  
**Catalog Number:** 2603449

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:** M00105

**Chemical Name:** Not applicable

**Chemical Formula:** Not applicable

**Chemical Family:** Not applicable

**Use of the substance/preparation:** Complexes copper to provide reagent blank

**CAS No.:** Not applicable

**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: +39-0266101029, 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:** 85,0 - 95,0

**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

### Disodium Succinate

**EEC Number:** 2057787

**CAS No.:** 610624

**Percent Range:** 5,0 - 15,0

**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:** White powder  
**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):** No effects anticipated  
**Target Organs (SA E):** Not applicable  
**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:**  
This product does NOT contain any IARC listed chemicals.

**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.  
**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: carbon monoxide, carbon dioxide. 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:** Protect from: moisture Keep away from: oxidizers  
**Special Packaging Instructions:** Not applicable

*Use of the substance/preparation:* Complexes copper to provide reagent blank

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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:* lab coat 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:* White powder

*Physical State:* Solid

*Odor:* None

*pH:* of 5% solution = 7,9

*Vapor Pressure:* Not applicable

*Vapor Density (air = 1):* Not applicable

*Boiling Point:* Not applicable

*Melting Point:* Partial decomposition at 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):* 2,22

*Evaporation Rate (water = 1):* Not applicable

*Volatile Organic Compounds Content:* Not determined

*Partition Coefficient (n-octanol / water):* Not determined

*Solubility:*

*Water:* Soluble

*Acid:* Soluble

*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:* Excess moisture Heating to decomposition.

*Reactivity / Incompatibility:* Incompatible with: oxidizers sodium nitrite

*Hazardous Decomposition:* Toxic fumes of: carbon dioxide carbon monoxide sulfur oxides

*Hazardous Polymerization:* Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

*Product Toxicological Data:*

*LD50:* None reported

*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:** Sodium Thiosulfate: Oral rat LD50 > 8 gm/kg

This product does NOT contain any IARC listed chemicals.

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## 12. ECOLOGICAL INFORMATION

**Product Ecological Information:** No information reported for this product.

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

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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:** All ingredients used to make this product are listed on EINECS / ELINCS.

**EEC Number:** Not applicable

**EEC LABEL COPY:**

**EU Symbols:** Not applicable

**R PHRASES:** Not applicable

**S PHRASES:** Not applicable

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## 16. OTHER INFORMATION

**References:** Fire Protection Guide on Hazardous Materials, 10th Ed. Quincy, MA: National Fire Protection Fire Protection Guide on Hazardous Materials, 10th Ed. Quincy, MA: National Fire Protection Association, 1991. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Technical Judgment. In-house information. 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:** Complexes copper to provide reagent blank

**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.

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