29.02.2024	Kit components
Product code	Description
4301-0010	Vanadis Extract® Bind and Wash kit For research use only. Not for use in diagnostic procedures.
Components:	
4201 0010 D1	D: 1: D CC

Comp	onents:
------	---------

4301-0010-P1	Binding Buffer
4301-0010-P2	Wash Solution



Revision: 29.02.2024



## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 29.02.2024

Version number 2 (replaces version 1)

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

- · 1.1 Product identifier
- Trade name: Binding Buffer
- · Article number: 4301-0010-P1
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

For research use only. Not for use in diagnostic procedures.

- · Product category PC21 Laboratory chemicals
- · Application of the substance / the mixture

In vitro diagnostics Laboratory chemicals

For research use only. Not for use in diagnostic procedures.

- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Revvity Inc.

Wallac Oy

P.O. Box 10

FI-20101 Turku

Finland

+358 2 2678 111

· Further information obtainable from:

Product safety department.

MSDS Turku@revvity.com

· 1.4 Emergency telephone number:

CHEMTREC (whithin U.S.) 800 424-9300

CHEMTREC (from outside U.S.) +1-703-572-3887

### SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flammable

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS05 corrosive

Skin Corr. 1C H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



STOT SE 3 H336 May cause drowsiness or dizziness.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

(Contd. on page 2)

Version number 2 (replaces version 1) Printing date 29.02.2024 Revision: 29.02.2024

Trade name: Binding Buffer

(Contd. of page 1)

#### · 2.2 Label elements

#### · Labelling according to Regulation (EC) No 1272/2008 and 98/79

The product is labelled according to the IVD regulation

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms







GHS05

#### · Signal word Danger

#### · Hazard-determining components of labelling:

guanidinium thiocyanate propan-2-ol

#### · Hazard statements

H225 Highly flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

#### · Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or 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/doctor.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

#### · Additional information:

EUH032 Contact with acids liberates very toxic gas.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

#### SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- · **Description:** Mixture of substances listed below with nonhazardous additions.

	Dangerous components:		
ſ	CAS: 593-84-0	guanidinium thiocyanate	≥25-≤50%
	EINECS: 209-812-1	🔗 Skin Corr. 1C, H314; Eye Dam. 1, H318; Aquatic Chronic 3,	
	Index number: 615-030-00-5	H412, EUH032	
Ī		propan-2-ol	25-50%
	EINECS: 200-661-7	🐠 Flam. Liq. 2, H225; 🕚 Eye Irrit. 2, H319; STOT SE 3, H336	
	Index number: 603-117-00-0		

· Additional information: For the wording of the listed hazard phrases refer to section 16.

Printing date 29.02.2024 Version number 2 (replaces version 1) Revision: 29.02.2024

Trade name: Binding Buffer

(Contd. of page 2)

### SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: If symptoms persist consult doctor.
- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## **SECTION** 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· 5.2 Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- 5.3 Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

#### SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

· 6.2 Environmental precautions:

Prevent seepage into sewage system, workpits and cellars.

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Do not store together with acids.

(Contd. on page 4)

Printing date 29.02.2024 Version number 2 (replaces version 1) Revision: 29.02.2024

Trade name: Binding Buffer

· Further information about storage conditions:

(Contd. of page 3)

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 7.3 Specific end use(s) No further relevant information available.

#### SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection



Tightly sealed goggles

#### **SECTION 9: Physical and chemical properties**

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Physical state Fluid
- Colour: According to product specification

(Contd. on page 5)

Printing date 29.02.2024 Version number 2 (replaces version 1) Revision: 29.02.2024

Trade name: Binding Buffer

	(Contd. of page
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling	
range	82 °C
Flammability	Highly flammable.
Lower and upper explosion limit	
Lower:	2 Vol %
Upper:	12 Vol %
Flash point:	13 °C
Auto-ignition temperature:	425 °C
Decomposition temperature:	Not determined.
pH ,	Not determined.
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure at 20 °C:	43 hPa
Density and/or relative density	
Density:	Not determined.
Relative density	Not determined.
Vapour density	Not determined.
•	1100 determined.
9.2 Other information	
Appearance: Form:	Fluid
Important information on protection of health and	a
environment, and on safety. Ignition temperature:	Product is not selfigniting.
	Product is not seyignting.  Product is not explosive. However, formation
Explosive properties:	explosive air/vapour mixtures are possible.
Columnt contouts	explosive air/vapour mixtures are possible.
Solvent content:	32.3 %
Organic solvents:	52.5 % 0.0 %
Solids content:	0.0 %
Change in condition	N . 1 1
ī	Not determined.
Information with regard to physical hazard classe	s
Information with regard to physical hazard classe Explosives	vs Void
Information with regard to physical hazard classe Explosives Flammable gases	rs Void Void
Information with regard to physical hazard classe Explosives Flammable gases Aerosols	rs Void Void Void
Information with regard to physical hazard classe Explosives Flammable gases Aerosols Oxidising gases	rs Void Void Void Void
Information with regard to physical hazard classe Explosives Flammable gases Aerosols Oxidising gases Gases under pressure	vs Void Void Void Void Void
Information with regard to physical hazard classe Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids	void Void Void Void Void Void Highly flammable liquid and vapour.
Information with regard to physical hazard classe Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids	void Void Void Void Void Highly flammable liquid and vapour. Void
Information with regard to physical hazard classe Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures	void Void Void Void Void Void Void Void V
Information with regard to physical hazard classe Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids	Void Void Void Void Void Void Void Void
Information with regard to physical hazard classe Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids	S Void Void Void Void Void Void Void Void
Evaporation rate  Information with regard to physical hazard classe Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures	Void Void Void Void Void Void Void Void
Information with regard to physical hazard classe Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures Substances and mixtures	Void Void Void Void Void Void Void Void
Information with regard to physical hazard classe Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures Substances and mixtures	Void Void Void Void Void Void Void Void
Information with regard to physical hazard classe Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures Substances and mixtures Substances and mixtures Oxidising liquids	Void Void Void Void Void Void Void Void
Information with regard to physical hazard classe Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures Substances and mixtures Substances and mixtures Oxidising solids Oxidising solids	Void Void Void Void Void Void Void Highly flammable liquid and vapour. Void Void Void Void Void Void Void Void
Information with regard to physical hazard classe Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids Self-reactive substances and mixtures Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures Substances and mixtures Substances and mixtures Oxidising liquids	Void Void Void Void Void Void Void Void

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Trade name: Binding Buffer

(Contd. of page 5)

· Desensitised explosives

Void

#### SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

### SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Skin corrosion/irritation Causes severe skin burns and eye damage.
- · Serious eye damage/irritation Causes serious 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 May cause drowsiness or dizziness.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

#### SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- · 12.7 Other adverse effects
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

EU

Printing date 29.02.2024 Version number 2 (replaces version 1) Revision: 29.02.2024

Trade name: Binding Buffer

(Contd. of page 6)

## SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · Recommendation: Hand over to hazardous waste disposers.
- $\cdot \textit{Recommended cleansing agents:} \textit{Water, if necessary together with cleansing agents.}$

14.1 UN number or ID number ADR, IMDG, IATA	UN2924
14.2 UN proper shipping name	
· ADR · IMDG, IATA	2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL) guanidinium thiocyanate) FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL) guanidinium thiocyanate)
14.3 Transport hazard class(es)	
ADR	
Class Label	3 Flammable liquids. 3+8
Class	3 Flammable liquids.
· Label	3/8
· IATA  · Class · Label	3 Flammable liquids.
	3 (8)
· 14.4 Packing group · ADR, IMDG, IATA	II
· 14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number:	Warning: Flammable liquids. 336 F-E,S-D

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Trade name: Binding Buffer

	(Contd. of page
· Stowage Code	SW2 Clear of living quarters.
· 14.7 Maritime transport in bulk accord	ling to IMO
instruments	Not applicable.
Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	IL
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	D/E
· IMDG	
· Limited quantities (LQ)	IL
· Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.
6	(ISOPROPANOL (ISOPROPYL ALCOHOL
	GUANIDINIUM THIOCYANATE), 3 (8), II

## **SECTION 15: Regulatory information**

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

- · REGULATION (EU) 2019/1148
- · Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

• 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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Trade name: Binding Buffer

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#### · Relevant phrases

H225 Highly flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

EUH032 Contact with acids liberates very toxic gas.

## · Department issuing SDS: Product safety department.

· Contact: MSDS Turku@revvity.com · Date of previous version: 02.09.2019 · Version number of previous version: 1

#### · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids - Category 2

Skin Corr. 1C: Skin corrosion/irritation – Category 1C

Eye Dam. 1: Serious eye damage/eye irritation – Category 1 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

\* Data compared to the previous version altered.



Revision: 29.02.2024



## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 29.02.2024

Version number 2 (replaces version 1)

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

· 1.1 Product identifier

· Trade name: Wash Solution

· Article number: 4301-0010-P2

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

For research use only. Not for use in diagnostic procedures.

· Product category PC21 Laboratory chemicals

· Application of the substance / the mixture

Laboratory chemicals In vitro diagnostics

For research use only. Not for use in diagnostic procedures.

1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Revvity Inc.

Wallac Oy

P.O. Box 10

FI-20101 Turku

Finland

+358 2 2678 111

· Further information obtainable from:

Product safety department.

MSDS Turku@revvity.com

· 1.4 Emergency telephone number:

CHEMTREC (whithin U.S.) 800 424-9300

CHEMTREC (from outside U.S.) +1-703-572-3887

### SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flammable

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 and 98/79

The product is labelled according to the IVD regulation

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



- · Signal word Danger
- · Hazard statements

H225 Highly flammable liquid and vapour.

(Contd. on page 2)

Printing date 29.02.2024 Version number 2 (replaces version 1) Revision: 29.02.2024

Trade name: Wash Solution

(Contd. of page 1)

· Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

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

protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or shower].

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· **PBT**: Not applicable. · **vPvB**: Not applicable.

EINECS: 231-791-2

### SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:			
CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5	ethanol	♠ Flam. Liq. 2, H225	50-75%
· Other ingredients			
CAS: 7732-18-5 water			25-50%

<sup>·</sup> Additional information: For the wording of the listed hazard phrases refer to section 16.

## **SECTION 4: First aid measures**

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

#### **SECTION 5: Firefighting measures**

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

#### SECTION 6: Accidental release measures

• 6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.

(Contd. on page 3)

Printing date 29.02.2024 Version number 2 (replaces version 1) Revision: 29.02.2024

Trade name: Wash Solution

(Contd. of page 2)

#### · 6.2 Environmental precautions:

Prevent seepage into sewage system, workpits and cellars.

Dilute with plenty of water.

#### · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

#### · 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## SECTION 7: Handling and storage

- · 7.1 Precautions for safe handling No special precautions are necessary if used correctly.
- Information about fire and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 7.3 Specific end use(s) No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

- · Respiratory protection: Not required.
- · Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 4)

Printing date 29.02.2024 Version number 2 (replaces version 1) Revision: 29.02.2024

Trade name: Wash Solution

(Contd. of page 3)

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection



Tightly sealed goggles

## SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state Fluid

• Colour: According to product specification

Odour: Characteristic
 Odour threshold: Not determined.
 Melting point/freezing point: Undetermined.

· Boiling point or initial boiling point and boiling

*range* 78 °C

· Flammability Highly flammable.

· Lower and upper explosion limit

Lower: 3.5 Vol %
Upper: 15 Vol %
Flash point: 13 °C
Auto-ignition temperature: 425 °C
Decomposition temperature: Not determined.
pH Not determined.

· Viscosity:

Kinematic viscosity
 Dynamic:
 Not determined.
 Not determined.

Solubility

water: Fully miscible.
Partition coefficient n-octanol/water (log value)
Vapour pressure at 20 °C: 59 hPa
Vapour pressure at 50 °C: 280 hPa

Density and/or relative density

Density at 20 °C: 0.85 g/cm³
 Relative density Not determined.
 Vapour density Not determined.

· 9.2 Other information

· Appearance:

· Form: Fluid

Important information on protection of health and

environment, and on safety.

• Ignition temperature: Product is not selfigniting.

Explosive properties: Product is not explosive. However, formation of

explosive air/vapour mixtures are possible.

· Solvent content:

• Organic solvents: 70.0 %
 • Water: 30.0 %
 • Solids content: 0.0 %

· Change in condition

• Evaporation rate Not determined.

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Information with regard to physical hazard classe	S
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Highly flammable liquid and vapour.
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable	
gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

#### SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

### SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · 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 Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

### SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.

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- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- · 12.7 Other adverse effects
- Additional ecological information:
- · General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

## **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · Recommendation: Hand over to hazardous waste disposers.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

14.1 UN number or ID number ADR, IMDG, IATA	UN1170
· · · · · · · · · · · · · · · · · · ·	ON1170
14.2 UN proper shipping name ADR	1170 ETHANOL SOLUTION (ETHYL ALCOHO
ADK	SOLUTION)
<i>IMDG</i>	ETHANOL SOLUTION (ETHYL ALCOHO
	SOLUTION)
IATA	ETHANOL SOLUTION
14.3 Transport hazard class(es)	
ADR, IMDG, IATA	
3	
	3 Flammable liquids.
Label	3 Flammable liquids. 3
Label 14.4 Packing group	3
Label 14.4 Packing group	•
Label 14.4 Packing group ADR, IMDG, IATA	3
Label 14.4 Packing group ADR, IMDG, IATA 14.5 Environmental hazards:	II  Not applicable.  Warning: Flammable liquids.
Label  14.4 Packing group ADR, IMDG, IATA  14.5 Environmental hazards:  14.6 Special precautions for user Hazard identification number (Kemler code):	3  II  Not applicable.  Warning: Flammable liquids. 33
Label  14.4 Packing group ADR, IMDG, IATA  14.5 Environmental hazards:  14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number:	3  II  Not applicable.  Warning: Flammable liquids. 33 F-E,S-D
Label  14.4 Packing group ADR, IMDG, IATA  14.5 Environmental hazards:  14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number: Stowage Category	II  Not applicable.  Warning: Flammable liquids. 33 F-E,S-D A
Class Label  14.4 Packing group ADR, IMDG, IATA  14.5 Environmental hazards:  14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number: Stowage Category  14.7 Maritime transport in bulk according to IM	II  Not applicable.  Warning: Flammable liquids. 33 F-E,S-D A
Label  14.4 Packing group ADR, IMDG, IATA  14.5 Environmental hazards:  14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number: Stowage Category  14.7 Maritime transport in bulk according to IM	II  Not applicable.  Warning: Flammable liquids. 33 F-E,S-D A
Label 14.4 Packing group ADR, IMDG, IATA 14.5 Environmental hazards: 14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number: Stowage Category 14.7 Maritime transport in bulk according to IM instruments	II  Not applicable.  Warning: Flammable liquids. 33 F-E,S-D A
Label  14.4 Packing group ADR, IMDG, IATA  14.5 Environmental hazards:  14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number: Stowage Category	II  Not applicable.  Warning: Flammable liquids. 33 F-E,S-D A

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· Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
Transport category	2
Tunnel restriction code	D/E
<i>IMDG</i>	
Limited quantities (LQ)	IL
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL
	SOLUTION), 3, II
	// ·

### **SECTION 15: Regulatory information**

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

- · REGULATION (EU) 2019/1148
- · Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

- · National regulations:
- · Additional classification according to Decree on Hazardous Materials, Annex II:

Carcinogenic hazardous material group III (dangerous).

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H225 Highly flammable liquid and vapour.

- · **Department issuing SDS:** Product safety department.
- · Contact: MSDS\_Turku@revvity.com
- · Date of previous version: 12.12.2018

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· Version number of previous version: 1

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the

International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 2: Flammable liquids – Category 2

\* \* Data compared to the previous version altered.