

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: Chloride 21 FS R1

As part of the kits: 1 1221 XX XX XXX
(The positions X code different packages.)

UFI: MY00-R0CF-R001-3VGR

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

General use: Reagent for in-vitro diagnostics in human samples
For professional use only.

1.3 Details of the supplier of the safety data sheet

Company name: DiaSys Diagnostic Systems GmbH

Street/POB-No.: Alte Strasse 9

Postal Code, city: DE-65558 Holzheim

WWW: <http://www.diasys.de>

E-mail: mail@diasys.de

Telephone: +49 (0) 6432-9146-0

Telefax: +49 (0) 6432-9146-32

Department responsible for information:

Corporate headquarters, Telephone: +49 (0) 6432-9146-0, Email: mail@diasys.de

1.4 Emergency telephone number

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Met. Corr. 1; H290 May be corrosive to metals.

Skin Corr. 1B; H314 Causes severe skin burns and eye damage.

Aquatic Chronic 2; H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (CLP)



Signal word: **Danger**

Hazard statements:

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements:	P234	Keep only in original packaging.
	P260	Do not breathe vapours.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection.
	P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER/doctor.
	P390	Absorb spillage to prevent material damage.

Special labelling

Text for labelling: Contains Methanesulphonic acid

2.3 Other hazards

No risks worthy of mention.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

No data available

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: Aqueous solution of inorganic salts and organic compounds.

Hazardous ingredients:

Identifiers	Designation Classification	Content
list no. 607-973-6 CAS 26635-92-7	2,2'-[(Octadecylimino)bis(ethane-2,1-diyloxy)]diethanol Skin Irrit. 2; H315. Eye Dam. 1; H318. Aquatic Acute 1; H400. Aquatic Chronic 1; H410.	2,5 - 5 %
EC No. 500-027-2 CAS 9043-30-5	Isotridecanol, ethoxylated Acute Tox. 4; H302. Eye Dam. 1; H318.	< 3 %
REACH 01-2119491166-34-xxxx EC No. 200-898-6 CAS 75-75-2	Methanesulphonic acid Met. Corr. 1; H290. Acute Tox. 4; H302. Acute Tox. 4; H312. Skin Corr. 1B; H314. Eye Dam. 1; H318. STOT SE 3; H335.	< 3 %

Full text of H- and EUH-statements: see section 16.

SECTION 4: First aid measures

4.1 Description of 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.

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

4.2 Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

5.2 Special hazards arising from the substance or mixture

Fires in the immediate vicinity may cause the development of dangerous vapours. In case of fire may be liberated: Hydrochloric gas, nitrogen oxides (NO_x), sulphur oxides, carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Special protective equipment for firefighters:

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

Additional information:

Use fine water spray to cool endangered containers. 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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with the substance. Wear appropriate protective equipment. Do not breathe vapour/aerosol. Provide adequate ventilation. If possible, eliminate leakage. Keep unprotected people away. Take off immediately all contaminated clothing and wash it before reuse.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning 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.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling:

Provide adequate ventilation, and local exhaust as needed.
Do not breathe vapour/aerosol. 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.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

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

Storage temperature 2 - 8 °C.

Hints on joint storage:

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

Keep away from food, drink and animal feedingstuffs.

Storage class:

8B = Non-combustible corrosive substances

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
75-75-2	Methanesulphonic acid	Germany: TRGS 900 Kurzzeit	0,7 mg/m ³ (Aerosol and vapour)
		Germany: TRGS 900 Langzeit	0,7 mg/m ³ (Aerosol and vapour)

8.2 Exposure controls

When aerosols and vapours form: Withdraw by suction.

Personal protection equipment

Occupational exposure controls

Respiratory protection:

If vapours form, use respiratory protection.

Use filter type A (= against vapours of organic substances) according to EN 14387.

Hand protection:

Protective gloves according to EN 374.

Glove material: Nitrile rubber-Layer thickness: 0,11 mm.

Breakthrough time: > 480 min.

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

Eye protection:

Tightly sealed goggles according to EN 166.

Body protection:

Wear suitable protective clothing.

General protection and hygiene measures:

Do not breathe vapour/aerosol. 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.

Environmental exposure controls

Do not allow to penetrate into soil, waterbodies or drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state at 20 °C and 101.3 kPa

liquid

Colour:

clear, weak yellowish

Odour:

no characteristic odour

Odour threshold:

No data available

Melting point/freezing point:

No data available

Initial boiling point and boiling range:

approx. 100 °C

Flammability:

No data available

Upper/lower flammability or explosive limits:

No data available

Flash point/flash point range:	No data available
Decomposition temperature:	No data available
pH:	at 25 °C: approx. 0,5
Viscosity, kinematic:	No data available
Water solubility:	completely miscible
Partition coefficient: n-octanol/water:	No data available
Vapour pressure:	No data available
Density:	at 20 °C: approx. 1,022 g/mL
Vapour density:	No data available
Particle characteristics:	Not applicable

9.2 Other information

Explosive properties:	No data available
Oxidizing characteristics:	No data available
Auto-ignition temperature:	No data available
Evaporation rate:	No data available
Additional information:	No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

May be corrosive to metals.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

Protect from frost, heat and sunlight.

10.5 Incompatible materials

Strong oxidizing agents, acids, alkalis, metals

10.6 Hazardous decomposition products

	No decomposition when used properly.
Thermal decomposition:	No data available

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

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): Based on available data, the classification criteria are not met.
ATEmix (calculated): > 5.000 mg/kg

Acute toxicity (dermal): Based on available data, the classification criteria are not met.
ATEmix (calculated): > 5.000 mg/kg

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Skin Corr. 1B; H314 = 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.

11.2 Information on other hazards

Endocrine disrupting properties: No data available

Other information: Information about Methanesulphonic acid:
LD50 Rat, oral: 1157,5 mg/kg (OECD 401)
LD50 Rabbit, dermal: > 1.000 mg/kg (OECD 402)

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.

After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.

SECTION 12: Ecological information

12.1 Toxicity

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

Water Hazard Class: 2 = obviously hazardous to water

12.2 Persistence and degradability

Further details: No data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:
No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

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

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Waste key number: 16 05 06* = Laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals.

* = Evidence for disposal must be provided.

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

Package

Waste key number: 15 01 02 = Plastic packaging

Recommendation: Dispose of waste according to applicable legislation.

Non-contaminated packages may be recycled.

SECTION 14: Transport information**14.1 UN number or ID number**

ADR/RID, ADN, IMDG, IATA-DGR:

UN 3265

14.2 UN proper shipping name

ADR/RID, ADN, IMDG, IATA-DGR:

UN 3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Methanesulphonic acid)

14.3 Transport hazard class(es)

ADR/RID, ADN:

Class 8, Code: C3

IMDG:

Class 8, Subrisk -

IATA-DGR:

Class 8

14.4 Packing group

ADR/RID:

II

14.5 Environmental hazards

Dangerous for the environment: Substance/mixture is environmentally hazardous according to the criteria of the UN model regulations.

Marine pollutant - IMDG: yes

Marine pollutant - ADN: yes



14.6 Special precautions for user

Land transport (ADR/RID)

Warning board:	ADR/RID: Kemmler-number 80, UN number UN 3265
Hazard label:	8
Special Provisions:	274
Limited quantities:	1 L
EQ:	E2
Package - Instructions:	P001 IBC02
Special provisions for packing together:	MP15
Portable tanks - Instructions:	T11
Portable tanks - Special Provisions:	TP2 TP27
Tank coding:	L4BN
Tunnel restriction code:	E

Inland waterway craft (ADN)

Hazard label:	8
Special Provisions:	274
Limited quantities:	1 L
EQ:	E2
Transport permitted:	T
Equipment necessary:	PP - EP

Sea transport (IMDG)

EmS:	F-A, S-B
Special Provisions:	274
Limited quantities:	1 L
Excepted quantities:	E2
Package - Instructions:	P001
Package - Provisions:	-
IBC - Instructions:	IBC02
IBC - Provisions:	-
Tank instructions - IMO:	-
Tank instructions - UN:	T11
Tank instructions - Provisions:	TP2, TP27
Stowage and handling:	Category B. SW2
Segregation:	SG36 SG49
Properties and observations:	Causes burns to skin, eyes and mucous membranes.
Segregation group:	1

Air transport (IATA)

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

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations - Germany

Storage class:	8B = Non-combustible corrosive substances
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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No 2020/878

Chloride 21 FS R1

Material number 1 1221 R1

Revision date: 20.12.2022

Version: 19.1

Replaces version: 19.0

Language: en-DE

Date of print: 11.1.2023

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Water Hazard Class: 2 = obviously hazardous to water

Incident regulation: Richtlinie 2012/18/EU (Seveso III):
Umweltgefahren: Ziffer 1.3.2 = Code E2, Mengenschwelle 200 000kg / 500 000kg

Information on working limitations:
Observe employment restrictions for young people.
Observe employment restrictions for expectant or nursing mothers.

Further regulations, limitations and legal requirements:
The product is not subject to the Chemicals Prohibition Ordinance (ChemVerbotsV).

National regulations - EC member states

Further regulations, limitations and legal requirements:
Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances
[Seveso-III-Directive] refer to Germany, 12. BImSchV
Use restriction according to REACH annex XVII, no.: 3

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

Wording of the H-phrases under paragraph 2 and 3:

H290 = May be corrosive to metals.
H302 = Harmful if swallowed.
H312 = Harmful in contact with skin.
H314 = Causes severe skin burns and eye damage.
H315 = Causes skin irritation.
H318 = Causes serious eye damage.
H335 = May cause respiratory irritation.
H400 = Very toxic to aquatic life.
H410 = Very toxic to aquatic life with long lasting effects.
H411 = Toxic to aquatic life with long lasting effects.

Reason of change: General revision

Date of first version: 16.9.2011

Department issuing data sheet: see section 1: Department responsible for information

SAFETY DATA SHEET

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Abbreviations and acronyms:

- Acute Tox.: Acute toxicity
- ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- Aquatic Acute: Hazardous to the aquatic environment - acute
- Aquatic Chronic: Hazardous to the aquatic environment - chronic
- AS/NZS: Australian Standards/New Zealand Standards
- CAS: Chemical Abstracts Service
- CFR: Code of Federal Regulations
- CLP: Classification, Labelling and Packaging
- DMEL: Derived minimal effect level
- DNEL: Derived no-effect level
- EC: European Community
- EN: European Standard
- EQ: Excepted quantities
- EU: European Union
- Eye Dam.: Eye damage
- IATA: International Air Transport Association
- IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
- IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
- IMDG Code: International Maritime Dangerous Goods Code
- LD50: Lethal dose 50%
- MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
- Met. Corr.: Corrosive to metals
- OECD: Organisation for Economic Co-operation and Development
- OSHA: Occupational Safety and Health Administration
- PBT: Persistent, bioaccumulative and toxic
- PNEC: Predicted no-effect concentration
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
- Skin Corr.: Skin corrosion
- Skin Irrit.: Skin irritation
- STOT SE: Specific target organ toxicity - single exposure
- TRGS: Technical Rules for Hazardous Substances
- UN: United Nations
- vPvB: Very persistent and very bioaccumulative

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.