**SAFETY DATA SHEET**

Revised Date: 2013/06/12

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Part Number K9221ZA

<table>
<thead>
<tr>
<th>Product Name (Chemical Name, Trade Name, etc.)</th>
<th>Standard Solution</th>
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### Composition/Information on Ingredients

- **Single Product/Mixture Product:** Single Product
- **Chemical Name (Synonyms):** Sodium Chloride
- **Ingredient /Content:** 0.1 mol/l Sodium Chloride Solution (250 ml)
- **Formula:** NaCl
- **CAS No.:** 7647-14-5

### GHS Classification:
Not Classified

### Other Information:
Refer to next page “0.1mol/l Sodium Chloride Solution” MSDS
IDENTITY 0.1mol/l Sodium Chloride Solution

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTIFIER: 0.1mol/l Sodium Chloride Solution
MANUFACTURER: Wako Pure Chemical Industries, Ltd.
SUPPLIER: SUPPLIER(In JAPAN): Wako Pure Chemical Industries, Ltd.
ADDRESS: 1-2, Doshomachi 3-chome, Chuo-ku, Osaka, 540-8605, Japan
TELEPHONE NUMBER & EMERGENCY TELEPHONE NUMBER: (06)6203-3741
SUPPLIER(In U.S.A.): Wako Chemicals USA, Inc.
ADDRESS: 1600 Bellwood Road, Richmond, VA 23237, U.S.A.
TELEPHONE NUMBER: (804)271-7677
EMERGENCY TELEPHONE NUMBER: (800)424-9300 (CHEMTREC)
SUPPLIER(In EUROPE): Wako Chemicals GmbH, Germany
ADDRESS: Fuggerstrasse 12, D-41468 Neuss, GERMANY
TELEPHONE NUMBER & EMERGENCY TELEPHONE NUMBER: (02131)311-0

RECOMMENDED USE: Research use only.

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION: Not classified hazardous according to Regulation (EC) No 1272/2008
PRECAUTIONARY STATEMENTS:

EU CLASSIFICATION: Not classified dangerous according to Directive 67/548/EEC

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY CONTENT
Sodium chloride : (1) 0.58w/v%(01mol/L)
Water Balance
SYNONYMS: (1); Common salt; Salt
FORMULA: (1); NaCl
MOLECULAR WEIGHT: (1); 58.44
CAS NUMBER: (1); 7647-14-5
TSCA INVENTORY: (1); Listed
EINECS No.: (1); 231-598-3
EC INDEX NUMBER: (1); Not listed

4. FIRST AID MEASURES

GENERAL ADVICE: Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.

INHALATION: Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult a physician.
SKIN CONTACT: Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.
EYE CONTACT: Remove any contact lenses at once. Flush eyes well with flooding amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.
INGESTION: Rinse mouth, give plenty of water to dilute the substance. Never give anything by mouth to an unconscious person. Consult a physician.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Not combustible. Use extinguishing media appropriate to the surrounding fire.
FIRE & EXPLOSION HAZARDS: Toxic and irritating fumes or smoke may be emitted.
SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS: Firemen should wear normal protective equipment (full bunker gear) and positive-pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable...
respiratory equipment. Avoid contact with skin and eyes.

ENVIRONMENTAL PRECAUTIONS
Prevent spills from entering sewers, watercourses or low areas.

METHODS FOR CLEANING UP
Do not touch spilled material without suitable protection (See section 8). Take up spilled material with ashes or other absorbents. After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose of contaminated clothing.

7. HANDLING AND STORAGE

PRECAUTION FOR SAFE HANDLING
Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection.

CONDITIONS FOR SAFE STORAGE
Store away from sunlight in well-ventilated dry place at room temperature. Keep container tightly closed.

INCOMPATIBILITIES
Strong oxidizers, strong acids, bromine trifluoride, lithium, water-reactive materials (alkali metals etc.)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES
Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.

VENTILATION
Local Exhaust; Necessary, Mechanical (General); Recommended

INDIVIDUAL PROTECTION MEASURES
Respiratory protection: Use a NIOSH/MSHA or European Standard EN149 approved respirator if the vapor concentrations exceed regulatory guidelines.
Hand protection: Chemical resistant gloves
Eye protection: Safety glasses (goggles)
Skin protection: Protective clothing

CONTROL PARAMETER
(1); OSHA Final Limits : None established
ACGIH TLV(s): None established

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE
Colorless clear liquid

ODOUR
Odorless

pH
Not available

MELTING POINT
Not available

INITIAL BOILING POINT
Not available

FLASH POINT
Not available

FLAMMABILITY (solid, gas)
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EXPLOSIVE LIMITS
Not available

VAPOR PRESSURE
Not available

SPECIFIC GRAVITY
1.005g/mL (at 25/4 °C= 77/39 °F)

SOLUBILITY IN
WATER: Miscible
ETHANOL: Miscible

PARTITION COEFFICIENT (log Po/w): Not available

DECOMPOSITION TEMPERATURE: Not available

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY
Stable under recommended storage conditions.

CONDITIONS TO AVOID
Sunlight, heat

INCOMPATIBLE MATERIALS
Strong oxidizers, strong acids, bromine trifluoride, lithium, water-reactive materials (alkali metals etc.)

HAZARDOUS DECOMPOSITION PRODUCTS
Sodium compounds and chlorine compounds may be formed.

11. TOXICOLOGICAL INFORMATION

as Sodium chloride;

ACUTE TOXICITY (oral/dermal/inhalation)
Not available as the mixture
(1); LCLo (oral, man): 1gm/kg (MACPAJ 65,1587,1990)
LDS0 (oral, rat): 3000mg/kg (VCVN1°,36,1998)

SKIN CORROSION/IRRITATION
Not available as the mixture
(1); Causes skin irritation.

EYE DAMAGE/EYE IRRITATION
Not available as the mixture
(1); Causes eye irritation.

RESPIRATORY OR SKIN SENSITIZATION
Not available as the mixture and components

GERM CELL MUTAGENICITY
(1); Mutation in microorganisms; S.cerevisiae; 2mol/L (MUREAV 189,11,1987)
Micronucleus test; rat; orl, 2 pph/14D (MUTAEX 17,89,2002)

REPRODUCTIVE TOXICITY
Not available as the mixture
TDLo(orl, rat): 56,400 mg/kg (5 D pre-21 D post); Maternal Effects - postpartum (AJPHAP 264, R296, 1993)
TDLo(ipc, woman): 27 mg/kg (15 W preg); Fertility - Abortion (AJOGA 118, 218, 1974)

**STOT (SINGLE EXPOSURE):** Not available as the mixture and components
**STOT (REPEATED EXPOSURE):** Not available as the mixture and components
**ASPIRATION HAZARD:** Not available as the mixture and components
**CARCINOGENICITY:** Not available as the mixture and components

**ADDITIONAL INFORMATION:**
- NTP : Not listed
- IARC : Not listed
- OSHA : Not listed
- ACGIH : Not listed

(1): EPA GENETOX PROGRAM 1988, Inconclusive: Mammalian micronucleus

### 12. ECOLOGICAL INFORMATION

**ECOTOXICITY:** Not available
**PERSISTENCE AND DEGRADABILITY:** Not available
**BIOACCUMULATION POTENTIAL:** Not available
**MOBILITY IN SOIL:** Not available
**OTHER ADVERSE EFFECTS:** (1); WGK, 1

### 13. DISPOSAL CONSIDERATION (INCLUDING CONTAINER)

Flush with a lot of water to dilute in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations (contact country, local or state environmental agency for specific rules).

After contents are completely removed, dispose of its container in accordance with local/regional/national/international regulation.

### 14. TRANSPORT INFORMATION

- **IATA:** Not Restricted.
- **MARINE POLLUTANT:** No
- **DOT (Department of Transportation):** Not a Hazardous Material for DOT shipping.

### 15. REGULATORY INFORMATION

**US REGULATIONS:**
- (1); EPA : CERCLA RQ= Not listed
- EPCRA TPQ= Not listed
- FIFRA 1998 STATUS OF PESTICIDES: RED Completed
- OSHA : TQ= Not listed

### 16. OTHER INFORMATION INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS

No specific notes

The above information is believed to be correct to be the best of our knowledge and information but does not purport to be all inclusive and shall be used only as a guide. This product is intended to be used by expert persons having chemical knowledge and skill, at their own discretion and risk and Wako shall not be held liable for any damage resulting from handling or from contact with the above material.