

## SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

### Nitrogen LR TT

Revision date 06-24-2025

Revision Number 1

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

### 1.1. Product identifier

**Product Code(s)** PL151-KUV  
**Product Name** Nitrogen LR TT  
**Unique Formula Identifier (UFI)** DUTF-60HQ-C003-0TF2

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

**Recommended use** Reagent for water analysis  
**Uses advised against** Others

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

#### Manufacturer

Water-i.d. GmbH  
Daimlerstr. 20  
76344 Eggenstein, Germany  
Tel.: +49 (0) 721 78 20 29 0, Fax: +49 (0) 721 78 20 29 11  
Website: [www.water-id.com](http://www.water-id.com)  
EHS / Compliance: [lab@water-id.com](mailto:lab@water-id.com)

### 1.4. Emergency telephone number

**Emergency Telephone** +44 1235 239670  
English, Albanian, Bosnian, Bulgarian, Croatian, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Latvian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Serbian, Slovak, Spanish, Swedish, Turkish and Ukrainian.

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

<b>Skin corrosion/irritation</b>	Category 1 - (H314)
<b>Serious eye damage/eye irritation</b>	Category 1 - (H318)
<b>Corrosive to metals</b>	Category 1 - (H290)

### 2.2. Label elements



**Signal word**  
Danger

#### Hazard statements

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

#### Precautionary Statements - EU (§28, 1272/2008)

P260 - Do not breathe dust, fume, gas, mist, vapors and spray

P280 - Wear protective gloves and protective clothing

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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 or doctor/physician

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

#### 3.2 Mixtures

##### Chemical nature

Aqueous alkaline solution.

Chemical name	Weight-%	REACH registration number	EC No. (Index No.)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Sodium hydroxide 1310-73-2	<1	No data available	215-185-5	Skin Corr. 1A (H314) Met. Corr. 1			

#### Full text of H- and EUH-phrases: see section 16

##### Acute Toxicity Estimate

No information available

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Sodium hydroxide 1310-73-2	325	1350			

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

Inhalation	Get medical attention immediately if symptoms occur. Remove to fresh air.
Eye contact	Call a doctor immediately. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Skin contact	If skin irritation persists, call a doctor. Wash off immediately with soap and plenty of water for at least 15 minutes.
Ingestion	Call a doctor. Drink 1 or 2 glasses of water. Do NOT induce vomiting.

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

Symptoms	Burning sensation.
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#### **4.3. Indication of any immediate medical attention and special treatment needed**

Note to doctors	Treat symptomatically.
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### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
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Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
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#### **5.2. Special hazards arising from the substance or mixture**

Specific hazards arising from the chemical	Product itself does not burn. Thermal decomposition can lead to release of irritating and toxic gases and vapours.
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Hazardous combustion products	Carbon oxides.
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#### **5.3. Advice for firefighters**

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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### **SECTION 6: Accidental release measures**

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

Personal precautions	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.
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For emergency responders	Use personal protection recommended in Section 8.
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#### **6.2. Environmental precautions**

Environmental precautions	Prevent further leakage or spillage if safe to do so.
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#### **6.3. Methods and material for containment and cleaning up**

Methods for containment	Prevent further leakage or spillage if safe to do so.
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**Methods for cleaning up** Take up mechanically, placing in appropriate containers for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

#### 6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Advice on safe handling** Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Barrier creams may help to protect the exposed areas of skin.

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

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

### 7.3. Specific end use(s)

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**Exposure Limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Sodium hydroxide 1310-73-2	-	TWA: 2 mg/m <sup>3</sup> STEL 4 mg/m <sup>3</sup>	-	TWA: 2.0 mg/m <sup>3</sup>	STEL: 2 mg/m <sup>3</sup>
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Sodium hydroxide 1310-73-2	-	TWA: 1 mg/m <sup>3</sup> Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Sodium hydroxide 1310-73-2	TWA: 2 mg/m <sup>3</sup>	-	-	TWA: 2 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup>
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Sodium hydroxide 1310-73-2	STEL: 2 mg/m <sup>3</sup>	-	Ceiling: 2 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Sodium hydroxide 1310-73-2	-	-	-	-	STEL: 1 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup>
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	-	STEL: 2 mg/m <sup>3</sup>
Chemical name	Sweden		Switzerland		United Kingdom
Sodium hydroxide 1310-73-2	NGV: 1 mg/m <sup>3</sup> Bindande KGV: 2 mg/m <sup>3</sup>		TWA: 2 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup>		STEL: 2 mg/m <sup>3</sup>

**Biological occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

**Derived No Effect Level (DNEL)** No information available.  
**Predicted No Effect Concentration (PNEC)**

**8.2. Exposure controls****Personal protective equipment**

**Eye/face protection** Eye protection must conform to standard EN 166. Wear safety glasses with side shields (or goggles).

**Hand protection** Gloves must conform to standard EN 374. Nitrile rubber.

**Skin and body protection** Long sleeved clothing. Wear suitable protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Barrier creams may help to protect the exposed areas of skin.

**Environmental exposure controls** No information available.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid
<b>Appearance</b>	aqueous solution
<b>Colour</b>	colourless
<b>Odour</b>	Odourless.
<b>Odour threshold</b>	No data available

**Remarks**

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Melting point / freezing point</b>	~0 °C	
<b>Boiling point / boiling range</b>	~100 °C	
<b>Flammability (solid, gas)</b>	No data available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability or explosive limits</b>	No data available	
<b>Lower flammability or explosive limits</b>	No data available	
<b>Flash point</b>	No data available	
<b>Autoignition temperature</b>	No data available	
<b>Decomposition temperature</b>		
<b>pH</b>	> 12	
<b>pH (as aqueous solution)</b>	No data available	
<b>Kinematic viscosity</b>	~1 mm <sup>2</sup> /s	@ 20 °C
<b>Dynamic viscosity</b>	~1 mPa s	@ 20 °C
<b>Water solubility</b>	Soluble in water	

<b>Solubility(ies)</b>	No data available
<b>Partition coefficient</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Relative density</b>	No data available
<b>Bulk density</b>	No data available
<b>Liquid Density</b>	No data available
<b>Relative vapour density</b>	No data available
<b>Particle characteristics</b>	
<b>Particle Size</b>	
<b>Particle Size Distribution</b>	

**9.2. Other information**

9.2.1. Information with regards to physical hazard classes

Not applicable

Explosive properties Not applicable

**Oxidising properties** Not applicable

9.2.2. Other safety characteristics

**Sensitivity to mechanical impact** None

**SECTION 10: Stability and reactivity****10.1. Reactivity**

**Reactivity** No information available.

**10.2. Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**10.3. Possibility of hazardous reactions**

**Possibility of hazardous reactions** None under normal processing.

**10.4. Conditions to avoid**

**Conditions to avoid** None known based on information supplied.

**10.5. Incompatible materials**

**Incompatible materials** Strong acids. Strong oxidising agents.

**10.6. Hazardous decomposition products**

**Hazardous decomposition products** Thermal decomposition can lead to release of irritating and toxic gases and vapours.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Information on likely routes of exposure**

**Product Information**

**Inhalation** Specific test data for the substance or mixture is not available.

<b>Eye contact</b>	Specific test data for the substance or mixture is not available.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** No information available.

**Numerical measures of toxicity**

No information available

**Acute toxicity**

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.  
 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.  
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).  
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).  
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium hydroxide	= 325 mg/kg ( Rat )	= 1350 mg/kg ( Rabbit )	

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** May cause skin irritation.

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit	Dermal			Negative

**Serious eye damage/eye irritation** Causes burns. Risk of serious damage to eyes. Classification based on data available for ingredients.

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 405: Acute Eye Irritation/Corrosion	Rabbit	eye	g 0.00005	hours 24	Eye Damage

**Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

**Carcinogenicity** Based on available data, the classification criteria are not met.

**Reproductive toxicity** Based on available data, the classification criteria are not met.

**STOT - single exposure** Based on available data, the classification criteria are not met.

**STOT - repeated exposure** Based on available data, the classification criteria are not met.

**Aspiration hazard** No information available.

**11.2. Information on other hazards****11.2.1. Endocrine disrupting properties**

Endocrine disrupting properties

**11.2.2. Other information**

Other adverse effects None known.

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

Ecotoxicity Based on available data, the classification criteria are not met.

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium hydroxide	-	LC50: =45.4mg/L (96h, <i>Oncorhynchus mykiss</i> )	-	-

**12.2. Persistence and degradability**

Persistence and degradability None known.

**12.3. Bioaccumulative potential**

Bioaccumulation No information available.

**12.4. Mobility in soil**

Mobility in soil Not expected to adsorb on soil.

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

PBT and vPvB assessment This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT).

Chemical name	PBT and vPvB assessment
Sodium hydroxide	The substance is not PBT / vPvB PBT assessment does not apply

**12.6. None known**

Endocrine disrupting properties

**12.7. Other adverse effects**

No information available.

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

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.



**Other information**

Waste codes should be assigned by the user based on the application for which the product was used.

**SECTION 14: Transport information****IATA**

14.1 UN number or ID number	UN1824
14.2 UN proper shipping name	Sodium hydroxide solution
14.3 Transport hazard class(es)	8
14.4 Packing group	III
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	A3, A803
ERG Code	8L

**IMDG**

14.1 UN number or ID number	UN1824
14.2 UN proper shipping name	Sodium hydroxide solution
14.3 Transport hazard class(es)	8
14.4 Packing group	III
14.5 Marine pollutant	Not applicable
Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	223
EmS-No	F-A, S-B
14.7 Maritime transport in bulk according to IMO instruments	

**RID**

14.1 UN number or ID number	UN1824
14.2 UN proper shipping name	Sodium hydroxide solution
14.3 Transport hazard class(es)	8
14.4 Packing group	III
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None
Classification code	C5

**ADR**

14.1 UN number or ID number	UN1824
14.2 UN proper shipping name	Sodium hydroxide solution
14.3 Transport hazard class(es)	8
14.4 Packing group	III
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None
Classification code	C5
Tunnel restriction code	(E)

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

**Water hazard class (WGK)** non-hazardous to water (nwg)

**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

**Authorisations and/or restrictions on use:**

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

**Persistent Organic Pollutants**

Not applicable

**Dangerous substance category per Seveso Directive (2012/18/EU)**

Non-controlled

**Ozone-depleting substances (ODS) Regulation (EU) 2024/590**

Not applicable

**International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**15.2. Chemical safety assessment****Chemical Safety Report**

A Chemical Safety Assessment is not required for this substance

**SECTION 16: Other information****Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of any hazard and/or precautionary statements referred to under Sections 2-15**

H314 - Causes severe skin burns and eye damage

**Legend**

SVHC: Substances of Very High Concern for Authorisation:

**Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method

Acute inhalation toxicity - Vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification  
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
 Organisation for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

Revision date 06-24-2025

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

**Disclaimer**

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.

**End of Safety Data Sheet**