

1. Product and Company Identification

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Product Name Sodium Chlorite Solution 25%
Part Number RXSOL-42-1977-251

Company Details:....

RX MARINE INTERNATIONAL
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2. Composition / Information on ingredients

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Mixtures

| Component | Classification | Concentration |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------|
| Sodium chlorite CAS-No. 7758-19-2 | Ox. Sol. 1; Acute Tox. 3; | >= 25 - < 30 % |
| EC-No 231-836-6 | Acute Tox. 2; Skin Corr. 1B; Eye Dam. 1; STOT RE 2; Aquatic Acute 1; H271, H301, H310, H314, H318, H373, H400 | |

For the full text of the H-Statements mentioned in this Section, see Section 16.

3. Hazards Identification

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Classification of the substance or mixture

| | |
|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Corrosive to Metals, (Category 1) | H290: May be corrosive to metals. |
| Acute toxicity, (Category 4) | H302: Harmful if swallowed. |
| Acute toxicity, (Category 3) | H311: Toxic in contact with skin. |
| Skin corrosion, (Category 1) | H314: Causes severe skin burns and eye damage. |
| Serious eye damage, (Category 1) | H318: Causes serious eye damage. |
| Specific target organ toxicity - repeated exposure, (Category 2), spleen | H373: May cause damage to organs through prolonged or repeated exposure. |
| Short-term (acute) aquatic | H400: Very toxic to aquatic life. |

hazard, (Category 1)

Label elements

Signal Word

Danger

Hazard Statements

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H373 May cause damage to organs (spleen) through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

Precautionary Statements

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P314 Get medical advice/ attention if you feel unwell.

Supplemental Hazard Statements

None

Other hazards

This substance/mixture contains no components considered to be either persistent,

bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at

levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain components considered to have endocrine

disrupting properties according to REACH Article 57(f) or Commission Delegated regulation

(EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information:

The substance/mixture does not contain components considered to have endocrine

disrupting properties according to REACH Article 57(f) or Commission Delegated regulation

(EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of

4. First Aid Measures

Description of first aid measures

| | |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General advice | First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance. |
| If inhaled | After inhalation: fresh air. Call in physician. |
| In case of skin contact | In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately. |
| In case of eye contact | After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses. |
| If swallowed | After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise. |
| Most important symptoms and effects, both acute and delayed | The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11 |
| Indication of any immediate medical attention and special treatment needed | No data available |

5. Fire-fighting Measures

Extinguishing media

| | |
|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Suitable extinguishing media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | For this substance/mixture no limitations of extinguishing agents are given. |
| Special hazards arising from the substance or mixture | Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Highly flammable liquid and vapor. Runoff to sewer may create fire or |

explosion hazard.

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the ground. Vapors may accumulate in low or confined areas or travel a considerable

distance to a source of ignition and flash back.

Hydrogen chloride gas

Sodium oxides

Not combustible.

Fire may cause evolution of:

Hydrogen chloride gas

Ambient fire may liberate hazardous vapours.

Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

spray to keep fire-exposed containers cool. Promptly isolate the scene by removing all persons from the vicinity of the incident if

there is a fire. No action shall be taken involving any personal risk or without suitable

training. Move containers from fire area if this can be done without risk. Use water

spray to keep fire-exposed containers cool.

6. Accidental Release Measures

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Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Reference to other sections

For disposal see section 13.

7. Handling and Storage

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Precautions for safe handling

| | |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Advice on safe handling | Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. |
| Hygiene measures | Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2. |
| Conditions for safe storage, including any incompatibilities | |
| Storage conditions | No metal containers. No metal containers. Protected from light. Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons. Do not store near acids. Recommended storage temperature see product label. |
| Storage class | Storage class (TRGS 510): 6.1D: Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects |
| Specific end use(s) | Apart from the uses mentioned in section 1.2 no other specific uses are stipulated |

8. Exposure controls and personal protection

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Control parameters

Ingredients with workplace control parameters

Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

Skin protection

This recommendation applies only to the product stated in the safety data sheet,

supplied by us and for the designated use. When dissolving in or mixing with other

substances and under conditions deviating from those stated in EN 16523-1 please

contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de).

Full contact

Material: Chloroprene

Minimum layer thickness: 0,65 mm

Break through time: 480 min

Material tested: KCL 720 Camapren®

This recommendation applies only to the product stated in the safety data sheet,

supplied by us and for the designated use. When dissolving in or mixing with other

substances and under conditions deviating from those stated in EN 16523-1 please

contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de).

Splash contact

Material: Latex gloves

Minimum layer thickness: 0,6 mm

Break through time: 60 min

Material tested: Lapren® (KCL 706 / Aldrich Z677558, Size M).

Protective clothing.

Recommended Filter type: Filter A-(P3)

Body Protection
Respiratory protection

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory

protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Do not let product enter drains.

Control of environmental exposure

9. Physical and chemical properties

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Physical state

Liquid

Colour

Colorless

Odor

Weak

Melting point/freezing point

Melting point: < -3 °C.

Initial boiling point and boiling range

Ca. >= 100 °C at 1.013 hPa

Flammability (solid, gas)

No data available

Upper/lower flammability or explosive limits

No data available

Flash point

Not applicable

Autoignition temperature

Not applicable

Decomposition temperature

No data available

pH

ca. 12 - 13 at 20 °C

materials. Extremely flammable in the presence of the following materials or conditions: oxidizing

materials.

Viscosity

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

Water solubility

At 20 °C soluble

Partition coefficient: n-octanol/water

Not applicable

Vapor pressure

ca. 20 hPa at 20 °C

Density

ca. 1,2 g/cm³ at 20 °C

Relative density

No data available

Relative vapor density

No data available

| | |
|--------------------------|------------------------------|
| Particle characteristics | No data available |
| Explosive properties | Not classified as explosive. |
| Oxidizing properties | Oxidizing potential |
| Other safety information | No data available |

10. Stability and reactivity

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|------------------------------------|---------------------------------------------------------------------------------------|
| Reactivity | Explosible after loss of solvent content. |
| | Contact with acids liberates very toxic gas. |
| Chemical stability | The product is chemically stable under standard ambient conditions (room temperature) |
| Possibility of hazardous reactions | Generates dangerous gases or fumes in contact with: |
| | Acids |
| | Release of: |
| | chlorine dioxide |
| | Violent reactions possible with: |
| | combustible substances |
| | Cyanides |
| | sulfur |
| | ammonium compounds |
| | phosphorus |
| | Organic Substances |
| | oxidisable substances |
| | Chlorine |
| | Metals |
| | in powder form |
| | Violent reactions possible with: |
| | Generates dangerous gases or fumes in contact with: |
| | Acids |
| | The generally known reaction partners of water. |
| Conditions to avoid | No information available |
| Incompatible materials | No data available |
| Hazardous decomposition products | In the event of fire: see section 5 |

11. Toxicological information

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|--------------------------------------|--------------------------------------------------------------------|
| Information on toxicological effects | |
| Acute toxicity | Acute toxicity estimate Oral - 1.114 mg/kg (Calculation method) |

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages: damage of respiratory tract

Acute toxicity estimate Dermal - 525,49 mg/kg

(Calculation method)

No data available

Remarks: Mixture causes serious eye damage.

Risk of blindness!

No data available

No data available

No data available

No data available

Mixture may cause damage to organs through prolonged or repeated exposure.

- spleen

No data available

Skin corrosion/irritation
sensitization

mutagenicity

Carcinogenicity

Reproductive toxicity

Specific target organ toxicity (single exposure)

Specific target organ toxicity (repeated exposure)

Aspiration hazard

12. Ecological information

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Toxicity

Mixture

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Endocrine disrupting properties

Assessment

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission

Delegated regulation (EU) 2017/2100 or Commission

Regulation (EU) 2018/605 at levels of 0.1% or higher

Other adverse effects

No data available .

13. Disposal considerations

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Waste treatment Method

No data available

14. Transport information

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UN number

ADR/RID:1908 IMDG:1908 IATA: 1908

UN proper shipping name

ADR/RID: CHLORITE SOLUTION

IMDG: CHLORITE SOLUTION

IATA: Chlorite solution

| | |
|------------------------------|------------------------------------------------|
| Transport hazard class(es) | ADR/RID: 8 IMDG: 8 IATA:8 |
| Packaging group | ADR/RID: II IMDG:II IATA:II |
| Environmental hazards | ADR/RID: no IMDG Marine pollutant: no IATA: no |
| Special precautions for user | |
| Tunnel restriction code | (E) |
| Further information | No data available |

15. Regulatory information

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|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety, health and environmental regulations/legislation specific for the substance or mixture | This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. |
| National legislation | Seveso III: Directive 2012/18/EU of the E1 ENVIRONMENTAL HAZARDS European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. |
| Other regulations | Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. |
| Chemical Safety Assessment | Take note of Dir 94/33/EC on the protection of young people at work For this product a chemical safety assessment was not carried out |

16. Other information

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|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Other Information | <p>The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages.</p> <p>DISCLAIMER OF LIABILITY :The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.</p> |
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