

**TC33500 - SODIUM HYDROXIDE  
0,1N=N/10=0,1M**

## Information Sheet

(meeting the information requirements on substances and mixtures pursuant to art. 32 of the Reg. (CE) 1907/2006 - REACH)

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

**1.1. Product identifier**

Code: **TC33500**  
Product name: **SODIUM HYDROXIDE 0,1N=N/10=0,1M**

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

Intended use: **Laboratory reagent**

**1.3. Details of the supplier of the safety data sheet**

Name: **TITOLCHIMICA SPA**  
Full address: **VIA S.PIETRO MARTIRE 1054**  
District and Country: **45030 PONTECCHIO POLESINE (RO)  
ITALIA**  
Tel. **+39425492644**  
Fax **+39425492909**

e-mail address of the competent person responsible for the Safety Data Sheet: **utecnico@titolchimica.it**

**1.4. Emergency telephone number**

For urgent inquiries refer to: **Poison control center (24/24h) available to the public: Regional Medicines and Poisons Information Centre NI emergency phone 844 892 0111**

### SECTION 2. Hazards identification

**2.1. Classification of the substance or mixture**

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements).

Hazard classification and indication: --

Physical-chemical hazards: the product is not classified for this class of danger.

Health hazards: the product is not classified as hazardous to health.

Environmental hazards: the product is not classified as dangerous for the environment.

**2.2. Label elements**

The product does not require hazard labeling in accordance with Regulation (EC) 1272/2008 (CLP) and subsequent amendments and adjustments.

**2.3. Other hazards**

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

### SECTION 3. Composition/information on ingredients

**3.1. Substances**

Information not relevant

**3.2. Mixtures**

The product does not contain substances classified as being hazardous to human health or the environment pursuant to the provisions Regulation (EU) 1272/2008 (CLP) (and subsequent amendments and supplements) in such quantities as to require the statement.

**TC33500 - SODIUM HYDROXIDE  
0,1N=N/10=0,1M****SECTION 4. First aid measures****4.1. Description of first aid measures**

Not specifically necessary. Observance of good industrial hygiene is recommended.

**4.2. Most important symptoms and effects, both acute and delayed**

Specific information on symptoms and effects caused by the product are unknown.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically. Consult a doctor.

**SECTION 5. Firefighting measures****5.1. Extinguishing media**

The product is not combustible: choose the means of extinction best suited to the specific situation, evaluating its compatibility with the possible presence of other substances. Given the physical state it is recommended to use water, chemical powder, foam.

**5.2. Special hazards arising from the substance or mixture**

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE  
Do not breathe combustion products.

**5.3. Advice for firefighters****GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS**

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

**SECTION 6. Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

For those who do not intervene directly

Alert personnel responsible for managing such emergencies. Move away from the accident area if you are not in possession of the personal protective equipment listed in Section 8.

For those who intervene directly

Remove all personnel not adequately equipped to cope with the emergency.

Wear appropriate personal protective equipment referred to in section 8 of the safety data sheet to prevent contamination of skin, eyes and personal clothing. Block the loss if there is no danger.

Making the area affected by the accident accessible to workers only after adequate reclamation has taken place. Ventilate the premises affected by the accident.

**6.2. Environmental precautions**

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

**TC33500 - SODIUM HYDROXIDE  
0,1N=N/10=0,1M**
**6.4. Reference to other sections**

Any information on personal protection and disposal is given in sections 8 and 13.

**SECTION 7. Handling and storage**
**7.1. Precautions for safe handling**

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use.

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

Keep the product in clearly labelled containers. Keep containers away from any incompatible materials, see section 10 for details.

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

Information not available

**SECTION 8. Exposure controls/personal protection**
**8.1. Control parameters**

Regulatory References:

TLV-ACGIH

ACGIH 2017

**SODIUM HYDROXIDE**
**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Critical effects		
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm			
TLV-ACGIH				2 (C)		Eye, cutaneous and upper respiratory tract irritation		

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Chronic local	Acute local	Acute systemic	Chronic systemic
Inhalation			1 mg/m <sup>3</sup>				1 mg/m <sup>3</sup>	

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

Sampling methods

The following sampling methods are suggested for the substances mentioned in the previous tables.

SODIUM HYDROXIDE

[http://amcaw.ifa.dguv.de/substance/methoden/045-sodium\\_hydroxide\\_2016.pdf](http://amcaw.ifa.dguv.de/substance/methoden/045-sodium_hydroxide_2016.pdf)

**8.2. Exposure controls**

Comply with the safety measures usually applied when handling chemical substances.

HAND PROTECTION

None required.

**TC33500 - SODIUM HYDROXIDE  
0,1N=N/10=0,1M**
**SKIN PROTECTION**

None required.

**EYE PROTECTION**

None required.

**RESPIRATORY PROTECTION**

None required, unless indicated otherwise in the chemical risk assessment.

**ENVIRONMENTAL EXPOSURE CONTROLS**

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	Clear liquid
Colour	colourless
Odour	Not available
Odour threshold	Not available
pH	>13
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not applicable (the product is liquid)
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not applicable (the product is a mixture)
Vapour density	Not applicable (the product is a mixture)
Relative density	1 k/l
Solubility	Not available
Partition coefficient: n-octanol/water	Not applicable (the product is a mixture)
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not applicable (absence of chemical groups associated with explosive properties pursuant to the provisions of Annex I, Part 2, chapter 2.1.4.3 of Regulation (EC) 1272/2008 - CLP).
Oxidising properties	Not applicable (absence of the requirements related to the presence of atoms and / or chemical bonds associated with oxidizing properties in the molecules of the components according to the provisions of Annex I, Part 2, 2.13.4 of Regulation (EC) 1272/2008 - CLP).

### 9.2. Other information

VOC (Directive 2010/75/EC) :	0
VOC (volatile carbon) :	0

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions

**TC33500 - SODIUM HYDROXIDE  
0,1N=N/10=0,1M**

No hazardous reactions are foreseeable in normal conditions of use and storage.

**10.4. Conditions to avoid**

None in particular. However the usual precautions used for chemical products should be respected.

**10.5. Incompatible materials**

Information not available

**10.6. Hazardous decomposition products**

Information not available

**SECTION 11. Toxicological information**
**11.1. Information on toxicological effects**
ACUTE TOXICITY

On the basis of the available data and considering the classification criteria of Annex I, Part 3 of Reg. (EC) 1272/2008 and s.m.i., the product is not classified for this hazard class.

SKIN CORROSION / IRRITATION

On the basis of the available data and considering the classification criteria provided in Table 3.2.3 of Annex I, of Reg. (EC) 1272/2008 and s.m.i., the product is not classified for this hazard class.

SERIOUS EYE DAMAGE / IRRITATION

On the basis of the available data and considering the classification criteria provided in Table 3.3.3 of Annex I of Reg. (EC) 1272/2008 and s.m.i., the product is not classified for this hazard class.

RESPIRATORY OR SKIN SENSITISATION

On the basis of the available data and considering the classification criteria of Annex I, Part 3 of Reg. (EC) 1272/2008 and s.m.i., the product is not classified for this hazard class.

GERM CELL MUTAGENICITY

On the basis of the available data and considering the classification criteria of Annex I, Part 3 of Reg. (EC) 1272/2008 and s.m.i., the product is not classified for this hazard class.

CARCINOGENICITY

On the basis of the available data and considering the classification criteria of Annex I, Part 3 of Reg. (EC) 1272/2008 and s.m.i., the product is not classified for this hazard class.

REPRODUCTIVE TOXICITY

On the basis of the available data and considering the classification criteria of Annex I, Part 3 of Reg. (EC) 1272/2008 and s.m.i., the product is not classified for this hazard class.

STOT - SINGLE EXPOSURE

On the basis of the available data and considering the classification criteria of Annex I, Part 3 of Reg. (EC) 1272/2008 and s.m.i., the product is not classified for this hazard class.

STOT - REPEATED EXPOSURE

On the basis of the available data and considering the classification criteria of Annex I, Part 3 of Reg. (EC) 1272/2008 and s.m.i., the product is not classified for this hazard class.

ASPIRATION HAZARD

On the basis of the available data and considering the classification criteria of Annex I, Part 3 of Reg. (EC) 1272/2008 and s.m.i., the product is not classified for this hazard class.

**SECTION 12. Ecological information**
**12.1. Toxicity**

Based on the evaluation of the classification of components and the classification provisions of Annex I, Part 4 of Reg. (CE) 1272/2008 and s.m.i., the mixture is not classified as dangerous for the environment.

**TC33500 - SODIUM HYDROXIDE  
 0,1N=N/10=0,1M**
**12.2. Persistence and degradability**

Information not available

**12.3. Bioaccumulative potential**

Information not available

**12.4. Mobility in soil**

Information not available

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

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

**12.6. Other adverse effects**

Information not available

**SECTION 13. Disposal considerations**
**13.1. Waste treatment methods**

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

**CONTAMINATED PACKAGING**

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

**SECTION 14. Transport information**

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

**14.1. UN number**

Not applicable

**14.2. UN proper shipping name**

Not applicable

**14.3. Transport hazard class(es)**

Not applicable

**14.4. Packing group**

Not applicable

**14.5. Environmental hazards**

Not applicable

**14.6. Special precautions for user**

Not applicable

**TC33500 - SODIUM HYDROXIDE  
 0,1N=N/10=0,1M**
**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

Information not relevant

**SECTION 15. Regulatory information**
**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Seveso Category - Directive 2012/18/EC: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

None

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Information not available

**15.2. Chemical safety assessment**

No chemical safety assessment has been processed for the mixture and the substances it contains.

**SECTION 16. Other information**

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level

**TC33500 - SODIUM HYDROXIDE  
 0,1N=N/10=0,1M**

- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

**GENERAL BIBLIOGRAPHY**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
  4. Regulation (EU) 2015/830 of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
  11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
  12. Regulation (EU) 2016/1179 (IX Atp. CLP)
  13. Regulation (EU) 2017/776 (X Atp. CLP)
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - IFA GESTIS website
  - ECHA website
  - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Information sheet n.7 – 15/01/18.