

**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**

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

**2. HAZARDS IDENTIFICATION**

<b>Hazard designation:</b>	Void.
<b>Information pertaining to particular dangers for man and environment:</b>	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.
<b>Classification system:</b>	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.
<b>GHS label elements:</b>	Void.

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

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

## 4. FIRST AID MEASURES

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

## 5. FIRE FIGHTING MEASURES

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

## 6. ACCIDENTAL RELEASE MEASURES

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

## 7. HANDLING AND STORAGE

### Handling

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

### Storage

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

### Shelf life

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

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

<b>Additional information about design of technical systems:</b>	No further data; see item 7.
<b>Components with critical values that require monitoring at the workplace:</b>	The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
<b>Additional information:</b>	The lists that were valid during the compilation were used as basis.
<b><u>Personal protective equipment</u></b>	
<b>General protective and hygienic measures:</b>	The usual precautionary measures should be adhered to in handling the chemicals.
<b>Breathing equipment:</b>	Not required.
<b>Protection of hands:</b>	Protective gloves.
<b>Glove material:</b>	<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>
<b>Penetration time of glove material:</b>	The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
<b>Eye protection:</b>	Safety glasses recommended during refilling.
<b>Body protection:</b>	Protective work clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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

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

## 10. STABILITY AND REACTIVITY

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

## 11. TOXICOLOGICAL INFORMATION

<b>Primary irritant effect on the skin:</b>	No irritant effect.
<b>Primary irritant effect on the eye:</b>	No irritant effect.
<b>Sensitisation:</b>	No sensitising effect known.
<b>Additional toxicological information:</b>	<p>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.</p> <p>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.</p>

## 12. ECOLOGICAL INFORMATION

<b>General notes:</b>	Generally not hazardous for water.
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## 13. DISPOSAL CONSIDERATIONS

### Product

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

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

## 14. TRANSPORT INFORMATION

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

ADR/ RID – GGVS/ GGVE    Void.  
class:

### 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.