

**Chloride R1, Chloride R1L**

Date 5.5.2011

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**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier****1.1.1 Commercial Product Name**

Chloride R1, Chloride R1L

**1.1.2 Product code**

984364, 984365

**1.2 Relevant identified uses of the substance or mixture and uses advised against****1.2.1 Recommended use**

For general laboratory purposes.

**1.3 Details of the supplier of the safety data sheet****1.3.1 Supplier**

Thermo Fisher Scientific Oy, Clinical Diagnostics Finland

Ratastie 2, P.O.Box 100

FI-01621 Vantaa

FINLAND

+358-9-329 100

+358-9-3291 0300

FI0921547-0

**Email**

info.cdx.fi@thermofisher.com

**1.4 Emergency telephone number****2. HAZARDS IDENTIFICATION**

The product is classified as dangerous in accordance with Directive 1999/45/EC.

**2.1 Classification of the substance or mixture****67/548/EEC - 1999/45/EC**

T; R20/21/22-33-39/23/24/25-10

**2.2 Label elements****67/548/EEC - 1999/45/EC**

T Toxic

**R-phrases(s)**

R20/21/22

Harmful by inhalation, in contact with skin and if swallowed.

R33

Danger of cumulative effects.

R39/23/24/25

Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

R10

Flammable.

**S-phrases(s)**

S7

Keep container tightly closed.

S9

Keep container in a well-ventilated place.

S17

Keep away from combustible material.

S36

Wear suitable protective clothing.

S45

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**2.3 Other hazards**

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**3. COMPOSITION/INFORMATION ON INGREDIENTS****Hazardous components****CAS/EC and Reg.  
number****Chemical name of the  
substance****Concentration Classification**

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67-56-1	methanol	10-19.5%	T; R23/24/25-39/23/24/25;F; R11
7782-61-8	Iron(III) nitrate nonahydrate	2.5-10%	O, R8 Xi; R36/37/38
592-85-8	Mercury dithiocyanate	0.05-0.25%	T+;R26/27/28; R33 N; R50/53
7697-37-2	Nitric acid	1.0-4.5%	O; R8;C; R35

**3.3 Other information**

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**4. FIRST AID MEASURES****4.1 Description of first aid measures**

Symptoms of poisoning may only appear several hours later. Medical supervision for minimum 48 hours.

**4.1.2 Inhalation**

Move to fresh air. Oxygen or artificial respiration if needed. Get medical attention immediately if symptoms occur. Keep patient warm and at rest.

**4.1.3 Skin contact**

Flush skin with large amounts of water. If irritation develops and persists, get medical attention.

**4.1.4 Eye contact**

Immediately flush eye(s) with plenty of water.

**4.1.5 Ingestion**

Call a physician immediately.

**4.2 Most important symptoms and effects, both acute and delayed**

no data available

**4.3 Indication of immediate medical attention and special treatment needed**

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**5. FIREFIGHTING MEASURES****5.1 Extinguishing media****5.1.1 Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>), Foam, Water

**5.1.2 Extinguishing media which must not be used for safety reasons**

no data available

**5.2 Special hazards arising from the substance or mixture**

no data available

**5.3 Advice for firefighters**

Respiratory protection

**5.4 Specific methods**

-

**6. ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment.

**6.2 Environmental precautions**

Flush with plenty of water. Do not flush into surface water or sanitary sewer system.

**6.3 Methods and materials for containment and cleaning up**

Soak up with inert absorbent material and dispose of as hazardous waste.

**6.4 Reference to other sections**

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**7. HANDLING AND STORAGE**

- 7.1 Precautions for safe handling**  
Provide adequate ventilation.
- 7.2 Conditions for safe storage, including any incompatibilities**  
Keep at temperatures between 2 and 8 °C.  
Keep away from combustible material. Do not smoke.
- 7.3 Specific end use(s)**  
-

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

- 8.1 Control parameters**
- 8.1.1 Threshold limits**
- |          |                       |  |  |
|----------|-----------------------|--|--|
| 67-56-1  | methanol              | 200 ppm (8 h)<br>270 mg/m <sup>3</sup> (8 h) | 250 ppm (15 min)<br>330 mg/m <sup>3</sup> (15 min) |
| 592-85-8 | Mercury dithiocyanate | skin<br>0.05 mg/m <sup>3</sup> (8 h)         | skin, Hg   |
- 8.1.2 Other information on limit values**  
no data available
- 8.1.3 Limit values in other countries**  
no data available
- 8.1.4 DNELs**  
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- 8.1.5 PNECs**  
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- 8.2 Exposure controls**
- 8.2.1 Appropriate engineering controls**  
Wear protective gloves. Avoid contact with the skin and the eyes.
- 8.2.2 Individual protection measures**
- 8.2.2.1 Respiratory protection**  
Breathing apparatus with filter.
- 8.2.2.2 Hand protection**  
Impervious gloves
- 8.2.2.3 Eye protection**  
Goggles
- 8.2.2.4 Skin and body protection**  
Lab coat
- 8.2.3 Environmental exposure controls**  
no data available

**9. PHYSICAL AND CHEMICAL PROPERTIES**

- 9.1 Important Health Safety and Environmental Information**
- 9.1.1 Appearance**  
liquid
- 9.1.2 Odour**  
no data available
- 9.1.3 Odour threshold**  
no data available
- 9.1.4 pH**  
no data available
- 9.1.5 Melting point/freezing point**  
no data available

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<b>9.1.6</b>	<b>Initial boiling point and boiling range</b>	100 °C
<b>9.1.7</b>	<b>Flash point</b>	no data available
<b>9.1.8</b>	<b>Evaporation rate</b>	no data available
<b>9.1.9</b>	<b>Flammability (solid, gas)</b>	not auto-flammable
<b>9.1.10</b>	<b>Explosive properties</b>	
<b>9.1.10.1</b>	<b>Lower explosion limit</b>	5.5 v-%
<b>9.1.10.2</b>	<b>Upper explosion limit</b>	44.0 v-%
<b>9.1.11</b>	<b>Vapour pressure</b>	128.0 hPa
<b>9.1.12</b>	<b>Vapour density</b>	no data available
<b>9.1.13</b>	<b>Relative density</b>	0.98 g/cm <sup>3</sup>
<b>9.1.14</b>	<b>Solubility(ies)</b>	
<b>9.1.14.1</b>	<b>Water solubility</b>	completely soluble
<b>9.1.14.2</b>	<b>Fat solubility (solvent - oil to be specified)</b>	no data available
<b>9.1.15</b>	<b>Partition coefficient: n-octanol/water</b>	no data available
<b>9.1.16</b>	<b>Auto-ignition temperature</b>	no data available
<b>9.1.17</b>	<b>Decomposition temperature</b>	no data available
<b>9.1.18</b>	<b>Viscosity</b>	no data available
<b>9.1.19</b>	<b>Explosive properties</b>	no data available
<b>9.1.20</b>	<b>Oxidising properties</b>	no data available
<b>9.2</b>	<b>Other information</b>	-

**10. STABILITY AND REACTIVITY**

<b>10.1</b>	<b>Reactivity</b>	no data available
<b>10.2</b>	<b>Chemical stability</b>	no data available
<b>10.3</b>	<b>Possibility of hazardous reactions</b>	no data available
<b>10.4</b>	<b>Conditions to avoid</b>	no data available
<b>10.5</b>	<b>Incompatible materials</b>	no data available
<b>10.6</b>	<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

**11. TOXICOLOGICAL INFORMATION**

<b>11.1</b>	<b>Information on toxicological effects</b>	
<b>11.1.1</b>	<b>Acute toxicity</b>	Methanol: LD50/oral/rat = 13000 mg/kg
<b>11.1.2</b>	<b>Irritation and corrosion</b>	no data available
<b>11.1.3</b>	<b>Sensitisation</b>	No sensitisation responses were observed.
<b>11.1.4</b>	<b>Subacute, subchronic and prolonged toxicity</b>	no data available

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- 11.1.5 STOT-single exposure**  
no data available
- 11.1.6 STOT-repeated exposure**  
no data available
- 11.1.7 Aspiration hazard**  
no data available
- 11.1.8 Other information on acute toxicity**  
no data available

**12. ECOLOGICAL INFORMATION**

- 12.1 Toxicity**
- 12.1.1 Aquatic toxicity**  
slightly water endangering
- 12.1.2 Toxicity to other organisms**  
no data available
- 12.2 Persistence and degradability**
- 12.2.1 Biodegradation**  
no data available
- 12.2.2 Chemical degradation**  
no data available
- 12.3 Bioaccumulative potential**  
no data available
- 12.4 Mobility in soil**  
no data available
- 12.5 Results of PBT and vPvB assessment**  
no data available
- 12.6 Other adverse effects**  
no data available

**13. DISPOSAL CONSIDERATIONS**

- 13.1 Waste treatment methods**  
The product has to be disposed of as laboratory chemical in accordance with local regulations.
- 13.2 Waste from residues / unused products**  
no data available

**14. TRANSPORT INFORMATION**

- 14.1 UN number** UN 1987
- 14.2 UN proper shipping name** Alcohol, N.O.S. (Methyl Alcohol Solution)
- 14.3 Transport hazard class(es)** 3
- 14.4 Packing group** III
- 14.5 Environmental hazards**  
no data available
- 14.6 Special precautions for users**  
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- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**  
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**15. REGULATORY INFORMATION**

The product is classified and labelled in accordance with Directive 1999/45/EC.

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
no data available
- 15.2 Chemical safety assessment**  
no data available

**16. OTHER INFORMATION****16.3 Key literature references and sources for data**

The SDS of the manufacturer.

This product has been evaluated in accordance with the directives 1967/548/EEC, 1999/45/EC and 2001/58/EC.  
IATA Dangerous Goods Regulations

**16.4 Classification procedure**

The mixture is classified as dangerous in accordance with Directive 1999/45/EC.

**16.5 List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements**

- |              |   |
|--------------|---|
| R2           | Risk of explosion by shock, friction, fire or other sources of ignition.                                      |
| R33          | Danger of cumulative effects.   |
| R36/38       | Irritating to eyes and skin.  |
| R10          | Flammable.  |
| R11          | Highly flammable.   |
| R20/21/22    | Harmful by inhalation, in contact with skin and if swallowed.   |
| R39/23/24/25 | Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. |
| R20/22       | Harmful by inhalation and if swallowed.   |
| R36/37/38    | Irritating to eyes, respiratory system and skin.  |
| R8           | Contact with combustible material may cause fire.   |
| R26/27/28    | Very toxic by inhalation, in contact with skin and if swallowed.  |
| R50/53       | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.              |
| R35          | Causes severe burns.  |

**16.6 Training advice**

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**16.7 Recommended restrictions**

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**16.8 Additional information available from:**

Code of the Safety Data Sheet: D10166-01-01-SDS-Chloride R1-EN  
Corporation mentioned in point 1.3.

The information in this datasheet is to our best knowledge correct and complete, and is offered in good faith as accurate. It characterizes the product with regard to the appropriate safety precautions. It does not guarantee properties of the product.

5.5.2011

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