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MSDS No: M00380

# SAFETY DATA SHEET

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

**Product Name:** Mercuric Thiocyanate Solution  
**Catalog Number:** 2212129

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:** M00380

**Chemical Name:** Not applicable

**Chemical Formula:** Not applicable

**Chemical Family:** Not applicable

**Use of the substance/preparation:** Determination of chloride

**CAS No.:** Not applicable

**Hazard:** Toxic. Cumulative poison. Flammable. Cannot be made non-toxic. Experimental teratogen.

**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

### Mercuric Thiocyanate

**EEC Number:** 2097730

**CAS No.:** 592-85-8 Contains Mercury, Dispose Per Local, State or Federal Laws

**Percent Range:** < 0,5

**Percent Range Units:** weight / weight

**Ingredient EEC Symbol:** Not applicable

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

**TLV:** 0,1 mg(Hg)/m<sup>3</sup> (skin)

**PEL:** 0,1 mg(Hg)/m<sup>3</sup> (skin)

**EU Occupational Exposure Limits:** 0,1 mg/m<sup>3</sup>

### Methyl Alcohol

**EEC Number:** 2006596

**CAS No.:** 67561

**Percent Range:** > 99,0

**Percent Range Units:** weight / weight

**Ingredient EEC Symbol:** F - HIGHLY FLAMMABLE T - TOXIC

**Ingredient R phrase(s) (R phrase details given in Heading 16):** R 11

**TLV:** 200 ppm

**PEL:** 200 ppm

**EU Occupational Exposure Limits:** 200 ppm (260 mg/m<sup>3</sup>)

## 3. HAZARDS IDENTIFICATION

**Emergency Overview:**

**Appearance:** Clear, colorless liquid

**Odor:** Alcoholic

**EU Symbols:** T - TOXIC F - HIGHLY FLAMMABLE

**R PHRASES:** R 11: Highly flammable. R 23/24/25: Toxic by inhalation, in contact with skin and if swallowed. R 39/23/24/25: Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

**Protective Equipment:**

**Potential Health Effects:**

**Eye Contact (EC):** Causes moderate irritation

**Skin Contact (EC):** Causes moderate irritation

**Skin Absorption (EC):** Toxic Effects similar to those of ingestion

**Target Organs (SA E):** Optic nerve Central nervous system Kidneys Cardiovascular system

**Ingestion (EC):** Toxic Cannot be made non-toxic. Methanol causes central nervous system depression, symptoms may include: drunkenness, drowsiness, dizziness, lightheadedness, unconsciousness and coma. Methanol causes cardiovascular effects such as cardiac depression and blood pressure changes. Methanol may cause irritation of the eyes, visual impairment or blindness. May cause: headache weakness nausea vomiting shock loosening of the teeth toxic nephritis (inflammation of the kidneys) liver damage kidney damage

**Target Organs (Ing E):** Optic nerve Central nervous system Cardiovascular system Kidneys Liver

**Inhalation:** Methanol causes central nervous system depression, symptoms may include: drunkenness, drowsiness, dizziness, lightheadedness, unconsciousness and coma. Methanol causes cardiovascular effects such as cardiac depression and blood pressure changes. Methanol may cause irritation of the eyes, visual impairment or blindness. May cause: mouth soreness nausea vomiting headache weakness muscular twitching kidney damage loosening of the teeth death

**Target Organs (Inh E):** Optic nerve Central nervous system Cardiovascular system Kidneys

**Medical Conditions Aggravated:** Allergies or sensitivity to mercury. Pre-existing: Eye conditions Skin conditions Kidney conditions Central nervous system diseases

**Chronic Effects:** Methanol is a cumulative poison. Methanol may cause visual impairment and possibly blindness by repeated or prolonged exposure. Mercury is a general protoplasmic poison; it circulates in the blood and is stored in the liver, kidneys, spleen and bones. Main symptoms are sore mouth, tremors and psychic disturbances. Chronic overexposure may cause central nervous system effects brain damage kidney damage liver damage

**Cancer / Reproductive Toxicity Information:**

This product does NOT contain any IARC listed chemicals.

**Additional Cancer / Reproductive Toxicity Information:** Contains: an experimental mutagen. an experimental teratogen.

**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 soap and plenty of water for 15 minutes. Remove contaminated clothing. Call physician immediately.

**Ingestion (First Aid):** Induce vomiting using syrup of ipecac or by sticking finger down throat. Never give anything by mouth to an unconscious person. Call physician immediately.

**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. Call physician.

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## 5. FIRE FIGHTING MEASURES

**Flammable Properties:** Flammable liquid and vapors. Can burn in fire, releasing toxic vapors.

**Hazardous Combustion Products:** Toxic fumes of: mercury carbon monoxide, carbon dioxide.

**Fire / Explosion Hazards:** Flammable Liquid Do not expose to flames. Do not expose to sparks or other ignition sources. May react violently with: strong oxidizers

**Static Discharge:** None reported.

**Mechanical Impact:** None reported

**Extinguishing Media:** Carbon dioxide Alcohol foam. 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:** Releases of this material may contaminate the environment. Remove all combustible material from spill area. Remove all ignition and spark-creating sources from the spill area. Cover spilled liquid with a commercially available flammable liquid sorbent such as vapor barrier blanket or activated carbon to avoid evolution of fumes. Vapors may travel to a source of ignition and flash back. May be ignited by: heat, sparks, or flames. Material will float on water creating a fire hazard. Dike the material to create a barrier to combustibles.

**Clean-up Technique:** Eliminate all sources of ignition. Mercury and its compounds are extremely toxic! Be extremely careful not to contact the spill or breathe any vapors. Absorb spilled liquid with non-reactive sorbent material. Sweep up spilled material and absorbent with non-sparking tools. Dispose of material in an E.P.A. approved hazardous waste facility. Dispose of all mercury contaminated material at an E.P.A. hazardous waste facility. Decontaminate area with commercially available mercury absorbing compounds.

**Evacuation Procedure:** Evacuate general area (50 foot radius or as directed by your facility's emergency response plan) when: any quantity is spilled. If conditions warrant, increase the size of the evacuation.

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## 7. HANDLING AND STORAGE

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

**Storage:** Protect from: sparks, flames and other ignition sources light Keep away from: oxidizers

**Special Packaging Instructions:** Not applicable

**Use of the substance/preparation:** Determination of chloride

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## 8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

**Engineering Controls:** Have an eyewash station nearby. Use a fume hood to avoid exposure to dust, mist or vapor. Maintain general industrial hygiene practices when using this product.

**Personal Protective Equipment:**

**Eye Protection:** chemical splash goggles

**Skin / Hand Protection:** nitrile gloves lab coat

**Inhalation Protection:** laboratory fume hood

**Precautionary Measures:** Avoid contact with: eyes skin clothing Do not breathe: mist/vapor Wash thoroughly after handling. Protect from: light heat sparks, flames and other ignition sources Keep away from: oxidizers

**TLV:** Not established

**PEL:** Not established

**EU Occupational Exposure Limits:** For methyl alcohol: 200 ppm (260 mg/m<sup>3</sup>)

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## 9. PHYSICAL / CHEMICAL PROPERTIES

**Appearance:** Clear, colorless liquid

**Physical State:** Liquid

**Odor:** Alcoholic

**pH:** Not available

**Vapor Pressure:** 100 mm @ 100°C (212°F)

**Vapor Density (air = 1):** 1,11

**Boiling Point:** 65°C; 149°F

**Melting Point:** -98°C; -144°F

**Flash Point:** 12°C; 54°F

**Method:** Closed cup

**Autoignition Temperature:** 385°C; 725°F

**Flammability Limits:**

**Lower Explosion Limits:** 6,7%

**Upper Explosion Limits:** 36,5%

**Specific Gravity (water = 1):** 0,79

**Evaporation Rate (water = 1):** 5,9

**Volatile Organic Compounds Content:** ~100%

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

**Solubility:**

**Water:** Miscible

**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:** Exposure to light. Extreme temperatures  
**Reactivity / Incompatibility:** Incompatible with: oxidizers  
**Hazardous Decomposition:** Toxic fumes of: mercury carbon monoxide carbon dioxide  
**Hazardous Polymerization:** Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

**Product Toxicological Data:**

**LD50:** None reported

**LC50:** None reported

**Dermal Toxicity Data:** Methanol Skin monkey LDLo = 393 mg/kg; Methanol Skin rabbit LD50 = 15800 mg/kg;  
Mercuric Thiocyanate Skin rat LD50 = 685 mg/kg

**Skin and Eye Irritation Data:** Methanol Skin rabbit 20 mg/24H - MODERATE; Methanol Eye rabbit 100 mg/24H - MODERATE

**Mutation Data:** Methanol: DNA inhibition - Human - Lymphocytes - 300 mmol/l; DNA damage - Oral rat - 10µg/kg

**Reproductive Effects Data:** Methanol: Inhalation mouse 1500 ppm/6H Specific developmental abnormalities - Central nervous system; Inhalation rat 10000 ppm/7H Embryo or Fetus - Fetotoxicity

Inhalation rat 20000 ppm/7H Specific developmental abnormalities - musculoskeletal, endocrine system, cardiovascular, urogenital

**Ingredient Toxicological Data:** Methanol Oral rat LD50 = 5628 mg/kg; oral human LDLo = 143 mg/kg; Mercuric Thiocyanate Oral rat LD50 = 46 mg/kg

This product does NOT contain any IARC listed chemicals.

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## 12. ECOLOGICAL INFORMATION

**Product Ecological Information:** --

No ecological data available for this product.

**Ingredient Ecological Information:** --

No ecological data available for the ingredients of this product.

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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:** Methanol Solution

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**ICAO Hazard Class:** 3

**ICAO Subsidiary Risk:** 6,1

**ICAO UN/ID Number:** UN1230

**ICAO Packing Group:** II

**I.M.O.:**

**I.M.O. Proper Shipping Name:** Methanol Solution

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**I.M.O. Hazard Class:** 3

*I.M.O. Subsidiary Risk:* 6,1  
*I.M.O. UN Number:* UN1230  
*I.M.O. Packing Group:* II

**A.D.R.:**

*A.D.R. Proper Shipping Name:* Methanol Solution

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*A.D.R Hazard Class:* 3  
*A.D.R. Subsidiary Risk:* 6,1  
*A.D.R. UN-Number::* 1230  
*A.D.R. Packing Group:* II

**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:* T - TOXIC F - HIGHLY FLAMMABLE

**R PHRASES:** R 11: Highly flammable. R 23/24/25: Toxic by inhalation, in contact with skin and if swallowed. R 39/23/24/25: Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

**S PHRASES:** S 7: Keep container tightly closed. S 16: Keep away from sources of ignition - No smoking. S 36/37: Wear suitable protective clothing and gloves. S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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## 16. OTHER INFORMATION

**References:** 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor). Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. CCINFO RTECS. Canadian Centre for Occupational Health and Safety. Hamilton, Ontario Canada: 30 June 1993. 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. 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. Sax, N. Irving. Dangerous Properties of Industrial Materials, 7th Ed. New York: Van Nostrand Reinhold Co., 1989. Technical Judgment. Vendor Information.

**R PHRASES:** R 11: Highly flammable. R 23/24/25: Toxic by inhalation, in contact with skin and if swallowed. R 39/23/24/25: Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

**Use of the substance/preparation:** Determination of chloride

**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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(970) 669-3050

MSDS No: M00383

## SAFETY DATA SHEET

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

**Product Name:** Ferric Ion Solution  
**Catalog Number:** 2212242

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:** M00383

**Chemical Name:** Not applicable

**Chemical Formula:** Not applicable

**Chemical Family:** Not applicable

**Use of the substance/preparation:** Determination of chloride

**CAS No.:** Not applicable

**Hazard:** Causes burns.

**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

#### Ferric Perchlorate

**EEC Number:** 2369080

**CAS No.:** 13537-24-1

**Percent Range:** 5,0 - 10,0

**Percent Range Units:** weight / volume

**Ingredient EEC Symbol:** C - CORROSIVE

**Ingredient R phrase(s) (R phrase details given in Heading 16):** R 9

**TLV:** Not established

**PEL:** Not established

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

#### Demineralized Water

**EEC Number:** 2317912

**CAS No.:** 7732185

**Percent Range:** 80,0 - 90,0

**Percent Range Units:** volume / volume

**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:** Not established

#### Perchloric Acid

**EEC Number:** 2315124

**CAS No.:** 7604908

**Percent Range:** 1,0 - 10,0

**Percent Range Units:** volume / volume  
**Ingredient EEC Symbol:** C - CORROSIVE  
**Ingredient R phrase(s) (R phrase details given in Heading 16):** R 8 R 22 R 35 R 5  
**TLV:** Not established  
**PEL:** Not established  
**EU Occupational Exposure Limits:** Not established

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### 3. HAZARDS IDENTIFICATION

**Emergency Overview:**

**Appearance:** Clear, light pink liquid  
**Odor:** Odorless  
**EU Symbols:** C - CORROSIVE  
**R PHRASES:** R 34: Causes burns.

**Protective Equipment:**

**Potential Health Effects:**

**Eye Contact (EC):** Causes burns  
**Skin Contact (EC):** Causes burns  
**Skin Absorption (EC):** None Reported  
**Target Organs (SA E):** None Reported  
**Ingestion (EC):** Causes: burns May cause: abdominal pain nausea vomiting thirst diarrhea circulatory collapse  
excitation body temperature reduction  
**Target Organs (Ing E):** None Reported  
**Inhalation:** Causes: burns May cause: choking coughing chest pain  
**Target Organs (Inh E):** None Reported  
**Medical Conditions Aggravated:** Pre-existing: Eye conditions Skin conditions Respiratory conditions  
**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 for 15 minutes. Remove contaminated clothing. Call physician immediately.  
**Ingestion (First Aid):** Do not induce vomiting. Give 1-2 glasses of water. Call physician immediately. Never give anything by mouth to an unconscious person.  
**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. Call physician.

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### 5. FIRE FIGHTING MEASURES

**Flammable Properties:** Material will not burn.  
**Hazardous Combustion Products:** None reported  
**Fire / Explosion Hazards:** Drying to completion may form explosive products.  
**Static Discharge:** None reported.  
**Mechanical Impact:** When dry, explodes with shock, heat or friction.  
**Extinguishing Media:** Use media appropriate to surrounding fire conditions  
**Extinguishing Media NOT To Be Used:** 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:** Absorb spilled liquid with non-reactive sorbent material. Stop spilled material from being released to the environment.

**Clean-up Technique:** Cover spilled material with an alkali, such as soda ash or sodium bicarbonate. Scoop up slurry into a large beaker. Dilute with a large excess of water. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Flush reacted material to the drain with a large excess of water. Decontaminate the area of the spill with a soap solution.

**Evacuation Procedure:** Evacuate local area (15 foot radius or as directed by your facility's emergency response plan) when: any quantity is spilled. If conditions warrant, increase the size of the evacuation.

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## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes skin clothing Do not breathe mist or vapors. Wash thoroughly after handling. Use with adequate ventilation. Maintain general industrial hygiene practices when using this product.

**Storage:** Store away from: alkalies oxidizable materials combustible materials reducers Do not allow product to dry out. Store between 10° and 25°C. Protect from: light

**Special Packaging Instructions:** Not applicable

**Use of the substance/preparation:** Determination of chloride

---

## 8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

**Engineering Controls:** Have an eyewash station nearby. Have a safety shower nearby. Use a fume hood to avoid exposure to dust, mist or vapor. Maintain general industrial hygiene practices when using this product.

**Personal Protective Equipment:**

**Eye Protection:** chemical splash goggles

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

**Inhalation Protection:** laboratory fume hood

**Precautionary Measures:** Avoid contact with: eyes skin clothing Do not breathe: mist/vapor Wash thoroughly after handling. Use with adequate ventilation. Protect from: light Keep away from: combustible material organic materials alkalies reducers

**TLV:** Not established

**PEL:** Not established

**EU Occupational Exposure Limits:** Not established

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## 9. PHYSICAL / CHEMICAL PROPERTIES

**Appearance:** Clear, light pink liquid

**Physical State:** Liquid

**Odor:** Odorless

**pH:** <1,0

**Vapor Pressure:** Not determined

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

**Boiling Point:** ~100° C (~212° F)

**Melting Point:** Not determined

**Flash Point:** Not applicable

**Method:** Not applicable

**Autoignition Temperature:** Not applicable

**Flammability Limits:**

**Lower Explosion Limits:** Not applicable

**Upper Explosion Limits:** Not applicable

**Specific Gravity (water = 1):** 1,095

**Evaporation Rate (water = 1):** ~1

**Volatile Organic Compounds Content:** Not applicable

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

**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:* Do not heat to dryness. Exposure to light. Extreme temperatures

*Reactivity / Incompatibility:* May react violently in contact with: alkalis reducers organic materials combustible materials

*Hazardous Decomposition:* None reported

*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:* Perchloric Acid: Oral rat LD50 = 1100 mg/kg, Oral dog LD50 = 400 mg/kg

This product does NOT contain any IARC listed chemicals.

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## 12. ECOLOGICAL INFORMATION

*Product Ecological Information:* --

No ecological data available for this product.

*Ingredient Ecological Information:* --

No ecological data available for the ingredients of this product.

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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:* Corrosive Liquid, Acidic, Inorganic, N.O.S.

(Perchloric Acid/Ferric Perchlorate Solution)

*ICAO Hazard Class:* 8

*ICAO Subsidiary Risk:* NA

*ICAO UN/ID Number:* UN3264

*ICAO Packing Group:* II

*I.M.O.:*

*I.M.O. Proper Shipping Name:* Corrosive Liquid, Acidic, Inorganic, N.O.S.

(Perchloric Acid/Ferric Perchlorate Solution)

*I.M.O. Hazard Class:* 8

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

*I.M.O. UN Number:* UN3264

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

*A.D.R.:*

*A.D.R. Proper Shipping Name:* Corrosive Liquid, Acidic, Inorganic, N.O.S.

(Perchloric Acid/Ferric Perchlorate Solution)

*A.D.R Hazard Class:* 8

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

*A.D.R. UN-Number::* 3264

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

**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:** C - CORROSIVE

**R PHRASES:** R 34: Causes burns.

**S PHRASES:** S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 37/39: Wear suitable gloves and eye / face protection. S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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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. Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. In-house information. Technical Judgment.

**R PHRASES:** R 34: Causes burns.

**Use of the substance/preparation:** Determination of chloride

**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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