

MATERIAL SAFETY DATA SHEET

Ashland

Page 001

Date Prepared: 08/18/04

Date Printed: 12/07/05

MSDS No: 301.0004191-006.012

SODIUM HYPOCHLORITE 12.5% SOLUTION

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: SODIUM HYPOCHLORITE 12.5% SOLUTION

General or Generic ID: SALTS

Company

Ashland  
Ashland Distribution Co. &  
Ashland Specialty Chemical Co.  
P. O. Box 2219  
Columbus, OH 43216  
614-790-3333

Emergency Telephone Number:

1-800-ASHLAND (1-800-274-5263)  
24 hours everyday

Regulatory Information Number:  
1-800-325-3751

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
WATER	7732-18-5	86.0- 90.0
SODIUM HYPOCHLORITE	7681-52-9	11.0- 15.0

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3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Can cause permanent eye injury. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure the cornea and cause blindness.

Skin

Can cause permanent skin damage. Symptoms may include redness, burning, and swelling of skin, burns, and other skin damage. Additional symptoms of skin contact may include: skin blistering, hair loss, Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

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Swallowing

Swallowing this material may be harmful or fatal. Symptoms may include severe stomach and intestinal irritation (nausea, vomiting, diarrhea), abdominal pain, and vomiting of blood. Swallowing this material may cause burns and destroy tissue in the mouth, throat, and digestive tract. Low blood pressure and shock may occur as a result of severe tissue injury.

Inhalation

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing this material may be harmful or fatal. Symptoms may include severe irritation and burns to the nose, throat, and respiratory tract.

Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea) irritation (nose, throat, airways), cough, tight feeling in the chest, difficult breathing, lung edema (fluid buildup in the lung tissue), lung damage, shock, coma, and death.

Target Organ Effects

This material (or a component) has been shown to lower activity of certain immune system cells in experimental animals. The significance of this effect with respect to human health is uncertain.

Developmental Information

There are no data available for assessing risk to the fetus from maternal exposure to this material.

Cancer Information

Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration.

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Other Health Effects

When combined with an acid or ammonia, hypochlorites may produce chlorine or chloramine gas, respectively. Inhalation of these gases results in coughing, choking, difficult breathing, and other symptoms of respiratory tract irritation. Fluid may collect in the lung tissue following a severe gas exposure.

Primary Route(s) of Entry

Inhalation, Skin absorption, Skin contact, Eye contact, Ingestion.

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4. FIRST AID MEASURES

Eyes

If material gets into the eyes, immediately flush eyes gently with water for at least 15 minutes while holding eyelids apart. If symptoms develop as a result of vapor exposure, immediately move individual away from exposure and into fresh air before flushing as recommended above. Seek immediate medical attention.

Skin

Immediately flush skin with water for at least 15 minutes while removing contaminated clothing and shoes. Seek immediate medical attention. Wash clothing before reuse and discard contaminated shoes.

Swallowing

Seek immediate medical attention. Do not induce vomiting. Vomiting will cause further damage to the mouth and throat. If individual is conscious and alert, immediately rinse mouth with water and give milk or water to drink. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

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Note to Physicians

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), immune system.

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5. FIRE FIGHTING MEASURES

Flash Point

Not applicable

Explosive Limit

Not applicable

Autoignition Temperature

No data

Hazardous Products of Combustion

May form: chlorine.

Fire and Explosion Hazards

Substance is an oxidizer that will cause moderate increase in the burning rate of combustible materials with which it comes into contact.

Extinguishing Media

Use an extinguishing media appropriate for surrounding fire.

Fire Fighting Instructions

Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

NFPA Rating

Health - 3, Flammability - 0, Reactivity - 1

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6. ACCIDENTAL RELEASE MEASURES

Small Spill

Dilute with water and absorb onto a noncombustible absorbent material.

Large Spill

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred. Collect and add slowly to large volume of water. Persons not wearing protective equipment should be excluded from area of spill until clean-up is completed. Stop spill at source. Dike to prevent spreading. Pump to salvage tank.

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7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Emergency eyewash fountains and safety showers should be available in the immediate vicinity of potential exposure.

Storage

Store in a cool, dry place. Keep away from flammable and combustible materials (such as paper, wood, etc.). Keep away from reducing agents such as zinc, alkaline metals (for example, lithium, sodium and potassium), and formic acid.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles and face shield (8" min.) in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. (Consult your industrial hygienist.)

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Skin Protection

Wear impervious gloves (consult your safety equipment supplier).  
To prevent skin contact, wear impervious clothing and boots.

Respiratory Protections

If overexposure has been determined or documented, a NIOSH/MSHA jointly approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators under specified conditions. (See your safety equipment supplier.) Engineering or administrative controls should be implemented to reduce exposure.

Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects).

Exposure Guidelines

Component

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WATER (7732-18-5)

No exposure limits established

SODIUM HYPOCHLORITE (7681-52-9)

AIHA WEEL 2.000 mg/m3 - STEL

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9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

(for component) 212.0 F (100.0 C)

Vapor Pressure

(for component) 17.500 mmHg

Specific Vapor Density

No data

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Specific Gravity

1.192 @ 68.00 F

Liquid Density

9.930 lbs/gal @ 60.00 F

1.192 kg/l @ 20.00 C

Percent Volatiles

87.5 %

Evaporation Rate

SLOWER THAN ETHYL ETHER

Appearance

No data

State

LIQUID

Physical Form

HOMOGENEOUS SOLUTION

Color

CLEAR TO YELLOW LIQUID

Odor

CHLORINATED BLEACH ODOR

pH

13.5

Solubility in Water

SOLUBLE

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10. STABILITY AND REACTIVITY

Hazardous Polymerization

Product will not undergo hazardous polymerization.

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Hazardous Decomposition

May form: acid vapors, chlorine.

Chemical Stability

Stable.

Incompatibility

Avoid contact with: ammonia, ethers, excessive heat, heavy metals  
organic materials, reducing agents, strong mineral acids.

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11. TOXICOLOGICAL INFORMATION

No data

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12. ECOLOGICAL INFORMATION

No data

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13. DISPOSAL CONSIDERATION

Waste Management Information

Dispose of in accordance with all applicable local, state and  
federal regulations. For assistance with your waste management  
needs - including disposal, recycling and waste stream reduction,  
contact Ashland Distribution Company, IC&S Environmental Services  
Group at 800-531-7106.

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14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description:

HYPOCHLORITE SOLUTIONS,8,UN1791,III

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Container/Mode:

55 GAL DRUM/TRUCK PACKAGE

NOS Component:

Not applicable

RQ (Reportable Quantity) - 49 CFR 172.101

Product Quantity (lbs) Component

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800

SODIUM HYPOCHLORITE

Other Transportation Information

The Transport Information may vary with the container and mode of shipment.

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15. REGULATORY INFORMATION

US Federal Regulations

TSCA (Toxic Substances Control Act) Status

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4(a)

Component

RQ (lbs)

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SODIUM HYPOCHLORITE

100

CERCLA RQ - 40 CFR 302.4(b)

Materials without a "listed" RQ may be reportable as an "unlisted hazardous substance". See 40 CFR 302.5 (b).

SARA 302 Components - 40 CFR 355 Appendix A

None

Section 311/312 Hazard Class - 40 CFR 370.2

Immediate(X) Delayed(X) Fire(X) Reactive( ) Sudden Release of Pressure( )

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SARA 313 Components - 40 CFR 372.65  
None

OSHA Process Safety Management 29 CFR 1910  
None listed

EPA Accidental Release Prevention 40 CFR 68  
None listed

International Regulations

Inventory Status

DSL (CANADA) The intentional ingredients of this product are listed.

State and Local Regulations

California Proposition 65  
None

New Jersey RTK Label Information  
SODIUM HYPOCHLORITE

7681-52-9

Pennsylvania RTK Label Information  
HYPOCHLOROUS ACID, SODIUM SALT

7681-52-9

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16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

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SOURCE:ASHLAND INC WTR, EASYWTR