



SAFETY DATA SHEET

(SDS)

This safety data sheet complies with the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008, (EU) No. 2015/830

Revision Date 09-Jan-2023

WAI2 - EGHS - EUROPEAN

Revision Number 6

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Name Ammonia pH - Adjusting ISA

Product No 951211

Pure substance/mixture Mixture

Contains Sodium hydroxide

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

Recommended Use Use as laboratory reagent

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer, importer, supplier Thermo Fisher Scientific
Robert-Bosch-Str. 163505
Langenselbold, GERMANY
Tel.: +49 (6184) 90-6000

E-mail address info.water@thermo.com

Made in USA

1.4. Emergency telephone number 24 Hour Emergency Phone Number
CHEMTREC®
Within USA and Canada: 1-800-424-9300
Outside USA and Canada: 1-703-527-3887
(collect calls accepted)

SECTION 2. HAZARDS IDENTIFICATION**2.1. Classification of the substance or mixture****Classification - Mixture**

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Corrosion/Irritation	Category 1 Sub-category A - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)
Specific target organ toxicity — single exposure	Category 2 - (H371)

2.2. Label elements

Contains Sodium hydroxide

**Signal Word**

Danger

Hazard Statements

H314 - Causes severe skin burns and eye damage

H371 - May cause damage to organs

Precautionary Statements

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

P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P310 - Immediately call a POISON CENTER or doctor/physician

P264 - Wash face, hands and any exposed skin thoroughly after handling

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P363 - Wash contaminated clothing before reuse

P501 - Dispose of contents/container in accordance with local, regional, national and international regulations.

P202 - Do not handle until all safety precautions have been read and understood

2.3. Other hazards

No information available

General Hazards

This product does not contain any known or suspected endocrine disruptors

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1. Substances**

Component	EC No	CAS No	Weight percent	GHS Classification	REACH Reg. No
Water	EEC No. 231-791-2	7732-18-5	70 - 80%	Not classified	No information available
Sodium hydroxide	EEC No. 215-185-5	1310-73-2	20 - 30%	Skin Corr. 1A (H314)	No information available
Glycine, N,N-1,2-ethanediylbis[N-(carboxymethyl)-, disodium salt, dihydrate	-	6381-92-6	0 - 10%	-	No information available
Thymolphthalein	EEC No. 204-729-7	125-20-2	0 - 10%	-	No information available
Methanol	EEC No. 200-659-6	67-56-1	0 - 10%	Flam. Liq. 2 (H225) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) STOT SE 1 (H370)	No information available

Note *The exact percentage (concentration) of composition has been withheld as a trade secret

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

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures**

General Advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Call a doctor immediately.
Inhalation	If not breathing, give artificial respiration. Remove from exposure, lie down. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a doctor immediately.
Ingestion	Do NOT induce vomiting. Clean mouth with water. Never give anything by mouth to an unconscious person. Call a doctor immediately.
Self-Protection of the First Aider	Use personal protective equipment as required. See section 8 for more information. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

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

Most important symptoms and effects	Causes burns by all exposure routes
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4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically
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SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Carbon dioxide (CO₂), Dry chemical, Dry sand, Alcohol resistant foam.

Unsuitable Extinguishing Media

No information available

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapours. The product causes burns of eyes, skin and mucous membranes.

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions

Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

6.2. Environmental precautions

Environmental Precautions

No special environmental precautions required. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up

Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

Reference to other sections

Refer to protective measures listed in Sections 7 and 8

See Section 8 for information on appropriate personal protective equipment

See Section 12 for additional Ecological Information

See Section 13 for additional waste treatment information

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapours/spray. Do not ingest. If swallowed then seek immediate medical assistance.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Specific Use(s)

Use as laboratory reagent

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**

Component	European Union	The United Kingdom	France	Spain	Germany
Sodium hydroxide 1310-73-2	-	STEL: 2 mg/m ³ 15 min	TWA / VME: 2 mg/m ³ (8 heures).	STEL / VLA-EC: 2 mg/m ³ (15 minutos).	-
Methanol 67-56-1	TWA: 200 ppm (8hr) TWA: 260 mg/m ³ (8hr) Skin	STEL: 250 ppm 15 min STEL: 333 mg/m ³ 15 min TWA: 200 ppm 8 hr TWA: 266 mg/m ³ 8 hr Skin	TWA / VME: 200 ppm (8 heures). restrictive limit TWA / VME: 260 mg/m ³ (8 heures). restrictive limit STEL / VLCT: 1000 ppm. restrictive limit STEL / VLCT: 1300 mg/m ³ . restrictive limit Peau	TWA / VLA-ED: 200 ppm (8 horas) TWA / VLA-ED: 266 mg/m ³ (8 horas) Piel	TWA: 100 ppm (8 Stunden). AGW - exposure factor 2 TWA: 130 mg/m ³ (8 Stunden). AGW - exposure factor 2 TWA: 100 ppm (8 Stunden). MAK TWA: 130 mg/m ³ (8 Stunden). MAK Höhepunkt: 200 ppm Höhepunkt: 260 mg/m ³ Haut
Component	Italy	Portugal	The Netherlands	Finland	Denmark
Sodium hydroxide 1310-73-2	-	Ceiling: 2 mg/m ³	-	Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³
Methanol 67-56-1	TWA: 200 ppm 8 ore. Time Weighted Average TWA: 260 mg/m ³ 8 ore. Time Weighted Average Pelle	STEL: 250 ppm 15 minutos TWA: 200 ppm 8 horas TWA: 260 mg/m ³ 8 horas Pele	huid TWA: 133 mg/m ³ 8 uren	TWA: 200 ppm 8 tunteina TWA: 270 mg/m ³ 8 tunteina STEL: 250 ppm 15 minuutteina STEL: 330 mg/m ³ 15 minuutteina Iho	TWA: 200 ppm 8 timer TWA: 260 mg/m ³ 8 timer STEL: 400 ppm 15 minutter STEL: 520 mg/m ³ 15 minutter Hud
Component	Austria	Switzerland	Poland	Norway	Ireland
Sodium hydroxide 1310-73-2	MAK-KZGW: 4 mg/m ³ 15 Minuten MAK-TMW: 2 mg/m ³ 8 Stunden	STEL: 2 mg/m ³ 15 Minuten TWA: 2 mg/m ³ 8 Stunden	STEL: 1 mg/m ³ 15 minutach TWA: 0.5 mg/m ³ 8 godzinach	Ceiling: 2 mg/m ³	STEL: 2 mg/m ³ 15 min
Methanol 67-56-1	Haut MAK-KZGW: 800 ppm 15 Minuten MAK-KZGW: 1040 mg/m ³ 15 Minuten MAK-TMW: 200 ppm 8 Stunden MAK-TMW: 260 mg/m ³ 8 Stunden	Haut/Peau STEL: 400 ppm 15 Minuten STEL: 520 mg/m ³ 15 Minuten TWA: 200 ppm 8 Stunden TWA: 260 mg/m ³ 8 Stunden	STEL: 300 mg/m ³ 15 minutach TWA: 100 mg/m ³ 8 godzinach	TWA: 100 ppm 8 timer TWA: 130 mg/m ³ 8 timer STEL: 150 ppm 15 minutter. value calculated STEL: 162.5 mg/m ³ 15 minutter. value calculated Hud	TWA: 200 ppm 8 hr. TWA: 260 mg/m ³ 8 hr. STEL: 600 ppm 15 min STEL: 780 mg/m ³ 15 min Skin
Component	European Union	United Kingdom	France	Spain	Germany
Methanol 67-56-1	-	-	Methanol: 15 mg/L urine end of shift	-	-

Derived No Effect Level (DNEL) No information available**Predicted No Effect Concentration (PNEC)** No information available**8.2. Exposure controls**

Engineering Measures	Ensure that eyewash stations and safety showers are close to the workstation location
Personal protective equipment	
Eye/face Protection	Wear chemical splash goggles and face shield. If splashes are likely to occur:. Goggles.
Skin and body protection	Wear protective gloves/protective clothing.
Respiratory Protection	No protective equipment is needed under normal use conditions. In case of inadequate ventilation wear respiratory protection.
Environmental exposure controls	No information available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Dark blue
Odour	weak odour from raw material of alcohol
Odour Threshold	No information available
pH	13.5
PH Range	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point/freezing point	No information available	
Boiling point/range	No information available	
Flash Point	104.0 °C / 219.2 °F	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit	No information available	
Vapour pressure	No information available	
Vapour Density	1.1 (Methanol)	
Specific Gravity	No information available	
Water Solubility	Soluble	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition Temperature	-	
Decomposition Temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive Properties	No information available	
Oxidising Properties	No information available	

9.2. Other information

Softening Point	No information available
Molecular Weight	No information available
VOC Content(%)	1
Density	No information available
Bulk Density	No information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No information available

10.2. Chemical stability

Stable under normal conditions

Explosion Data

Sensitivity to Mechanical Impact None
Sensitivity to Static Discharge None

10.3. Possibility of hazardous reactions

None under normal processing

10.4. Conditions to avoid

Extremes of temperature and direct sunlight

10.5. Incompatible materials

No information available

10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapours

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute Toxicity****Product Information**

Inhalation No information available
Eye Contact Causes serious eye damage
Skin Contact Causes burns
Ingestion No information available

Unknown Acute Toxicity 1 % of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 1,398.00 mg/kg
ATEmix (dermal) 5,510.00 mg/kg
ATEmix (inhalation-dust/mist) 50.10 mg/L
ATEmix (inhalation-vapour) 4,169.76 mg/L

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	LD50 > 90 mL/kg (Rat)		
Sodium hydroxide	LD50 = 325 mg/kg (Rat)	LD50 = 1350 mg/kg (Rabbit)	
Methanol	LD50 = 6200 mg/kg (Rat)	LD50 = 15840 mg/kg (Rabbit)	LC50 = 22500 ppm (Rat) 8 h

Skin Corrosion/Irritation Causes severe burns
(b) skin corrosion/irritation; Category 1. A.
Serious eye damage/eye irritation No information available
Sensitisation No information available
Mutagenic Effects No information available
Carcinogenic effects No information available
Reproductive Effects No information available
STOT - single exposure No information available
STOT - repeated exposure No information available

Symptoms

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

Aspiration hazard

No information available

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

3% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Component	Freshwater Algae	Freshwater Fish	Water Flea
Sodium hydroxide	-	LC50: = 45.4 mg/L, 96h static (Oncorhynchus mykiss)	-
Methanol	-	LC50: 13500 - 17600 mg/L, 96h flow-through (Lepomis macrochirus) LC50: 18 - 20 mL/L, 96h static (Oncorhynchus mykiss) LC50: 19500 - 20700 mg/L, 96h flow-through (Oncorhynchus mykiss) LC50: > 100 mg/L, 96h static (Pimephales promelas) LC50: = 28200 mg/L, 96h flow-through (Pimephales promelas)	-

12.2. Persistence and degradability**12.3. Bioaccumulative potential**

No information available

12.4. Mobility in soil

Highly mobile in soils

Mobility

Component	log Pow
Thymolphthalein 125-20-2 (0 - 10%)	3.682
Methanol 67-56-1 (0 - 10%)	-0.77

12.5. Results of PBT and vPvB assessment

No information available

12.6. Endocrine disrupting properties

No information available

Endocrine Disruptor Information

No information available

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods**Waste from Residues/Unused Products**

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of this container to hazardous or special waste collection point.

Other Information Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not flush to sewer. Large amounts will affect pH and harm aquatic organisms. Solutions with high pH-value must be neutralized before discharge.

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

14.1 UN-No	UN1824
14.2 Proper Shipping Name	Sodium hydroxide solution
14.3 Hazard Class	8
14.4 Packing Group	III
Description	UN1824, SODIUM HYDROXIDE SOLUTION, 8, III
14.5 Marine Pollutant	Not Applicable
14.6 Special Provisions	223
EmS	F-A, S-B
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code	No information available

ICAO

14.1 UN-No	UN1824
14.2 Proper Shipping Name	Sodium hydroxide solution
14.3 Hazard Class	8
14.4 Packing Group	III
Description	UN1824, SODIUM HYDROXIDE SOLUTION, 8, III
14.5 Environmental hazard	Not Applicable
14.6 Special Provisions	A3

IATA

14.1 UN-No	UN1824
14.2 Proper Shipping Name	Sodium hydroxide solution
14.3 Hazard Class	8
14.4 Packing Group	III
Description	UN1824, SODIUM HYDROXIDE SOLUTION, 8, III
14.5 Environmental hazard	Not Applicable
14.6 Special Provisions	A3, A803
ERG Code	8L

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

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

International Inventories

United States of America Inventory	Complies
CANINV	Complies
EINECS/ELINCS	Does not Comply
ENCS	Does not Comply

IECSC	Complies
KECL	Does not Comply
PICCS	Complies
AICS	Complies

Legend:

USINV/ TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

CANINV/ DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

IECSC - Chinese 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

A chemical safety assessment according to regulation (EC) No. 1907/2006 is not required

SECTION 16: OTHER INFORMATION**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H314 - Causes severe skin burns and eye damage

H370 - Causes damage to the kidneys/ liver/ eyes/ brain/ respiratory system/ central nervous system in contact with skin

H373 - May cause damage to organs through prolonged or repeated exposure if inhaled

Legend - SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Prepared By	Regulatory Affairs
Prepared For	Thermo Fisher Scientific Inc.
Issue Date	No information available
Revision Date	09-Jan-2023
Reason for revision	SDS sections updated.

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

The information provided in this Material 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