Material Safety Data Sheet

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Version 1.7
According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

1 - Product and Company Information

Product Name	SODIUM CHLORITE, TECH., 80%
Product Number	244155
Company	Sigma-Aldrich Pty, Ltd Unit 2, 14 Anella Avenue Castle Hill NSW 1765 Australia
Technical Phone #	+61 2 9841 0555
Fax	+61 2 9841 0500
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2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
SODIUM CHLORITE	7758-19-2	231-836-6	None

Formula	ClHO2.Na
Molecular Weight	90.44 AMU
Synonyms	Alcide LD * Chlorous acid, sodium salt (8CI,9CI) * Neo Silox D * Textile * Textone

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT
Contact with combustible material may cause fire. Harmful if swallowed. Toxic in contact with skin. Contact with acids liberates very toxic gas. Causes burns.

4 - First Aid Measures

AFTER INHALATION
If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

AFTER SKIN CONTACT
In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

AFTER EYE CONTACT
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

AFTER INGESTION
If swallowed, wash out mouth with water provided person is

conscious. Call a physician.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA
Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS
Specific Hazard(s): Emits toxic fumes under fire conditions. Contact with other material may cause fire. May accelerate combustion.
Explosion Hazards: Container explosion may occur under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL
Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP
Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING
Directions for Safe Handling: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE
Conditions of Storage: Keep tightly closed. Keep away from combustible materials, heat, sparks, and open flame.

SPECIAL REQUIREMENTS: Avoid contact with acid.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS
Use only in a chemical fume hood. Safety shower and eye bath.

GENERAL HYGIENE MEASURES
Wash thoroughly after handling. Remove and wash contaminated clothing promptly.

PERSONAL PROTECTIVE EQUIPMENT
Respiratory Protection: Government approved respirator.
Hand Protection: Compatible chemical-resistant gloves.
Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

Appearance	Physical State: Solid Color: White Form: Powder	

Property	Value	At Temperature or Pressure
pH	10 - 11	20 °C Concentration: 100 g/l
BP/BP Range	N/A	
MP/MP Range	N/A	
Flash Point	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	Lower: 7 %	
Vapor Pressure	N/A	
SG/Density	N/A	
Partition Coefficient	N/A	
Viscosity	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

10 - Stability and Reactivity

STABILITY
Stable: Stable.
Materials to Avoid: Strong reducing agents, Finely powdered metals, Phosphorus, Sulfur, Zinc, Ammonia, Organic materials, Acids, Amines.

HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Hydrogen chloride gas.

HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur

11 - Toxicological Information

RTECS NUMBER: VZ4800000

ACUTE TOXICITY
LD50
Skin
Rabbit
> 50 - 400 mg/kg
LD50
Oral
Rat
*
LC50
Inhalation
Rat

29 mg/m3
81% SOLUTION
LC50
Inhalation
Rat
7.5 mg/m3
25% SOLUTION

LD50
Oral
Rat
165 mg/kg
Remarks: Liver:Jaundice, other or unclassified. Kidney, Ureter, Bladder:Interstitial nephritis. Biochemical:Metabolism (intermediary): Other.

LC50
Inhalation
Rat
230 mg/m3
4H

LD50
Oral
Mouse
350 mg/kg

LD50
Oral
Guinea pig
300 mg/kg

LD50
Oral
Rat
350 mg/kg

IRRITATION DATA
Skin
Rabbit
Remarks: Corrosive.
Eyes
Rabbit
31 %
24 H
Remarks: Severe irritation effect

SIGNS AND SYMPTOMS OF EXPOSURE
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Prolonged exposure may result in delayed lung injury.

ROUTE OF EXPOSURE
Skin Contact: Causes burns.
Skin Absorption: Toxic if absorbed through skin.
Eye Contact: Causes burns.
Inhalation: Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. May be harmful if inhaled.
Ingestion: Harmful if swallowed.

CHRONIC EXPOSURE - CARCINOGEN

Result: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Mouse
Route of Application: Oral
Exposure Time: 85W
Result: Tumorigenic:Carcinogenic by RTECS criteria. Liver:Tumors.

IARC CARCINOGEN LIST

Rating: Group 3

CHRONIC EXPOSURE - MUTAGEN

Rat
84 MG/KG
Oral
12W
DNA inhibition

Rat
660 MG/KG
Oral
66D
sperm

Mouse
15 MG/KG
Intraperitoneal
Micronucleus test

Hamster
20 MG/L
Cell Type: fibroblast
Cytogenetic analysis

CHRONIC EXPOSURE - TERATOGEN

Species: Rat
Dose: 800 MG/KG
Route of Application: Oral
Exposure Time: (8-15D PREG)
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Species: Rat
Dose: 80 MG/KG
Route of Application: Intraperitoneal
Exposure Time: (8-15D PREG)
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat
Dose: 16 GM/KG
Route of Application: Oral
Exposure Time: (8-15D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Species: Rat
Dose: 660 MG/KG
Route of Application: Oral
Exposure Time: (66D MALE)
Result: Paternal Effects: Spermatogenesis (including genetic material, sperm morphology,motility, and count).

Species: Rat
Dose: 1130 MG/KG
Route of Application: Oral
Exposure Time: (8W MALE/2W PRE-3W POST)
Result: Effects on Newborn: Biochemical and metabolic.

Species: Rat
Dose: 160 MG/KG
Route of Application: Intraperitoneal
Exposure Time: (8-15D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Species: Mouse
Dose: 22 GM/KG
Route of Application: Oral
Exposure Time: (1-21D PREG/28D POST)
Result: Effects on Newborn: Growth statistics (e.g., reduced weight gain).

12 - Ecological Information

ECOTOXICOLOGICAL EFFECTS

Test Type: EC50 Algae
Species: Selenastrum capricornutum resp.
Time: 96 h
Value: < 0.01 mg/l

Test Type: EC50 Daphnia
Species: Daphnia magna
Time: 48 h
Value: 0.03 mg/l

Test Type: EC50 Daphnia
Species: Daphnia magna
Time: 48 h
Value: 0.29 mg/l

Test Type: LC50 Fish
Species: Lepomis macrochirus (Bluegill)
Time: 96 h
Value: > 100 mg/l

Test Type: LC50 Fish
Species: Cyprinodon variegatus (Sheepshead minnow)
Time: 96 h
Value: 75 mg/l

Test Type: LC50 Fish
Species: Onchorhynchus mykiss (Rainbow trout)
Time: 96 h
Value: > 100 mg/l

Test Type: LC50 Fish

Species: Onchorhynchus mykiss (Rainbow trout)
Time: 96 h
Value: > 100 mg/l

13 - Disposal Considerations

SUBSTANCE DISPOSAL
Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR
UN#: 1496
Class: 5.1
PG: II
Proper Shipping Name: Sodium chlorite

IMDG
UN#: 1496
Class: 5.1
PG: II
Proper Shipping Name: Sodium chlorite
Marine Pollutant: No
Severe Marine Pollutant: No

IATA
UN#: 1496
Class: 5.1
PG: II
Proper Shipping Name: Sodium chlorite
Inhalation Packing Group I: No

15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES
INDICATION OF DANGER: O T
Oxidizing. Toxic.
R-PHRASES: 8 22 24 32 34
Contact with combustible material may cause fire. Harmful if swallowed. Toxic in contact with skin. Contact with acids liberates very toxic gas. Causes burns.
S-PHRASES: 17 26 36/37/39 45
Keep away from combustible material. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

COUNTRY SPECIFIC INFORMATION

Germany
WGK: 2

SWITZERLAND
SWISS POISON CLASS: 3

16 - Other Information

WARRANTY
The above information is believed to be correct but does not

purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

DISCLAIMER

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