

**Sodium hypochlorite solution****71696-2.5L**

Version 2.1

Issuing date 07/20/2016  
11/12/2018

Revision Date 08/12/2019

Print Date 08/04/2021

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name : Sodium hypochlorite solution

Number : 000000020198

Recommended use of the chemical and restrictions on use : Laboratory chemicals

Manufacturer or supplier's details : Honeywell Specialty Chemicals Seelze GmbH  
Wunstorfer Straße 40  
Seelze, 30926

For further information, please contact: : 1-800-368-0050  
+1-231-726-3171  
(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**  
: **Transportation (CHEMTREC): 1-800-424-9300 or +1-703-527-3887**  
: **In Japan: +(81)-345209637**  
: (24 hours/day, 7 days/week)

**2. HAZARDS IDENTIFICATION****Classification of the substance or mixture**

Classification of the substance or mixture : Corrosive to metals, Category 1  
Skin corrosion, Category 1B  
Serious eye damage, Category 1  
Short-term (acute) aquatic hazard, Category 1  
Long-term (chronic) aquatic hazard, Category 3

**GHS Label elements, including precautionary statements**

Symbol(s) :



Signal word : Danger

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- Hazard statements** : May be corrosive to metals.  
Causes severe skin burns and eye damage.  
Very toxic to aquatic life.  
Harmful to aquatic life with long lasting effects.
- Precautionary statements** : **Prevention:**  
Keep only in original container.  
Wash skin thoroughly after handling.  
Avoid release to the environment.  
Wear protective gloves/ protective clothing/ eye protection/ face protection.
- Response:**  
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER/doctor.  
Wash contaminated clothing before reuse.  
Absorb spillage to prevent material damage.  
Collect spillage.
- Storage:**  
Store locked up.  
Store in corrosive resistant container with a resistant inner liner.
- Disposal:**  
Dispose of contents/ container to an approved waste disposal plant.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Formula : NaOCl

Chemical nature : Mixture

Chemical name	CAS-No.	Concentration
Water	7732-18-5	>=70.00 - <90.00 %
Water		
Sodium hypochlorite	7681-52-9	>=10.00 - <20.00 %
Sodium hypochlorite		

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Note: none

**4. FIRST AID MEASURES**

- |                |   |
|----------------|---|
| General advice | : First aider needs to protect himself.<br>Take off all contaminated clothing immediately.  |
| Inhalation     | : Remove to fresh air.<br>If breathing is difficult, give oxygen.<br>Use oxygen as required, provided a qualified operator is present.<br>Call a physician immediately.                                     |
| Skin contact   | : Wash off immediately with plenty of water for at least 15 minutes.<br>Take off contaminated clothing and shoes immediately.<br>Wash contaminated clothing before re-use.<br>Call a physician immediately. |
| Eye contact    | : Protect unharmed eye.<br>Irrigate eyes for at least 15 minutes with copious quantities of water, keeping eyelids apart and away from eyeballs during irrigation.<br>Call a physician immediately.         |
| Ingestion      | : Rinse mouth with water.<br>Do NOT induce vomiting.<br>Call a physician immediately.   |

**5. FIREFIGHTING MEASURES**

- |   |   |
|---|---|
| Suitable extinguishing media                  | : Water spray<br>Foam<br>Carbon dioxide (CO <sub>2</sub> )<br>Dry powder  |
| Specific hazards during firefighting          | : Fire may cause evolution of:<br>Chlorine compounds  |
| Special protective equipment for firefighters | : In the event of fire and/or explosion do not breathe fumes.<br>Wear self-contained breathing apparatus and protective suit.<br>No unprotected exposed skin areas. |

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Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
The product itself does not burn.

**6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation.  
Keep people away from and upwind of spill/leak.  
Use personal protective equipment.

Environmental precautions : Do not flush into surface water or sanitary sewer system.  
Should not be released into the environment.  
Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material.  
Sweep up and shovel into suitable containers for disposal.

**7. HANDLING AND STORAGE****Handling**

Precautions for safe handling : Wear personal protective equipment.  
Use only with adequate ventilation.  
Do not breathe vapours or spray mist.  
Do not get in eyes, on skin, or on clothing.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

**Storage**

Conditions for safe storage, including any incompatibilities : Store in original container.  
Keep containers tightly closed in a dry, cool and well-ventilated place.  
Protect against light.

Advice on common storage : Do not store together with:  
Acids

Storage temperature : 15 - 25 °C

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

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Contains no substances with occupational exposure limit values.

**Appropriate engineering controls**

Use with local exhaust ventilation.

**Individual protection measures, such as personal protective equipment**

- |                          |   |
|--------------------------|---|
| Respiratory protection   | : In the case of vapour formation use a respirator with an approved filter.   |
| Hand protection          | : Impervious gloves<br>Gloves must be inspected prior to use.<br>Replace when worn.   |
| Eye protection           | : Safety goggles  |
| Skin and body protection | : Impervious clothing   |
| Hygiene measures         | : Separate rooms are required for washing, showering and changing clothes.<br>Take off all contaminated clothing immediately.<br>Remove and wash contaminated clothing before re-use.<br>Wash hands before breaks and at the end of workday.<br>When using do not eat or drink.                         |
| Protective measures      | : Ensure that eyewash stations and safety showers are close to the workstation location.<br>Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.<br>Do not breathe vapours or spray mist.<br>Do not get in eyes, on skin, or on clothing. |

**9. PHYSICAL AND CHEMICAL PROPERTIES**

- |                     |                     |
|---------------------|---------------------|
| Physical state      | : liquid            |
| Colour              | : clear             |
| Odour               | : no data available |
| pH                  | : Note: alkaline    |
| Melting point/range | : -30 - -20 °C      |

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Boiling point/boiling range	: 111 °C
Flash point	: Note: Not applicable
Evaporation rate	: Note: no data available
Lower explosion limit	: Note: Not applicable
Upper explosion limit	: Note: Not applicable
Vapour pressure	: 23.3 hPa at 20 °C(68 °F)
Vapour density	: Note: no data available
Density	: 1.206 g/cm <sup>3</sup> at 25 °C
Water solubility	: Note: soluble
Partition coefficient: n-octanol/water	: Note: no data available
Ignition temperature	: Note: Not applicable
Decomposition temperature	: Note: No decomposition if used as directed.
Viscosity, dynamic	: Note: no data available
Viscosity, kinematic	: Note: no data available
Molecular weight	: 74.44 g/mol
Corrosivity	: Note: Corrosive to metals

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**10. STABILITY AND REACTIVITY**

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Hazardous polymerisation does not occur.
Conditions to avoid	: Protect from heat/overheating. Exposure to light.
Incompatible materials to avoid	: Acids
Hazardous decomposition products	: Chlorine compounds

**11. TOXICOLOGICAL INFORMATION**

Skin irritation	: Note: Classification based on Annex VI of regulation 1272/2008/EC.
Eye irritation	: Note: Classification based on Annex VI of regulation 1272/2008/EC.
Sensitisation	: Buehler Test Species: Guinea pig Classification: non-sensitizing Method: OECD Test Guideline 406

**12. ECOLOGICAL INFORMATION****Toxicity**

Toxicity to fish	: flow-through test LC50: 0.032 mg/l Exposure time: 96 h Species: Oncorhynchus kisutch (coho salmon) Test substance: REACH dossier "read-across" Note: anhydrous substance
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- Toxicity to daphnia and other aquatic invertebrates : flow-through test  
EC50: 0,035 mg actives Cl/l  
Exposure time: 48 h  
Species: Ceriodaphnia dubia (water flea)  
Method: OECD Test Guideline 202
- : flow-through test  
EC50: 0,141 mg actives Cl/l  
Exposure time: 48 h  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 202
- Toxicity to algae : Growth rate  
EC50: < 0,05 mg actives Cl/l  
Exposure time: 72 h  
Species: Pseudokirchneriella subcapitata (green algae)  
Method: OECD Test Guideline 201
- : static test  
EC50: < 0,03 mg actives Cl/l  
Exposure time: 72 h  
Species: Pseudokirchneriella subcapitata (green algae)  
Method: OECD Test Guideline 201

**Persistence and degradability**

- Biodegradability : Note: The methods for determining biodegradability are not applicable to inorganic substances.

**Ecotoxicology Assessment**

## Results of PBT assessment

This substance is not considered to be persistent, bioaccumulating and toxic (PBT)., This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**13. DISPOSAL CONSIDERATIONS**

- Disposal methods : In accordance with local and national regulations.



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**14. TRANSPORT INFORMATION****ADR**

UN/ID No. : UN 1791  
Description of the goods : HYPOCHLORITE SOLUTION

Class : 8  
Packing group : II  
Classification Code : C9  
Hazard Identification Number : 80  
Labels : 8

**IATA**

UN/ID No. : UN 1791  
Description of the goods : Hypochlorite solution  
Class : 8  
Packing group : II  
Labels : 8  
Packing instruction (cargo aircraft) : 855  
Packing instruction (passenger aircraft) : 851  
Packing instruction (passenger aircraft) : Y840

**IMDG**

UN/ID No. : UN 1791  
Description of the goods : HYPOCHLORITE SOLUTION  
(SODIUM HYPOCHLORITE)  
Class : 8  
Packing group : II  
Labels : 8  
EmS Number 1 : F-A  
EmS Number 2 : S-B  
Marine pollutant : yes

Other information : Incompatible with acids.

**15. REGULATORY INFORMATION****National regulatory information**

Vessel Safety Law : Corrosive substances (Article 2 and 3 of rules on shipping and 9/11

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JP VSL storage of dangerous goods and its Attached Table 1)

Aviation Law : Corrosive substances (Article 194 of The Enforcement Rules of  
JP AVL Aviation Law and its Attached Table 1)

Fire Service Law : Not relevant

Poisonous and Deleterious : Not relevant  
Substances Control Law**Other international regulations****Notification status**US. Toxic Substances : On TSCA Inventory  
Control ActAustralia. Industrial Chemical : On the inventory, or in compliance with the inventory  
(Notification and  
Assessment) ActCanada. Canadian : All components of this product are on the Canadian DSL  
Environmental Protection Act  
(CEPA). Domestic  
Substances List (DSL)

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Existing Chemicals : On the inventory, or in compliance with the inventory  
Inventory (KECI)Philippines. The Toxic : On the inventory, or in compliance with the inventory  
Substances and Hazardous  
and Nuclear Waste Control  
ActChina. Inventory of Existing : On the inventory, or in compliance with the inventory  
Chemical Substances  
(IECSC)New Zealand. Inventory of : On the inventory, or in compliance with the inventory  
Chemicals (NZIoC), as  
published by ERMA New

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**16. OTHER INFORMATION**

	<b>HMIS III</b>	<b>NFPA</b>
Health hazard	: 3	3
Flammability	: 0	0
Physical Hazard	: 0	
Instability	:	0

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

**Further information**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Previous Issue Date: 11/12/2018

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group