

SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Issue Date 28-Jun-2005 Revision Date 14-Feb-2023 Version 3.1

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Code(s) 2606945VIAL

Product Name AmVer™ High Range Ammonia Test ´N Tube™ Reagent

Molecular weight Not applicable

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

Recommended Use Water Analysis. Determination of ammonium nitrogen.

Uses advised against Consumer use

1.3. Details of the supplier of the safety data sheet

Supplier

HACH UK
Laser House
Ground Floor, Suite B
Waterfront Quay, Salford Quays
GB - Manchester, M50 3XW
Tel. +44 (0) 161 872 1487
info-uk@hach.com

HACH Ireland Unit 34 GB Business Park Little Island IRL-Co. Cork T45 H681 Tel. +353 (0)146 02 522 info-ie@hach.com

1.4. Emergency telephone number

UK: Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service IE: National Poisons Information Centre (NPIC) 01 809 2566 (24/7)

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

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This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Hazard statements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.3. Other hazards

No information available.

PBT & vPvB

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT) This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

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

Acute Toxicity Estimate No information available

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 contactWash skin with soap and water. In the case of skin irritation or allergic reactions see a

doctor.

Ingestion Rinse mouth.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

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

Symptoms No information available.

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

Note to doctors Treat symptomatically.

Section 5: FIREFIGHTING MEASURES

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on Date 14-Feb-2023 Version 3.1

5.1. Extinguishing media

surrounding environment.

Unsuitable extinguishing media No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

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

Hazardous combustion products This material will not burn.

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.

Additional information Fire residues and contaminated fire extinguishing water must be disposed of in accordance

with local regulations.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Evacuate personnel

to safe areas.

6.2. Environmental precautions

Environmental precautions Should not be released into the environment. 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 (e.g. sand, silica gel, acid binder, universal binder,

sawdust). 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.

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

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Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Specific use(s) Analytical 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 This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration

(PNEC)

No information available.

Additional information No information available.

8.2. Exposure controls

Engineering controls Technical measures and appropriate working operations should be given priority over the

use of personal protective equipment. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific

workplace.

Personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Hand protection Barrier creams may help to protect the exposed areas of skin. Wear suitable gloves. Gloves

must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374-1:2016 derived from it.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III acco.

Gloves									
Duration of contact	PPE - Glove material	Glove thickness	Break through time						
Long term (repeated)	ong term (repeated) Wear protective Viton™ 0		>480 minutes						
Short term	Wear protective nitrile rubber gloves	0,20 mm	>30 minutes						

Skin and body protection Avoid contact with eyes, skin and clothing. Wash contaminated clothing before reuse. Long

sleeved clothing.

Respiratory protection Ensure adequate ventilation. No protective equipment is needed under normal use

conditions. If exposure limits are exceeded or irritation is experienced, ventilation and

evacuation may be required. Wear breathing apparatus if exposed to

vapours/dusts/aerosols.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

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Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Liquid

Colour colourless Odour Odourless

Odour threshold Not applicable

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Molecular weight Not applicable

pH 11 @ 20 ℃

Melting point / freezing point 0 °C / 32 °F

Initial boiling point and boiling range 100 °C / 212 °F

Evaporation rate 1 (water = 1)

Vapour pressure 23.702 mm Hg / 3.16 kPa at 25 °C / 77 °F

Relative vapor density 0.03

Specific Gravity ~ 1

Partition coefficient No data available

Soil Organic Carbon-Water Partition

Autoignition temperature

Coefficient

No data available

No data available

Decomposition temperature No data available

Dynamic viscosity No data available

Kinematic viscosity No data available

Relative density 1 g/mL @ 20 °C

Solubility(ies)

Water solubility

Water solubility classification	Water solubility_	Water Solubility Temperature
Completely soluble	> 10000 mg/L	25 °C / 77 °F

Solubility in other solvents

Chemical Name_	Solubility classification	<u>Solubility</u>	Solubility Temperature_
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F

Metal Corrosivity

No information available

Steel Corrosion RateNo data availableAluminum Corrosion RateNo data available

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Explosive properties

Upper explosion limitNot applicableLower explosion limitNot applicable

Flammable properties

Flash point No data available

Flammability

Upper flammability limit:No data availableLower flammability limitNo data available

Oxidising properties No data available.

Bulk density No data available

9.2. Other information

No information available.

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions
None under normal processing.

Hazardous polymerisation Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Conditions to avoidNone known based on information supplied.

10.5. Incompatible materials

Incompatible materialsNone known based on information supplied.

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 toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met

Mixture No data available.

Substance Test data reported below.

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Oral Exposure Route:

ſ	Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
I		type	dose	time		sources for data
Ī	Sodium salicylate	Rat	930 mg/kg	None reported	Behavioral	RTECS
1		LD50			Convulsions or effect on seizure	
1					threshold	
L					Muscle contraction or spasticity	

Acute Toxicity Estimate (ATE)

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

Skin corrosion/irritation

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

Mixture No data available.

Substance Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium salicylate	OECD Test 404: Acute Dermal Corrosion/Irritation	Rabbit	500 mg	4 hours	Not corrosive or irritating to skin	ECHA
Sodium hydroxide	Patch test	Human	20 mg	24 hours	Corrosive to skin	RTECS

Serious eye damage/eye irritation

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

Mixture No data available.

Substance Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium salicylate	OECD Test 439: In Vitro Skin Irritation: Reconstructed Human Epidermis (Rhe) Test Method		50 mg	6 hours	Eye irritant	ECHA
Sodium hydroxide	Draize Test	Rabbit	0.05 mg	24 hours	Corrosive to eyes	RTECS

Respiratory or skin sensitisation

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

Mixture No data available.

Substance Test data reported below.

Skin Sensitization Exposure Route:

Chemical name Test method Species Results	Key literature references and sources for data
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	Sodium salicylate	Based on human	Human	No sensitisation responses were	Vendor SDS
1		experience		observed.	

Respiratory Sensitization Exposure Route:

Ī	Chemical name	Test method	Species	Results	Key literature references and sources for data
Ī	Sodium salicylate	Based on human experience	Human	Not confirmed to be a respiratory sensitizer	Vendor SDS

STOT - single exposure

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

Mixture No data available.

Substance Test data reported below.

Oral Exposure Route:

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Sodium salicylate	Human	700 mg/kg	None reported	Lungs, Thorax, or	RTECS
	LDLo			Respiration	
				Dyspnea	

STOT - repeated exposure

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

Mixture No data available.

Substance No data available.

Germ cell mutagenicity

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

Mixture invitro **Data** No data available.

Substance invitro **Data** Test data reported below.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium salicylate	OECD 471	Salmonella typhimurium	0.158 mg/plate	48 hours	Negative	No information available

Mixture invivo **Data** No data available.

Substance invivo **Data**Test data reported below.

Oral Exposure Route:

Chemical name	Test	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium salicylate	DNA damage	Rat	30 mg/L	None reported	Positive test result for mutagenicity	RTECS

Carcinogenicity

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

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Mixture No data available.

Substance No data available.

Reproductive toxicity

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

Mixture No data available.

Substance Test data reported below.

Oral Exposure Route:

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium salicylate	Rat TD∟₀	40 mg/kg	1 days	Effects on Newborn Stillbirth	RTECS

Aspiration hazard

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

11.2 Information on other hazards

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

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

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

Mixture

Acute aquatic toxicity: No data available.

Aquatic Chronic Toxicity: No data available.

Substance

Acute aquatic toxicity: Test data reported below.

Fish:

Chemical name	Exposure	Species	Endpoint type	Reported dose	Key literature references and
	time				sources for data
Sodium salicylate	96 hours	Pimephales promelas	LC ₅₀	1370 mg/L	GESTIS
Sodium hydroxide	96 hours	Oncorhynchus mykiss	LC ₅₀	45.4 mg/L	IUCLID

Crustacea:

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium hydroxide	48 Hours	Daphnia sp.	EC ₅₀	40.4 mg/L	IUCLID

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Aquatic Chronic Toxicity: No data available.

12.2. Persistence and degradability

Mixture No data available.

12.3. Bioaccumulative potential

Mixture:No data available.Partition coefficientNo data available

12.4. Mobility in soil

Soil Organic Carbon-Water Partition No da

Coefficient

No data available

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Endocrine disrupting properties

Endocrine Disruptor Information: This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

No information available.

Ozone: Not applicable

Ozone depletion potential (ODP): No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Advice on Disposal

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous

substances, including mixtures of laboratory chemicals; hazardous waste.

Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous

substances, including mixtures of laboratory chemicals; hazardous waste.

Contaminated packaging Dispose of contents/containers in accordance with local regulations.

Other Information Do not reuse empty containers.

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Section 14: TRANSPORT INFORMATION

IMDG

14.1 UN number or ID numberNot regulated14.2 Proper shipping nameNot regulated14.3 Transport hazard class(es)Not regulated14.4 Packing GroupNot regulated14.5 Marine pollutantNot applicable

14.6 Special precautions for user See section 6-8 for more information

14.7. Transport in bulk according to Not applicable

Annex II of MARPOL and the IBC

Code

ADR

14.1 UN number or ID numberNot regulated14.2 Proper shipping nameNot regulated14.3 Transport hazard class(es)Not regulated14.4 Packing GroupNot regulated14.5 Environmental hazardsNot applicable

14.6 Special precautions for user See section 6-8 for more information

IATANot regulated14.1 UN number or ID numberNot regulated14.2 Proper shipping nameNot regulated14.3 Transport hazard class(es)Not regulated14.4 Packing groupNot regulated14.5 Environmental hazardsNot applicable

14.6 Special precautions for user See section 6-8 for more information

Additional information

Section 15: REGULATORY INFORMATION

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

European Union

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 (EC) 1005/2009

Not applicable

Germany

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

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International Inventories

EINECS/ELINCS Complies Complies **TSCA DSL/NDSL** Complies Complies **ENCS** Complies **IECSC KECL - Existing substances** Complies Complies **PICCS AICS** Complies

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

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

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

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 Chemical safety assessments for substances in this mixture were not carried out.

Section 16: OTHER INFORMATION

Issue Date 28-Jun-2005

Revision Date 14-Feb-2023

Revision Note New SDS, SDS sections updated, 3, 9, 11, 12.

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

** Hazard Designation

ADN Accord européen relatif au transport international des marchandises dangereuses par voies

de navigation intérieure

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE Acute Toxicity Estimate

CAS Chemical Abstracts Service Number

Ceiling Maximum limit value

CLP Classification, Labelling and Packaging of substances and mixtures [Regulation (EC) No.

1272/2008]

DNEL Derived No Effect Level (DNEL)

EC European Community

ECHA (The European Chemicals Agency)

EC50 Effective Concentration to 50% of a test population

EEC European Economic Community

EN European Standard

IMDG International Maritime Dangerous Goods (IMDG)
IATA International Air Transport Association (IATA)

IATA-DGR International Air Transport Association - Dangerous Goods Regulations

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ICAO International Civil Aviation Organization

ICAO-TI International Civil Aviation Organization - Technical Instructions
IUCLID IUCLID (The International Uniform Chemical Information Database)
GHS Globally Harmonized System of Classification and Labelling of Chemicals

LOAEL Lowest observed adverse effect level

LOAEC Lowest observed adverse effect concentration LC50 Lethal Concentration to 50% of a test population

LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)
LOLI (List of Lists - An International Chemical Regulatory Database)

MAK Maximale Arbeitsplatz-Konzentration, a German expression corresponding to threshold limit

value, which relates to safe daily exposure levels to chemical substances

NOAEL NOAEL (No observed adverse effect level)
NOAEC No observed adverse effect concentration

OSHA Occupational Safety and Health Administration of the US Department of Labour)

PEC Predicted Effect Concentration

PNEC Predicted No Effect Concentration (PNEC)

PBT Persistent, Bioaccumulative, and Toxic (PBT) Chemicals

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals [Regulation (EC) No.

1907/20061)

RID Règlement international concernant le transport des marchandises dangereuses par chemin

de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

RTECS (Registry of Toxic Effects of Chemical Substances)

TWA TWA (time-weighted average)

SKN* Skin designation SKN+ Skin sensitisation

STEL STEL (Short Term Exposure Limit)
STOT Specific Target Organ Toxicity

STOT RE Specific target organ toxicity — repeated exposure STOT SE Specific target organ toxicity — single exposure

SVHC Substances of Very High Concern

TLV Threshold Limit Value

TRGS Technical rules for hazardous substances, Germany

TSCA Toxic Substances Control Act

UN United Nations

vPvB very persistent and very bioaccumulative

VOC Volatile organic compounds

AwSV Administrative regulation of water polluting substances, Germany

Key literature references and sources for data

See Section 11: TOXICOLOGICAL INFORMATION See Section 12: ECOLOGICAL INFORMATION

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

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Chronic aquatic toxicity	Calculation method
Aspiration toxicity	Calculation method
Ozone	Calculation method

Training Advice 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

Restrictions on use For Laboratory Use Only.

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

End of Safety Data Sheet

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