

## Chloride 21 FS R1

Material number 1 1221 R1

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### 1. Product and company identification

#### Product identifier

Trade name: Chloride 21 FS R1  
As part of the kits: 1 1221 XX XX XXX  
(The positions X code different packages.)

#### Relevant identified uses of the substance or mixture and uses advised against

General use: Reagent for in-vitro diagnostic use  
For professional use only

#### Details of the supplier of the safety data sheet

Company name: DiaSys Diagnostic Systems GmbH  
Street/POB-No.: Alte Strasse 9  
Postal Code, city: 65558 Holzheim  
WWW: <http://www.diasys.de>  
E-mail: [mail@diasys.de](mailto:mail@diasys.de)  
Telephone: +49 (0) 6432-9146-0  
Telefax: +49 (0) 6432-9146-32  
Dept. responsible for information:  
Corporate headquarters, Telephone: +49 (0) 6432-9146-0, Email: [mail@diasys.de](mailto:mail@diasys.de)

#### Emergency phone number

Infraserv, Telephone: +49 (0) 69-305-6418

### 2. Hazards identification

#### Emergency overview

Appearance: Physical state at 68 °F and 101.3 kPa: liquid  
Color: clear, weak yellowish  
Odor: odorless  
Classification: Corrosive to Metals - Category 1; Skin Corrosion - Category 1B;  
Aquatic toxicity - chronic - Category 2;

Hazard symbols:



Signal word: **Danger**  
Hazard statements: May be corrosive to metals.  
Causes severe skin burns and eye damage.  
Toxic to aquatic life with long lasting effects.



# SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

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### Precautionary statements:

Keep only in original container.  
Do not breathe vapors.  
Avoid release to the environment.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/or shower.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER/doctor.  
Absorb spillage to prevent material damage.

### Regulatory status

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

### Hazards not otherwise classified

see section 11: Toxicological information

## 3. Composition / Information on ingredients

Chemical characterization: Aqueous solution of anorganic salts and organic compounds.

### Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 9016-45-9	Nonylphenol, ethoxylated	5 - 10 %	Acute Toxicity - oral - Category 4. Eye Damage - Category 1. Aquatic toxicity - acute - Category 1.
CAS 26635-92-7	2,2'-[[Octadecylimino]bis (ethane-2,1-diyloxy)] diethanol	1 - 5 %	Skin Irritation - Category 2. Eye Damage - Category 1. Aquatic toxicity - acute - Category 1. Aquatic toxicity - chronic - Category 1.
CAS 75-75-2	Methanesulphonic acid	1 - 5 %	Corrosive to Metals - Category 1. Acute Toxicity - oral - Category 4. Acute Toxicity - dermal - Category 4. Skin Corrosion - Category 1B.

## 4. First aid measures

General information: First aider: Pay attention to self-protection!  
If medical advice is needed, have product container or label at hand. Take off immediately all contaminated clothing and wash it before reuse.

In case of inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention.

Following skin contact: Clean with plenty of water. If possible, also wash with polyethylene glycol 400. In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Subsequently seek the immediate attention of an ophthalmologist.



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After swallowing: Rinse mouth immediately and drink plenty of water. Avoid vomiting. (Risk of perforation)  
Immediately get medical attention. Do not try to neutralize. Never give anything by mouth to an unconscious person.

### Most important symptoms/effects, acute and delayed

Causes severe skin burns and eye damage.

### Information to physician

Treat symptomatically.

## 5. Fire fighting measures

Flash point/flash point range:

No data available

Auto-ignition temperature: No data available

Suitable extinguishing media:

Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

### Specific hazards arising from the chemical

Fires in the immediate vicinity may cause the development of dangerous vapors. In case of fire may be liberated: Hydrochloric gas, nitrogen oxides (NO<sub>x</sub>), sulphur oxides, carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:

Use a breathing apparatus independent of the ambient air (isolated apparatus) and a full protection outfit (suit) against chemicals.

Additional information:

Cool exposed containers with water spray. Do not allow fire water to penetrate into surface or ground water. Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

## 6. Accidental release measures

Personal precautions:

Avoid contact with the substance. Wear appropriate protective equipment. Do not breathe vapor or spray. Provide adequate ventilation.  
If possible, eliminate leakage. Keep unprotected people away.

Environmental precautions:

Do not allow to penetrate into soil, waterbodies or drains.  
If necessary notify appropriate authorities.

Methods for clean-up:

Soak up with absorbent materials such as sand, siliceous earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance. Wash spill area with plenty of water. Absorb spillage to prevent material damage.

Additional information:

Special danger of slipping by leaking/spilling product.



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### 7. Handling and storage

#### Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed.

Do not breathe vapor or spray. Avoid contact with skin, eyes, and clothing.

Take off immediately all contaminated clothing and wash it before reuse. Wear appropriate protective equipment.

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

When handling large quantities, supply emergency spray.

#### Storage

Requirements for storerooms and containers:

Store only in corrosive resistant containers. Keep container tightly closed and in a well-ventilated place.

Storage temperature 35.6 - 46.4 °F.

Hints on joint storage:

Do not store together with: strong oxidizing agents, acids, alkalis.

Keep away from food, drink and animal feedingstuffs.

### 8. Exposure controls / personal protection

#### Engineering controls

When aerosols or vapors form: Withdraw by suction.

See also information in chapter 7, section storage.

#### Personal protection equipment (PPE)

Eye/face protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

Skin protection: Wear suitable protective clothing.

Protective gloves according to OSHA Standard - 29 CFR: 1910.138.

Glove material: Nitrile rubber-Layer thickness: 0.11 mm.

Breakthrough time: >480 min.

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: When vapors form, use respiratory protection.

General hygiene considerations:

Do not breathe vapor or spray. Avoid contact with skin, eyes, and clothing. Take off immediately all contaminated clothing and wash it before reuse.

Wash hands before breaks and after work. Do not eat, drink or smoke when using this product. When handling large quantities, supply emergency spray.

### 9. Physical and chemical properties

#### Information on basic physical and chemical properties

Appearance: Physical state at 68 °F and 101.3 kPa: liquid

Color: clear, weak yellowish

Odor: odorless

Odor threshold: No data available

pH value: at 77 °F: 0.5



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Melting point/freezing point:	No data available
Initial boiling point and boiling range:	approx. 212 °F
Flash point/flash point range:	No data available
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Density:	at 68 °F: approx. 1.022 g/mL
Water solubility:	completely miscible
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Thermal decomposition:	No data available
Additional information:	No data available

### 10. Stability and reactivity

Reactivity:	May be corrosive to metals.
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions	No hazardous reactions known.
Conditions to avoid:	heating
Incompatible materials:	Strong oxidizing agents, acids, alkalis, metals
Hazardous decomposition products:	No decomposition when used properly.
Thermal decomposition:	No data available



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## 11. Toxicological information

### Toxicological tests

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Lack of data. Can damage your health.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Skin Corrosion - Category 1B = Causes severe skin burns and eye damage.

Serious eye damage/irritation: Lack of data.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Lack of data.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Lack of data.

### Symptoms

In case of inhalation: Mucous membrane irritation, cough, shortage of breath

In case of ingestion: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract. Risk of perforation.

## 12. Ecological information

### Ecotoxicity

Aquatic toxicity: Toxic to aquatic life with long lasting effects.

Information about Nonylphenol, ethoxylated:

Algae toxicity:  
EC50 algae: 10 - 100 mg/L/72 h.

Fish toxicity:  
LC50 Leuciscus idus: < 10 mg/l/48 h.  
LC50 Lepomis macrochirus (Bluegill): 1.0 - 9.7 mg/L/96

Daphnia toxicity:  
EC50 Daphnia magna (Big water flea): 12.2 - 17.0 mg/L/48h

### Mobility in soil

No data available

### Persistence and degradability

Further details: No data available

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### Additional ecological information

General information: Do not allow to enter into ground-water, surface water or drains.

## 13. Disposal considerations

### Product

Recommendation: Special waste. Dispose of waste according to applicable legislation.

### Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation.  
Non-contaminated packages may be recycled.

## 14. Transport information

### USA: Department of Transportation (DOT)

Identification number: UN3265  
Proper shipping name: UN 3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
(Methanesulphonic acid)  
Hazard class or Division: 8  
Packing Group: II  
Labels: 8  
Symbols: G  
Special provisions: B2, IB2, T11, TP2, TP27  
Packaging – Exceptions: 154  
Packaging – Non-bulk: 202  
Packaging – Bulk: 242  
Quantity limitations – Passenger aircraft / rail: 1 L  
Quantity limitations – Cargo only: 30 L  
Vessel stowage – Location: B  
Vessel stowage – Other: 40





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### Sea transport (IMDG)

UN number: UN 3265  
Proper shipping name: UN 3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
(Methanesulphonic acid)  
Class or division, Subsidiary risk: Class 8, Subrisk -  
Packing Group: II  
EmS: F-A, S-B  
Special provisions: 274  
Limited quantities: 1 L  
Excepted quantities: E2  
Contaminated packaging - Instructions: P001  
Contaminated packaging - Provisions: -  
IBC - Instructions: IBC02  
IBC - Provisions: -  
Tank instructions - IMO: -  
Tank instructions - UN: T11  
Tank instructions - Provisions: TP2, TP27  
Stowage and handling: Category B. SW2  
Properties and observations: Causes burns to skin, eyes and mucous membranes.  
Marine pollutant: yes  
Segregation group: 1

### Air transport (IATA)

UN/ID number: UN 3265  
Proper shipping name: UN 3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
(Methanesulphonic acid)  
Class or division, Subsidiary risk: Class 8  
Packing Group: II  
Hazard label: Corrosive  
Excepted Quantity Code: E2  
Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y840 - Max. Net Qty/Pkg. 0.5 L  
Passenger and Cargo Aircraft: Pack.Instr. 851 - Max. Net Qty/Pkg. 1 L  
Cargo Aircraft only: Pack.Instr. 855 - Max. Net Qty/Pkg. 30 L  
Special provisions: A3 A803  
Emergency Response Guide-Code (ERG): 8L

## 15. Regulatory information

### National regulations - U.S. Federal Regulations

Nonylphenol, ethoxylated: TSCA Inventory: listed; EPA flags XU  
TSCA HPVC: not listed  
2,2'-[(Octadecylimino)bis(ethane-2,1-diyloxy)]diethanol: TSCA Inventory: listed; EPA flags XU  
TSCA HPVC: not listed  
Methanesulphonic acid: TSCA Inventory: listed  
TSCA HPVC: not listed

### National regulations - Great Britain

Hazchem-Code: 2X





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### 16. Other information

Text for labeling: Contains 5 - 10 % Nonylphenol, ethoxylated, 1 - 5 %  
2,2'-[(Octadecylimino)bis(ethane-2,1-diyloxy)]diethanol, 1 - 5 % Methanesulphonic acid.  
Safety data sheet available on request.

Hazard rating systems:



NFPA Hazard Rating:

Health: 3 (Serious)  
Fire: 0 (Minimal)  
Reactivity: 1 (Slight)

HMIS Version III Rating:

Health: 3 (Serious)  
Flammability: 0 (Minimal)  
Physical Hazard: 1 (Slight)  
Personal Protection: X = Consult your supervisor

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	1
	X

Reason of change: General revision

Date of first version: 9/16/2011

#### Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.