

## Sodium hypochlorite (4% w/v solution), Plant Culture Tested

Version number: GHS 1.0

Date of compilation: 2025-01-29

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Identification of the substance

**Sodium hypochlorite (4% w/v solution),  
Plant Culture Tested**

CAS number

7681-52-9

Alternative number(s)

PCT1311

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Laboratory chemicals, Manufacture of substances

Uses advised against

Do not use for squirting or spraying. Do not use for products which come into direct contact with the skin.

#### 1.3 Details of the supplier of the safety data sheet

HiMedia Laboratories Pvt. Ltd.  
Plot No. C40, Road No. 21Y, Wagle Industrial Area, MIDC  
Thane West Maharashtra 400604  
India

Telephone: +91 22 69034800, +91 22 61169797

e-mail: [info@himedialabs.com](mailto:info@himedialabs.com)

Website: [www.himedialabs.com](http://www.himedialabs.com)

e-mail (competent person)

[info@himedialabs.com](mailto:info@himedialabs.com) (HiMedia Laboratories Pvt. Ltd)

#### 1.4 Emergency telephone number

Emergency information service

+91 9321269711

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification acc. to GHS

| Section | Hazard class                                          | Category | Hazard class and category | Hazard statement |
|---------|-------------------------------------------------------|----------|---------------------------|------------------|
| 3.2     | skin corrosion/irritation                             | 1B       | Skin Corr. 1B             | H314             |
| 3.3     | serious eye damage/eye irritation                     | 1        | Eye Dam. 1                | H318             |
| 4.1A    | hazardous to the aquatic environment - acute hazard   | 1        | Aquatic Acute 1           | H400             |
| 4.1C    | hazardous to the aquatic environment - chronic hazard | 1        | Aquatic Chronic 1         | H410             |

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis. Spillage and fire water can cause pollution of watercourses.

#### 2.2 Label elements

Labelling

- Signal word                      danger

## Sodium hypochlorite (4% w/v solution), Plant Culture Tested

Version number: GHS 1.0

Date of compilation: 2025-01-29

### - Pictograms

GHS05, GHS09



### - Hazard statements

H314 Causes severe skin burns and eye damage.  
H410 Very toxic to aquatic life with long lasting effects.

### - Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor.  
P391 Collect spillage.  
P501 Dispose of contents/container to industrial combustion plant.

### - Supplemental hazard information

EUH031 Contact with acids liberates toxic gas.

## 2.3 Other hazards

#### Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

#### Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Name of substance Sodium hypochlorite (4% w/v solution),  
Plant Culture Tested

#### Identifiers

CAS No 7681-52-9  
EC No 231-668-3  
Index No 017-011-00-1  
(GB CLP)

| Specific Conc. Limits | M-Factors                                       | ATE | Exposure route |
|-----------------------|-------------------------------------------------|-----|----------------|
| -                     | M-factor (acute) = 10<br>M-factor (chronic) = 1 | -   |                |

Molecular formula

NaClO

Molar mass

74.44 g/mol

## Sodium hypochlorite (4% w/v solution), Plant Culture Tested

Version number: GHS 1.0

Date of compilation: 2025-01-29

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

##### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

##### Following skin contact

Wash with plenty of soap and water.

##### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

##### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

#### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

#### 4.3 Indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO<sub>2</sub>)

##### Unsuitable extinguishing media

Water jet

#### 5.2 Special hazards arising from the substance or mixture

##### Hazardous combustion products

Hydrogen chloride (HCl)

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

##### For non-emergency personnel

Remove persons to safety.

##### For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

## **Sodium hypochlorite (4% w/v solution), Plant Culture Tested**

Version number: GHS 1.0

Date of compilation: 2025-01-29

### **6.3 Methods and material for containment and cleaning up**

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

### **6.4 Reference to other sections**

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

### **7.2 Conditions for safe storage, including any incompatibilities**

- Specific designs for storage rooms or vessels

Do not keep the container sealed.

- Storage temperature

Recommended storage temperature: 10 – 30 °C

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

### **7.3 Specific end use(s)**

See section 16 for a general overview.

## **SECTION 8: Exposure controls/personal protection**

### **8.1 Control parameters**

Occupational exposure limit values (Workplace Exposure Limits)  
this information is not available

### **8.2 Exposure controls**

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

## Sodium hypochlorite (4% w/v solution), Plant Culture Tested

Version number: GHS 1.0

Date of compilation: 2025-01-29

### Skin protection

#### - Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### - Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

### Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|                                                          |                                       |
|----------------------------------------------------------|---------------------------------------|
| Physical state                                           | liquid                                |
| Colour                                                   | Colourless to pinkish yellow solution |
| Odour                                                    | characteristic                        |
| Melting point/freezing point                             | not determined                        |
| Boiling point or initial boiling point and boiling range | not determined                        |
| Flammability                                             | non-combustible                       |
| Lower and upper explosion limit                          | not determined                        |
| Flash point                                              | not determined                        |
| Auto-ignition temperature                                | not determined                        |
| Decomposition temperature                                | not relevant                          |
| pH (value)                                               | not determined                        |
| Kinematic viscosity                                      | not determined                        |
| Solubility(ies)                                          | not determined                        |

### Partition coefficient

|                                                   |                          |
|---------------------------------------------------|--------------------------|
| Partition coefficient n-octanol/water (log value) | not relevant (inorganic) |
| Vapour pressure                                   | not determined           |

## Sodium hypochlorite (4% w/v solution), Plant Culture Tested

Version number: GHS 1.0

Date of compilation: 2025-01-29

### Density and/or relative density

|                         |                                               |
|-------------------------|-----------------------------------------------|
| Density                 | not determined                                |
| Relative vapour density | information on this property is not available |

|                          |                       |
|--------------------------|-----------------------|
| Particle characteristics | not relevant (liquid) |
|--------------------------|-----------------------|

### 9.2 Other information

|                                                    |                                                                |
|----------------------------------------------------|----------------------------------------------------------------|
| Information with regard to physical hazard classes | hazard classes acc. to GHS (physical hazards):<br>not relevant |
|----------------------------------------------------|----------------------------------------------------------------|

### Other safety characteristics

|                |       |
|----------------|-------|
| Liquid content | 100 % |
|----------------|-------|

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

### 10.2 Chemical stability

See below "Conditions to avoid".

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

### 10.5 Incompatible materials

There is no additional information.

Release of toxic materials with:

Acids

### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Classification acc. to GHS

#### Acute toxicity

Shall not be classified as acutely toxic.

#### Skin corrosion/irritation

Causes severe skin burns and eye damage.

#### Serious eye damage/eye irritation

Causes serious eye damage.

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

## **Sodium hypochlorite (4% w/v solution), Plant Culture Tested**

Version number: GHS 1.0

Date of compilation: 2025-01-29

### **Germ cell mutagenicity**

Shall not be classified as germ cell mutagenic.

### **Carcinogenicity**

Shall not be classified as carcinogenic.

### **Reproductive toxicity**

Shall not be classified as a reproductive toxicant.

### **Specific target organ toxicity - single exposure**

Shall not be classified as a specific target organ toxicant (single exposure).

### **Specific target organ toxicity - repeated exposure**

Shall not be classified as a specific target organ toxicant (repeated exposure).

### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

## **11.2 Information on other hazards**

There is no additional information.

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

Very toxic to aquatic life with long lasting effects.

### **12.2 Persistence and degradability**

Data are not available.

### **12.3 Bioaccumulative potential**

Data are not available.

### **12.4 Mobility in soil**

Data are not available.

### **12.5 Results of PBT and vPvB assessment**

According to the results of its assessment, this substance is not a PBT or a vPvB.

### **12.6 Endocrine disrupting properties**

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

### **12.7 Other adverse effects**

Data are not available.

## **SECTION 13: Disposal considerations**

### **13.1 Waste treatment methods**

#### **Waste treatment-relevant information**

Recycling/reclamation of other inorganic materials.

#### **Sewage disposal-relevant information**

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

#### **Waste treatment of containers/packagings**

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

### **Remarks**

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## Sodium hypochlorite (4% w/v solution), Plant Culture Tested

Version number: GHS 1.0

Date of compilation: 2025-01-29

### SECTION 14: Transport information

#### 14.1 UN number or ID number

|           |         |
|-----------|---------|
| ADR/RID   | UN 1791 |
| IMDG-Code | UN 1791 |
| ICAO-TI   | UN 1791 |

#### 14.2 UN proper shipping name

|           |                       |
|-----------|-----------------------|
| ADR/RID   | HYPOCHLORITE SOLUTION |
| IMDG-Code | HYPOCHLORITE SOLUTION |
| ICAO-TI   | Hypochlorite solution |

#### 14.3 Transport hazard class(es)

|           |   |
|-----------|---|
| ADR/RID   | 8 |
| IMDG-Code | 8 |
| ICAO-TI   | 8 |

#### 14.4 Packing group

|           |     |
|-----------|-----|
| ADR/RID   | III |
| IMDG-Code | III |
| ICAO-TI   | III |

#### 14.5 Environmental hazards

hazardous to the aquatic environment

#### 14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

#### 14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

#### Information for each of the UN Model Regulations

#### **Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) - Additional information**

|                     |                  |
|---------------------|------------------|
| Classification code | C9               |
| Danger label(s)     | 8, fish and tree |



|                               |                                            |
|-------------------------------|--------------------------------------------|
| Environmental hazards         | yes (hazardous to the aquatic environment) |
| Special provisions (SP)       | 521                                        |
| Excepted quantities (EQ)      | E1                                         |
| Limited quantities (LQ)       | 5 L                                        |
| Transport category (TC)       | 3                                          |
| Tunnel restriction code (TRC) | E                                          |
| Hazard identification No      | 80                                         |
| Emergency Action Code         | 2X                                         |



## Sodium hypochlorite (4% w/v solution), Plant Culture Tested

Version number: GHS 1.0

Date of compilation: 2025-01-29

### Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) - Additional information

Classification code C9  
Danger label(s) 8, fish and tree



Environmental hazards yes (hazardous to water)  
Special provisions (SP) 521  
Excepted quantities (EQ) E1  
Limited quantities (LQ) 5 L  
Transport category (TC) 3  
Hazard identification No 80

### International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant yes (P) (hazardous to the aquatic environment)  
Danger label(s) 8, fish and tree



Special provisions (SP) 223, 274, 900  
Excepted quantities (EQ) E1  
Limited quantities (LQ) 5 L  
EmS F-A, S-B  
Stowage category B  
Segregation group 8 - Hypochlorites

### International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Environmental hazards yes (hazardous to the aquatic environment)  
Danger label(s) 8



Special provisions (SP) A3  
Excepted quantities (EQ) E1  
Limited quantities (LQ) 1 L

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

#### Deco-Paint Directive

|             |     |
|-------------|-----|
| VOC content | 0 % |
|-------------|-----|

## Sodium hypochlorite (4% w/v solution), Plant Culture Tested

Version number: GHS 1.0

Date of compilation: 2025-01-29

### Industrial Emissions Directive (IED)

|             |     |
|-------------|-----|
| VOC content | 0 % |
|-------------|-----|

### Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

### Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

### Water Framework Directive (WFD)

| List of pollutants (WFD)                                    |        |           |         |
|-------------------------------------------------------------|--------|-----------|---------|
| Name of substance                                           | CAS No | Listed in | Remarks |
| Sodium hypochlorite (4% w/v solution), Plant Culture Tested |        | a)        |         |

#### Legend

a) Indicative list of the main pollutants

### Regulation on persistent organic pollutants (POP)

not listed

### National regulations (GB)

#### List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

not listed

### Restrictions according to GB REACH, Annex 17

| Dangerous substances with restrictions (GB REACH, Annex 17) |                                                                                                  |        |    |
|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------|----|
| Name of substance                                           | Name acc. to inventory                                                                           | CAS No | No |
| Sodium hypochlorite (4% w/v solution), Plant Culture Tested | this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC |        | 3  |

### National inventories

| Country | Inventory  | Status                       |
|---------|------------|------------------------------|
| EU      | REACH Reg. | substance is listed          |
| US      | TSCA       | substance is listed (ACTIVE) |

#### Legend

REACH Reg. REACH registered substances

TSCA Toxic Substance Control Act

## 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

## Sodium hypochlorite (4% w/v solution), Plant Culture Tested

Version number: GHS 1.0

Date of compilation: 2025-01-29

### SECTION 16: Other information

#### Abbreviations and acronyms

| Abbr.     | Descriptions of used abbreviations                                                                                                                                                                                                                                                       |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ADR       | Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)                                                                                                                            |
| ATE       | Acute Toxicity Estimate                                                                                                                                                                                                                                                                  |
| CAS       | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)                                                                                                                                                                                   |
| DGR       | Dangerous Goods Regulations (see IATA/DGR)                                                                                                                                                                                                                                               |
| EC No     | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)                                                                                                        |
| ED        | Endocrine disruptor                                                                                                                                                                                                                                                                      |
| EINECS    | European Inventory of Existing Commercial Chemical Substances                                                                                                                                                                                                                            |
| ELINCS    | European List of Notified Chemical Substances                                                                                                                                                                                                                                            |
| EmS       | Emergency Schedule                                                                                                                                                                                                                                                                       |
| GB CLP    | The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended)                                                                                                                               |
| GB REACH  | The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)                                                                                                                                                                                                     |
| GHS       | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations                                                                                                                                                                                |
| IATA      | International Air Transport Association                                                                                                                                                                                                                                                  |
| IATA/DGR  | Dangerous Goods Regulations (DGR) for the air transport (IATA)                                                                                                                                                                                                                           |
| ICAO      | International Civil Aviation Organization                                                                                                                                                                                                                                                |
| ICAO-TI   | Technical instructions for the safe transport of dangerous goods by air                                                                                                                                                                                                                  |
| IMDG      | International Maritime Dangerous Goods Code                                                                                                                                                                                                                                              |
| IMDG-Code | International Maritime Dangerous Goods Code                                                                                                                                                                                                                                              |
| index No  | The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008                                                                                                                                                                 |
| M-factor  | Means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by the summation method the classification of a mixture in which the substance is present |
| NLP       | No-Longer Polymer                                                                                                                                                                                                                                                                        |
| PBT       | Persistent, Bioaccumulative and Toxic                                                                                                                                                                                                                                                    |
| REACH     | Registration, Evaluation, Authorisation and Restriction of Chemicals                                                                                                                                                                                                                     |
| RID       | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)                                                                                                                  |
| VOC       | Volatile Organic Compounds                                                                                                                                                                                                                                                               |
| vPvB      | Very Persistent and very Bioaccumulative                                                                                                                                                                                                                                                 |

#### Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

## Sodium hypochlorite (4% w/v solution), Plant Culture Tested

Version number: GHS 1.0

Date of compilation: 2025-01-29

### List of relevant phrases (code and full text as stated in section 2 and 3)

| Code | Text                                                  |
|------|-------------------------------------------------------|
| H314 | Causes severe skin burns and eye damage.              |
| H318 | Causes serious eye damage.                            |
| H400 | Very toxic to aquatic life.                           |
| H410 | Very toxic to aquatic life with long lasting effects. |

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.