

MATERIAL SAFETY DATA SHEET**MSDS QRR010933**

Version: D06-EN (14-11-2014)

According to 1907/2006, Article 31

1. IDENTIFICATION OF SUBSTANCE AND COMPANY**Product details**

Trade name:	Starrsed Saline
Article number:	QRR 010933
Application of the substance/preparation:	Starrsed Saline is a dedicated IVD product, developed exclusively for the automatic cleaning of the needle and fill-nozzle assembly in Starrsed ESR analyzers.
Supplier:	Mechatronics Instruments B.V. P.O. Box 225 1620 AE Hoorn The Netherlands Phone: +31 229 291 129 Fax: +31 229 241 534
Informing department:	QA/RA Contact: Konstantin Artz Email: qara@rrmechatronics.com
Emergency information:	QA/RA During normal office hours (8 a.m. till 4:30 p.m., GMT+1) Phone: +31 229 291 129

2. HAZARDS IDENTIFICATION

Hazard designation:	Void.
Information pertaining to particular dangers for man and environment:	The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
Classification system:	The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.
GHS label elements:	Void.

3. COMPOSITION / DATA ON COMPONENTS**Chemical characterisation:**

Description:	Mixture of the substances listed below with harmless additions.
Dangerous components:	Void.
Additional information:	For the wording of the listed risk phrases refer to section 16.

4. FIRST AID MEASURES

General information:	No special measures required.
After inhalation:	Supply fresh air; consult doctor in case of symptoms.
After skin contact:	Instantly rinse with water. Product is not skin irritating.
After eye contact:	Rinse opened eye for several minutes under running water. In case of persistent symptoms consult doctor.
After swallowing:	Rinse out the mouth. In case of persistent symptoms consult doctor.

5. FIRE FIGHTING MEASURES

Suitable extinguishing agents:	CO ² , extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
Protective equipment:	No special measures required.

6. ACCIDENTAL RELEASE MEASURES

Person-related safety precautions:	Not required.
Measures for environmental protection:	Dilute with plenty of water.
Measures for cleaning/collecting:	Absorb with liquid binding material (sand, diatomite, acid binders, universal binders, sawdust).
Additional information:	No dangerous materials are released.

7. HANDLING AND STORAGE

Handling

Information for safe handling:	No special measures required.
Information about protection against explosions and fires:	No special requirements.

Storage

Requirements to be met by store rooms and containers:	No special requirements.
Information about storage in one common storage facility:	No special requirements.
Further information about storage conditions:	Store in cool, dry conditions in well sealed containers.

Shelf life

After production:	3 years, but no longer than the expiry date.
After opening the packaging:	Maximum of 3 months at advised temperature of 5 till 25°C.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Additional information about design of technical systems:	No further data; see item 7.
Components with critical values that require monitoring at the workplace:	The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Additional information:	The lists that were valid during the compilation were used as basis.
<u>Personal protective equipment</u>	
General protective and hygienic measures:	The usual precautionary measures should be adhered to in handling the chemicals.
Breathing equipment:	Not required.
Protection of hands:	Protective gloves.
Glove material:	<p>The glove material has to be impermeable and resistant to the product. Due to missing tests no recommendation to the glove material can be given for the product.</p> <p>Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.</p> <p>The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</p>
Penetration time of glove material:	The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection:	Safety glasses recommended during refilling.
Body protection:	Protective work clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Fluid.
Colour:	Colourless.
Smell:	Odourless.
Melting temperature:	0°C
Boiling temperature:	100°C
Flash point:	Not applicable.
Self-inflammability:	Product is not self-igniting.
Danger of explosion:	Product is not explosive.
Steam pressure at 20°C:	23 hPa
Density at 20°C:	1.02 g/cm ³ @ 25°C

pH-value at 20 °C:	Not available.
Solubility in / Miscibility with water:	Fully miscible.
Organic solvents:	0%
Water:	99.0%
Solids content:	1.0%

10. STABILITY AND REACTIVITY

Thermal decomposition / conditions to be avoided:	Heat, boiling temperatures.
Dangerous reactions:	No dangerous reactions known.
Dangerous products of decomposition:	No dangerous decomposition products known.

11. TOXICOLOGICAL INFORMATION

Primary irritant effect on the skin:	No irritant effect.
Primary irritant effect on the eye:	No irritant effect.
Sensitisation:	No sensitising effect known.
Additional toxicological information:	The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version. When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12. ECOLOGICAL INFORMATION

General notes:	Generally not hazardous for water.
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13. DISPOSAL CONSIDERATIONS

Product

Recommendation:	Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
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Un-cleaned packaging

Recommendation:	Disposal must be made according to official regulations.
Recommended cleaning agent:	Water, if necessary with cleaning agent.

14. TRANSPORT INFORMATION

Land transport ADR/ RID and GGVS/ GGVE (cross- border/ domestic)

ADR/ RID – GGVS/ GGVE
class: Void.

Maritime transport IMDG/ GGVSea

IMDG class: Void.

Marine pollutant: No.

Air transport ICAO-TI / IATA-DGR

ICAO/ IATA class: Void.

UN "Model regulation": Void.

15. REGULATORY INFORMATION

**Designation according to
EC guidelines:** The product is not subject to identification regulations under the
applicable EC directives and ordinances.

**Code letter and hazard
designation of product:** Void.

Risk phrases: Void.

Safety phrases: Void.

National regulations

Water hazard class: Generally not hazardous for water.

16. OTHER INFORMATION

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.