Porduct Name	Sodium Hypo Chlorit
Part Number	RXSOL-31-3025-035

Company Details:

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Weight **Chemical Name** Cas No. FC No Formula Sodium hypochlorite solution 7681-52-9 231-668-3 74,44 g/mol NaClO Signal Word H314 Danger **Hazard Statements** No Data available H290 May be corrosive to metals Causes severe skin burns and eye damage H440 Very toxic to aquatic life with long lasting effects. Precautionary statement(s) P234 Keep only in original packaging P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor P305 + P351 + P338 .IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Supplemental Hazard information (EU) Contact with acids liberates toxic gas.

General advice First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance. inhaled After inhalation: fresh air. Call in physician Swallowed After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses. Skin Contact In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately. Eye contac After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses. Ingestion Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately. Most important symptoms and effects, both acute and delaye 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

Flammability May be combustible at high temperature. 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 Hydrogen chloride gas Sodium oxides Not combustible. Ambient fire may liberate hazardous vapours... 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. Hazardous combustion

products No data available 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. Protective Equipment No data available Specific Hazards Arising from the Chemical No data available

Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8 Personal Protection Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: Protective equipment see section 8. **Environmental Precaution** Do not let product enter drains. Methods and materials for containment and cleaning Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts. Reference to other sections For disposal see section 13.

Incompatible materials For precautions see section 2.2. Keep away from alkalis, strong oxidizing Advice on safe handling agents and metals. Provide containment walls of adequate capacity to hold any accidental spills. **Immediately** Hygiene measures change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2. Advice on safe handling No data available Conditions for safe storage, including any incompatibilities Storage conditions No metal containers. Tightly closed. Do not store near acids. Storage stabilityRecommended storage temperature Storage conditions No Storage class (TRGS 510): 8B: Non-combustible, corrosive hazardous materials data available Storage class Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated Advice on general occupational hygiene No data available

Exposure controls Ingredients with workplace control parameters. **Engineering Control** Personal protective equipmen 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 **Body Protection** Protective clothing. Skin protection Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M) Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Respiratory protection Required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type ABEK The entrepeneur 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. Other Protection Measure Handle in accordance with good industrial hygiene and safety practice. Control of environmental exposure Do not let product enter drains.

Colour Physical state No data available Odour No data available Odor Threshold liquid Not 5,5 - 6,5 at 50 g/l at 20 °C Melting Point -28.9 °C **Boiling Point** Applicable pΗ Not applicable Flash Point No data available **Evaporation Rate** Not Applicable Flammability (solid, gas) No data available Explosive limits No Data Available Upper/lower flammability or explosive limits No data available Autoignition No data available temperature No data available Decomposition temperature No data available Vapour pressure Viscosity Viscosity, kinematic: No data available Viscosity, dynamic: No data available Density No data available Relative Density No data available Specific Gravity No data available Partition coefficient No data available Explosive properties No data available No data available No information available. Particle characteristics No data available Solubility Ignition temperature

Reactivity The product is chemically stable under standard ambient conditions No data available Chemical stability Violent reactions possible with: Generates dangerous gases or fumes in contact (room temperature) Possibility of hazardous reactions with: Acids The generally known reaction partners of water. Conditions to avoid no information available Incompatible materials Strong acids, Organic materials, Powdered metals, Forms shock-sensitive mixtures with certain other materials., Amines, Reacts violently with ammonium salts, aziridine, methanol, and phenylaceto primary aliphatic or aromatic amines to form explosively unstable n-chlor 55°C.Metals Hazardous decomposition products In the event of fire: see section 5

Acute toxicity Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the damage/irritation stomach. Skin corrosion/irritation Mixture causes burns. Serious eye Mixture causes serious eye No data available damage. Risk of blindness! Respiratory or skin sensitization Carcinogenicity No data available Germ cell mutagenicity No data available Reproductive toxicity No data available. Specific target organ toxicity exposure No data available Additional Information The substance/mixture does not contain components considered sinale 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. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately. The following applies to ammonium salts in general: after swallowing: local irritation symptoms, nausea, vomiting, diarrhoea. Systemic effect: after the uptake of very large qantities: drop in blood pressure, collapse, CNS disorders, spasms, narcotic conditions, respiratory paralysis, haemolysis. Handle in accordance with good industrial hygiene and safety practice.

Persistence and degradability The methods for determining biodegradability are not applicable to inorganic substances **Toxicity** LC50 - Oncorhynchus mykiss (rainbow trout) - 0,107 mg/l - 96 h Remarks: (ECHA) Toxicity to daphnia and other aquatic to fish invertebrates No data available **Toxicity** No data available Toxicity to bacteria No data available Toxicity to algae No data available) **Products Biodegradation** 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 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

Waste treatment methods

No data available

UN number ADR/RID:1791 IMDG:1791 IATA:1791 UN proper shipping name ADR/RID:HYPOCHLORITE SOLUTION IMDG:HYPOCHLORITE SOLUTION(sodium hypochlorite solution) IATA:HYPOCHLORITE SOLUTION IMDG: 8 Transport hazard class(es) ADR/RID: 8 8:ATAI Packaging group ADR/RID:III IMDG:III IATA:III Environmental hazards ADR/RID:Yes IMDG: No Marine pollutant: Yes IATA: No Special precautions for user Tunnel restriction code: (E) Further information No data available

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. Other regulations Take note of Dir 94/33/EC on the protection of young people at work. Chemical Safety Assessment For this product a chemical safety assessment was not carried out

Other Information

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 weassume 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 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.

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