

# Safety Data Sheet

## Potassium hypochlorite solution 0,1-1 % Cl active

Safety Data Sheet dated 3/11/2014, version 1

### 1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: Potassium hypochlorite solution 0,1-1 % Cl active

CAS number: 7778-66-7

Other means of identification:

EC number: 231-909-2

Recommended use of the chemical and restrictions on use

Recommended use:

Industrial uses

Restrictions on use:

Any other use outside recommended

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company:

Industrie De Nora s.p.a – Via Bistolfi 35 – 20134 Milano - Italy

Industrie De Nora s.p.a – Phone+39 02 21292830 Fax +39 02 21292831

Competent person responsible for the safety data sheet:

info@denoranext.com

Emergency phone number

**CHEMTREC +1 800 424 9300**

Industrie De Nora s.p.a c/o De Nora Tech - Phone +1 440 710 5418

### 2. HAZARD(S) IDENTIFICATION

Classification of the chemical

Aquatic Acute 2, Toxic to aquatic life.

Label elements

Symbols:

None

Hazard statements:

H401 Toxic to aquatic life.

Precautionary statements:

None

Special Provisions:

None

Hazards not otherwise classified identified during the classification process:

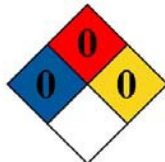
None

Ingredient(s) with unknown acute toxicity:

None.

Additional classification information

NFPA rating:



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HMIS rating:

HEALTH	/	0
FLAMMABILITY		0
PHYSICAL HAZARD		0
PERSONAL PROTECTION		<input type="checkbox"/>

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Identification of the substance:

CAS number: 7778-66-7

EC number: 231-909-2

Mixtures

N.A.

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### 4. FIRST-AID MEASURES

Description of necessary measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

None

Indication of immediate medical attention and special treatment needed

Treatment:

None

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### 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products:

None

Explosive properties: N.A.

Oxidizing properties: oxidant

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Remove persons to safety.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

Methods and materials for containment and cleaning up

Wash with plenty of water.

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### 7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not use on extensive surface areas in premises where there are occupants.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Storage temperature:

Store at ambient temperature.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

No occupational exposure limit available

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

Appropriate engineering controls:

None

Individual protection measures

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and colour:	liquid
Odour:	typical of chlorine
Odour threshold:	N.A.
pH:	9,0
Melting point / freezing point:	0/-2 °C
Initial boiling point and boiling range:	104 °C
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	N.A.
Evaporation rate:	N.A.
Vapour pressure:	23hPa (20°C)
Relative density:	1.0-1.1 g/mL
Solubility in water:	soluble
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	N.A.
Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties	N.A.

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### 10. STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions
Chemical stability	Stable under normal conditions
Possibility of hazardous reactions	None
Conditions to avoid	Stable under normal conditions.
Incompatible materials	None in particular.
Hazardous decomposition products	None.

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### 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects	
Toxicological information of the substance:	Potassium hypochlorite - CAS: 7778-66-7
b) skin corrosion/irritation:	Test: Skin Corrosive - Route: Skin Positive - Notes: when >10% active chlorine

Substance(s) listed on the NTP report on Carcinogens:	No.
Substance(s) listed on the IARC Monographs:	Potassium hypochlorite - Group 3.
Substance(s) listed as OSHA Carcinogen(s):	No.
Substance(s) listed as NIOSH Carcinogen(s):	No.

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### 12. ECOLOGICAL INFORMATION

Ecotoxicity  
Adopt good working practices, so that the product is not released into the environment.  
N.A.

Persistence and degradability  
N.A.

Bioaccumulative potential  
N.A.

Mobility in soil  
N.A.

Other adverse effects  
None

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### 13. DISPOSAL CONSIDERATIONS

Waste treatment and disposal methods  
Recover if possible. In so doing, comply with the local and national regulations currently in force.

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### 14. TRANSPORT INFORMATION

UN number  
Not classified as dangerous in the meaning of transport regulations.

UN proper shipping name  
N.A.

Transport hazard class(es)  
N.A.

Packing group  
N.A.

Environmental hazards  
ADR-Environmental Pollutant: No  
IMDG-Marine pollutant: No

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)  
N.A.

Special precautions  
N.A.

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### 15. REGULATORY INFORMATION

USA - Federal regulations  
TSCA - Toxic Substances Control Act  
This substance is listed on the TSCA inventory.  
TSCA listed substances:  
None.

SARA - Superfund Amendments and Reauthorization Act  
Section 302 - Extremely Hazardous Substances: No.  
Section 304 - Hazardous substances: No.  
Section 313 - Toxic chemical list: No.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act  
No substances listed.

CAA - Clean Air Act  
CAA listed substances:  
None.

CWA - Clean Water Act  
CWA listed substances:  
None.

USA - State specific regulations  
California Proposition 65

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Substance(s) listed under California Proposition 65:

None.

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

No.

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

No.

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

No.

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## 16. OTHER INFORMATION

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Disclaimer:

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.

This Safety Data Sheet cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).