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

1.1 Product identifier

Trade name

Wash Buffer 1

Form

The product is included in the following product sets:

SP947654P608	**IndiMag Pathogen IM 48 Cartridge (6 x 8)**
SP947654P224	**IndiMag Pathogen IM 48 Cartridge (2 x 24)**
SP947855P196	**IndiMag Pathogen KF96 Cartridge (96)**
SP947855P496	**IndiMag Pathogen KF96 Cartridge (4 x 96)**
SP947855P1696	**IndiMag Pathogen KF96 Cartridge (16 x 96)**
SP957654C608	**IndiMag Pathogen IM2 Cartridge (6 x 8)**

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

Relevant identified uses of the substance or mixture
laboratory chemicals

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
INDICAL BIOSCIENCE GmbH
Deutscher Platz 5b
04103 Leipzig
Germany

Telephone no. +49 341 12454 0
Fax no. +49 341 12454 60
e-mail compliance@indical.com

Advice on Safety Data Sheet
sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):
+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Eye Irrit. 2; H319
Flam. Liq. 2; H225
Skin Irrit. 2; H315

Classification information
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms


GHS02


GHS07

Signal word
Danger

Hazard statement(s)

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to a facility in accordance with local and national regulations.

2.3 Other hazards

This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

PBT assessment
According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.

vPvB assessment
According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**ethanol**			
	64-17-5 200-578-6 603-002-00-5 01-2119457610-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 50.00 - < 70.00	wt%
2	**GUANIDINIUM CHLORIDE**		**pls. refer to footnote (1)**	
	50-01-1 200-002-3 607-148-00-0 -	Acute Tox. 4*; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332	>= 25.00 - < 50.00	wt%

Full text of H- and EUH-phrases, if not already mentioned in section 2.2: see section 16.
(*,**,***,****) Detailed explanation pls. refer to CLP regulation No. 1272/2008, annex VI, 1.2
(1) Aberrant from/in addition to the classification set out in Annex VI, this substance is classified according to European Regulation (EC) No 1272/2008 (CLP), Article 4 (3), paragraph 2.

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	-	Eye Irrit. 2; H319: C >= 50%	-	-

Acute toxicity estimate (ATE) values			
No	**oral**	**dermal**	**inhalative**
2	1120 mg/kg bodyweight		

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician.

After inhalation
Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air.

After skin contact
In case of contact with skin wash off with water.

After eye contact
Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes).

After ingestion
Rinse the mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Extinguishing measures to suit surroundings.

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO2)

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing. Containers close to fire should be transferred to a safe place. Cool closed containers exposed to fire with water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Refer to protective measures listed in sections 7 and 8. Keep away from ignition sources.

For emergency responders
Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

General protective and hygiene measures
Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Do not inhale vapours. Avoid contact with eyes and skin. Wash hands before breaks and after work. Remove contaminated clothing and shoes and launder thoroughly before reusing.

Advice on protection against fire and explosion
Vapours can form an explosive mixture with air. Isolate from sources of heat, sparks and open flame. Take precautionary measures against electrostatic loading (earthing necessary during loading operations). Use explosion-proof equipment/fittings and non-sparking tools.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
Keep container tightly closed and dry in a cool, well-ventilated place.

Requirements for storage rooms and vessels
Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products
Substances to be avoided, see section 10.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.		EC no.	
1	**ethanol**	**64-17-5**		**200-578-6**	
	List of approved workplace exposure limits (WELs) / EH40				
	Ethanol				
	WEL long-term (8-hr TWA reference period)	1920	mg/m³	1000	ppm

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**ethanol**			**64-17-5 200-578-6**	
	dermal	Long term (chronic)	systemic	8238	mg/kg/day
	inhalative	Long term (chronic)	systemic	380	mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	**ethanol**			**64-17-5** **200-578-6**	
	inhalative	Long term (chronic)	systemic	114	mg/m³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	Type	Value	
1	**ethanol**		**64-17-5** **200-578-6**	
	water	fresh water	0.96	mg/L
	water	marine water	0.79	mg/L
	water	fresh water sediment	3.6	mg/kg dry weight
	water	marine water sediment	2.9	mg/L
	soil	-	0.63	mg/kg dry weight
	sewage treatment plant	-	580	mg/L
	secondary poisoning	-	0.38	g/kg
	with reference to: food			

8.2 Exposure controls

Appropriate engineering controls
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection
If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection
Safety glasses with side protection shield (EN 166)

Hand protection
Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other
Chemical-resistant work clothes.

Environmental exposure controls
No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
liquid

Form
liquid

Colour
colourless

Odour
characteristic

pH value
No data available

Boiling point / boiling range			
Value	78.3	°C	
Reference pressure	1013	hPa	
Reference substance	Ethanol		

Melting point/freezing point
No data available

Decomposition temperature
No data available

Flash point		
Value	12	°C
Method	closed cup	
Reference substance	Ethanol	

Ignition temperature
No data available

Flammability
No data available

Lower explosion limit
No data available

Upper explosion limit
No data available

Vapour pressure
No data available

Relative vapour density
No data available

Relative density
No data available

Density
No data available

Solubility
No data available

Partition coefficient n-octanol/water (log value)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**ethanol**	**64-17-5**		**200-578-6**
log Pow			-0.35	
Reference temperature			24	°C
with reference to	pH 7,4			
Method	OECD 107			
Source	ECHA			
2	**GUANIDINIUM CHLORIDE**	**50-01-1**		**200-002-3**
log Pow			1.7	
Reference temperature			20	°C

Kinematic viscosity
No data available

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available.

10.2 Chemical stability
Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions
Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid
Heat, naked flames and other ignition sources.

10.5 Incompatible materials
None known.

10.6 Hazardous decomposition products
None, if handled according to intended use.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity (result of the ATE calculation for the mixture)	
Product Name	
Wash Buffer 1	
Comments	The result of the applied calculation method according to the European Regulation (EC) 1272/2008 (CLP), Paragraph 3.1.3.6, Part 3 of Annex I is outside the values that imply a classification / labelling of this mixture according to table 3.1.1 defining the respective categories (ATE oral > 2000 mg/kg).

Acute oral toxicity				
No	**Substance name**	**CAS no.**	**EC no.**	
1	**ethanol**	**64-17-5**	**200-578-6**	
LD50		10470		mg/kg bodyweight
Species	rat			
with reference to	95% ethanol in water			
Method	OECD 401			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			
2	**GUANIDINIUM CHLORIDE**	**50-01-1**	**200-002-3**	
LD50		1120		mg/kg bodyweight
Species	rat			

Acute dermal toxicity
No data available

Acute inhalational toxicity (result of the ATE calculation for the mixture)	
Product Name	
Wash Buffer 1	
Comments	The result of the applied calculation method according to the European Regulation (EC) 1272/2008 (CLP), Paragraph 3.1.3.6, Part 3 of Annex I is outside the values that imply a classification / labelling of this mixture according to table 3.1.1 defining the respective categories (ATE for inhalation: > 20.000 ppmV (gases), > 20 mg/l (vapours), > 5 mg/l (dusts/mists).

Acute inhalational toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
LC50		124.7	mg/l
Duration of exposure		4	h
State of aggregation	Vapour		
Species	rat		
Method	OECD 403		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Skin corrosion/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	non-irritant		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Serious eye damage/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	irritant		
Evaluation/classification	Based on available data, the classification criteria are met.		

Respiratory or skin sensitisation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Route of exposure	respiratory tract		
Source	ECHA		
Evaluation	non-sensitizing		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	Skin		
Species	mouse		
Source	ECHA		
Evaluation	non-sensitizing		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Germ cell mutagenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Type of examination	in vitro gene mutation study in bacteria		
Species	Salmonella typhimurium		
Method	OECD 471		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Type of examination	in vitro gene mutation study in mammalian cells		
Species	mouse lymphoma cells		
Method	OECD 476		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Type of examination	Genotoxicity in vivo		
Species	mouse		
Method	OECD 478		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Reproduction toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**

Route of exposure	oral		
NOAEL			
Type of examination	2 generation study		
Species	mouse		
Method	OECD 416		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	inhalational		
NOAEL	>=	20000	ppm
Type of examination	Prenatal Developmental Toxicity Study		
Species	rat		
Method	OECD 414		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Carcinogenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**

Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

STOT - single exposure
No data available

STOT - repeated exposure			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**

Route of exposure	oral		
Duration of exposure		14	week/s
Species	rat		
Target organ	kidneys		
Method	OECD 408		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Aspiration hazard
No data available

Endocrine disrupting properties
No data available

11.2 Information on other hazards

Other information
No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**

LC50		14200	mg/l
Duration of exposure		96	h
Species	Pimephales promelas		
Method	EPA		
Source	ECHA		

Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**ethanol**	**64-17-5**		**200-578-6**
EC50		5012	mg/l	
Duration of exposure		48	h	
Species	Ceriodaphnia dubia			
Method	ASTM Standard E 729-80			
Source	ECHA			

Toxicity to Daphnia (chronic)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**ethanol**	**64-17-5**		**200-578-6**
NOEC		9.6	mg/l	
Duration of exposure		9	day(s)	
Species	Daphnia magna			
Source	ECHA			

Toxicity to algae (acute)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**ethanol**	**64-17-5**		**200-578-6**
EC50		275	mg/l	
Duration of exposure		72	h	
Species	Chlorella vulgaris			
Method	OECD 201			
Source	ECHA			

Toxicity to algae (chronic)
No data available

Bacteria toxicity
No data available

12.2 Persistence and degradability

Biodegradability				
No	**Substance name**	**CAS no.**		**EC no.**
1	**ethanol**	**64-17-5**		**200-578-6**
Type	aerobic biodegradation			
Value	appr.	84	%	
Duration		20	day(s)	
Source	ECHA			
Evaluation	readily biodegradable			
2	**GUANIDINIUM CHLORIDE**	**50-01-1**		**200-002-3**
Method	OECD 301 C			
Evaluation	not readily biodegradable			

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**ethanol**	**64-17-5**		**200-578-6**
log Pow		-0.35		
Reference temperature		24	°C	
with reference to	pH 7,4			
Method	OECD 107			
Source	ECHA			
2	**GUANIDINIUM CHLORIDE**	**50-01-1**		**200-002-3**
log Pow		1.7		
Reference temperature		20	°C	

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
Product Name	
Wash Buffer 1	
PBT assessment	According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.
vPvB assessment	According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information

Other information
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.
Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN	UN1170
IMDG	UN1170
ICAO-TI / IATA	UN1170

14.2 UN proper shipping name

ADR/RID/ADN	ETHANOL SOLUTION
IMDG	ETHANOL SOLUTION
ICAO-TI / IATA	Ethanol solution

14.3 Transport hazard class(es)

ADR/RID/ADN - Class	3
Label	3
Classification code	F1
Tunnel restriction code	D/E
Hazard identification no.	33
IMDG - Class	3
Label	3
ICAO-TI / IATA - Class	3
Label	3

14.4 Packing group

ADR/RID/ADN	II
IMDG	II

ICAO-TI / IATA	II

14.5 Environmental hazards

EmS F-E, S-D

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation
According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES				
The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.				No 3, 40
The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.				
No	**Substance name**	**CAS no.**	**EC no.**	**No**
1	**GUANIDINIUM CHLORIDE**	**50-01-1**	**200-002-3**	**75**

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances	
This product is subject to Part I of Annex I, risk category:	P5b

Other regulations
Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H302	Harmful if swallowed.
H332	Harmful if inhaled.

Creation of the safety data sheet
UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de

This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:
Alterations to the previous edition are marked in the left-hand margin.

Prod-ID 769053