

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

Ammonia No.1

Revision date 01-09-2025

Revision Number 1

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

1.1. Product identifier

Product Code(s) PPHAM1

Product Name Ammonia No.1

Unique Formula Identifier (UFI) 3UJF-2ATG-S117-YQPX

Pure substance/mixture Mixture
Contains Sodium salicylate, Ferrate(2-), pentakis(cyano-C)nitrosyl-, disodium, dihydrate, (OC-6-22)-

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
EHS / Compliance: 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

Acute toxicity - Oral	Category 4 - (H302)
Serious eye damage/eye irritation	Category 2 - (H319)
Reproductive toxicity	Category 2 - (H361)

2.2. Label elements

Contains Sodium salicylate, Ferrate(2-), pentakis(cyano-C)nitrosyl-, disodium, dihydrate, (OC-6-22)-



Signal word
Warning

Hazard statements

H302 - Harmful if swallowed

H319 - Causes serious eye irritation

H361d - Suspected of damaging the unborn child

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

P201 - Obtain special instructions before use

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

P270 - Do not eat, drink or smoke when using this product

P280 - Wear protective gloves, protective clothing, eye protection and face protection

P308 + P313 - IF exposed or concerned: Get medical advice/attention

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

Additional information

This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Sodium salicylate 54-21-7	20-30	No data available	200-198-0	Acute Tox. 4 (H302) Eye Irrit. 2 (H319) Repr. 2 (H361d)			
Ferrate(2-), pentakis(cyano-C)ni trosyl-, disodium, dihydrate, (OC-6-22)- 13755-38-9	1-5	No data available	-	Acute Tox. 3 (H301)			

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

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

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
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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 salicylate 54-21-7	930	2000			
Ferrate(2-), pentakis(cyano-C)nitrosyl -, disodium, dihydrate, (OC-6-22)- 13755-38-9	99				

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

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a doctor.

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

Symptoms	No information available.
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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.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	No information available.
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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	Ensure adequate ventilation.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.
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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.
Methods for cleaning up	Take up mechanically, placing in appropriate containers for disposal.
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.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling	Ensure adequate ventilation.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.
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7.3. Specific end use(s)

Risk Management Methods (RMM)	The information required is contained in this Safety Data Sheet.
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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Ferrate(2-), pentakis(cyano-C)nitrosyl -, disodium, dihydrate, (OC-6-22)- 13755-38-9	-	-	TWA: 1 mg/m ³	TWA: 1.0 mg/m ³	TWA: 5 mg/m ³ TWA: 1 mg/m ³ STEL: 2 mg/m ³
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Ferrate(2-), pentakis(cyano-C)nitrosyl -, disodium, dihydrate, (OC-6-22)-	-	TWA: 3 mg/m ³ Ceiling: 10 mg/m ³ *	TWA: 1 mg/m ³	-	TWA: 1 mg/m ³ STEL: 5 mg/m ³ iho*

13755-38-9					
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Ferrate(2-), pentakis(cyano-C)nitrosyl -, disodium, dihydrate, (OC-6-22)- 13755-38-9	TWA: 5 mg/m ³	-	TWA: 2 mg/m ³ Peak: 2 mg/m ³ *	TWA: 1 mg/m ³ STEL: 2 mg/m ³ STEL: 5 mg/m ³ skin - potential for cutaneous absorption	TWA: 1 mg/m ³ STEL: 5 mg/m ³ *
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Ferrate(2-), pentakis(cyano-C)nitrosyl -, disodium, dihydrate, (OC-6-22)- 13755-38-9	TWA: 5 mg/m ³ TWA: 1 mg/m ³ STEL: 15 mg/m ³ STEL: 2 mg/m ³	-	TWA: 1 mg/m ³	-	-
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Ferrate(2-), pentakis(cyano-C)nitrosyl -, disodium, dihydrate, (OC-6-22)- 13755-38-9	-	-	TWA: 0.9 ppm TWA: 1 mg/m ³ STEL: 4.5 ppm STEL: 5 mg/m ³ H*	STEL: 10 mg/m ³ STEL: 3 mg/m ³	-
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Ferrate(2-), pentakis(cyano-C)nitrosyl -, disodium, dihydrate, (OC-6-22)- 13755-38-9	TWA: 1 mg/m ³	TWA: 0.5 mg/m ³ STEL: 1 mg/m ³ *	TWA: 1 mg/m ³ * Ceiling: 5 mg/m ³	-	TWA: 1 mg/m ³
Chemical name	Sweden		Switzerland		United Kingdom
Ferrate(2-), pentakis(cyano-C)nitrosyl-, disodium, dihydrate, (OC-6-22)- 13755-38-9	NGV: 1 mg/m ³ *		TWA: 1 mg/m ³ H*		TWA: 5 mg/m ³ TWA: 1 mg/m ³ Sk*

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Ferrate(2-), pentakis(cyano-C)nitrosyl -, disodium, dihydrate, (OC-6-22)- 13755-38-9	-	-	-	6.5 mg/24 hours - urine (Thiocyanates) - urine collected over 24 hours <3 mg - urine and blood (Thiocyanate ratio in urine (mg/g Creatinine) and Carboxyhemoglobin in blood (%)) - urine and blood collected at the end of the work shift	-

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

8.2. Exposure controls**Personal protective equipment**

Eye/face protection No special protective equipment required.

Skin and body protection	No special protective equipment required.
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.
Environmental exposure controls	No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Powder
Colour	light pink
Odour	Odourless.
Odour threshold	

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
pH	No data available	None known
pH (as aqueous solution)	No data available	No information available
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapour pressure	No data available	None known
Relative density	No data available	None known
Bulk density	No data available	
Liquid Density	No data available	
Relative vapour density	No data available	None known
Particle characteristics		
Particle Size		
Particle Size Distribution		

9.2. Other information

9.2.1. Information with regards to physical hazard classes
Not applicable

9.2.2. Other safety characteristics

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No information available.
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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 None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

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.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available. Harmful if swallowed. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Numerical measures of toxicity**Acute toxicity**

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

ATEmix (oral) 948.90 mg/kg

Unknown acute toxicity

34.1 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium salicylate	= 930 mg/kg (Rat)	> 2000 mg/kg (Rat)	
Ferrate(2-), pentakis(cyano-C)nitrosyl-, disodium, dihydrate, (OC-6-22)-	= 99 mg/kg (Rat)		

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

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

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

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

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 salicylate	-	LC50: 1270 - 1470mg/L (96h, Pimephales promelas)	-	-

12.2. Persistence and degradability

Persistence and degradability**12.3. Bioaccumulative potential**

Bioaccumulation No information available.

Chemical name	Partition coefficient
Sodium salicylate	-1.259

12.4. Mobility in soil

Mobility in soil

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

Chemical name	PBT and vPvB assessment
Sodium salicylate	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

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.

SECTION 14: Transport information**IATA**

14.1 UN number or ID number Not regulated

14.2

14.3 Transport hazard class(es) Not regulated

14.4 Packing group Not regulated

14.5 Environmental hazards Not applicable

14.6 Special precautions for user

Special Provisions None

IMDG

14.1 UN number or ID number Not regulated

14.2

14.3 Transport hazard class(es) Not regulated

14.4 Packing group Not regulated

14.5 Marine pollutant Not applicable

14.6 Special precautions for user

Special Provisions None

14.7 Maritime transport in bulk according to IMO instruments

RID

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

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

Water hazard class (WGK) slightly hazardous to water (WGK 1)

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

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

Not applicable

International Inventories

TSCA	Complies
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Complies
KECL	Does not comply
PICCS	Complies
AICS	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

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

H301 - Toxic if swallowed
H302 - Harmful if swallowed
H319 - Causes serious eye irritation
H361d - Suspected of damaging the unborn child

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
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 01-09-2025

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