

KIT

1 INFORMATION OF THE SUBSTANCE/PREPARATION AND COMPANY

1.1 Product identifier

Product Name: 1,25(OH)2-Vit D ELISA

Catalog #: KAP1921

Kit Components: Microtiter plate
 Incubation Buffer
 Elution Solution
 Conjugate Buffer
 Concentrated conjugate
 Concentrated HRP
 Calibrators (0 to 5)
 Controls (1 and 2)
 Washing Solution
 Chromogenic TMB
 Stop Solution
 Blond Elut Silica Catridges

1.2 Intended Use

For In Vitro Diagnostic Use. See product literature for details.

1.3 Company

DIAsource ImmunoAssays S.A.
 Rue du Bosquet, 2
 B-1348 Louvain-la-Neuve
 Belgium
 Tel. Nr. +32 (0)10/84.99.11
 E-mail: products.support@diasource.be

1.4 Emergency telephone

DIAsource (only office hours): +32 (0)10/84.99.23
 Centre Anti-Poisons (BE) 070 245 245
 Please refer to your local Anti-Poison Center!

2 OTHER INFORMATION

	ADR	ADN/ADNR	IMDG	IATA
UN number	Not applicable			
UN proper shipping name	Not applicable			
Transport hazard class(es)	Not applicable		Not applicable	Not applicable
Packing group	Not applicable		Not applicable	Not applicable
Environmental hazards	Not available	Not available	Not available	Not available
Hazard label	Not applicable			
Classification code	Not applicable			
Special precautions for user	Not available			
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not available			
Other information	Not available	Not available	Not available	Not available

3 OTHER INFORMATION

3.1 Single components with dangerous ingredients:

According to Regulation (EC) No 1907/2006 (REACH) in combination with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) the products in the following table do not have to be classified as hazardous.

According to Article 31 of Regulation (EC) No 1907/2006 a safety data sheet has to be provided upon request where a mixture does not meet the criteria for classification as hazardous but contains a substance in a concentration of $\geq 1\%$ posing human health hazards.

Therefore the safety data sheet for the single kit component Stop Solution is attached.

The other single components in these products neither contain a substance in a concentration of $\geq 1\%$ posing human health or environmental hazards; nor a substance in a concentration $\geq 0.1\%$ that is carcinogenic category 2 or toxic to reproduction category 1A, 1B and 2, skin sensitizer category 1, respiratory sensitizer category 1, or has effects on or via lactation or is persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB)

Therefore a safety data sheet for the other single components in the kit is not required for these products.

3.2 General Precautions:

- The products are for professional laboratory use only.
- Users should have a thorough understanding of the Instructions for Use prior to their use of this kit.
- Good Laboratory Practices (GLP) should be followed to ensure the safe use and disposal of the reagents.
- Never pipet by mouth and avoid contact of reagents and specimens with skin and mucous membranes.
- Do not smoke, eat, drink or apply cosmetics in areas where specimens or kit reagents are handled.
- Wear disposable latex gloves when handling reagents

3.3 Other hazard

Conjugate Contains material from bovine origin

Calibrators Contains material from bovine origin

This kit contains material of human origin. Although these materials have been tested for HBsAg, anti-HCV and anti-HIV-1/2 and have been found not reactive, they should be considered as potentially infectious.

Controls Contains material from human origin

3.4 Other information

Microtiter plate : Each well can only be used once



INCUBATION BUFFER

1 INFORMATION OF THE SUBSTANCE/PREPARATION AND COMPANY

1.1 Product identifier

Product Name: Incubation Buffer
Catalog #: Component of KAP1921

1.2 Intended Use

For In Vitro Diagnostic Use. See product literature for details.

1.3 Company

DIAsource ImmunoAssays S.A.
Rue du Bosquet, 2
B-1348 Louvain-la-Neuve
Belgium
Tel. Nr. +32 (0)10/84.99.11
E-mail: products.support@diasource.be

1.4 Emergency telephone

DIAsource (only office hours): +32 (0)10/84.99.23
Centre Anti-Poisons (BE) 070 245 245
Please refer to your local Anti-Poison Center!

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Product Description	Colorless; Clear; Liquid; Odorless
Classification according to EC 1272/2008 (CLP/GHS)	Skin Sensitization Category 1
Classification according to US-OSHA (HCS 29 CFR 1910.1200) and UN GHS	Not classified as hazardous per US-OSHA HCS 2012 and UN GHS

2.2 Label elements according to the regulation (EC) n°1272/2008 (CLP) and its amendments

Danger symbol



Signal word

Warning

Product Identifier

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC# 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC# 220-239-6](3:1)

Danger

H317 May cause an allergic skin reaction.

Supplemental Hazard Information

-

Prevention statements

P261 Avoid breathing vapours.
P272 Contaminated work clothing should not be allowed out of the workplace.

Response statements

P280 Wear protective gloves, protective clothing and eye/face protection.
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before use.
 P501 Dispose of contents/container in accordance with local/national regulations.

Storage statements -

Disposal statements -

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

See Section 11 Toxicological Information for more detailed health information.
3 COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients:		Hazard Classification of Pure Ingredients		
Chemical Name	% by wt.	EU 1272/2008 CLP/GHS	GHS	
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC# 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC# 220-239-6](3:1) CAS # 55965-84-9 EINECS# Not available Index # Not available	<0.1	Acute Tox. Dermal 3 Acute Tox. Inhal. 3 Acute Tox. Oral 3 Aquatic Acute 1 Aquatic Longterm 1 Skin Corr. 1B Skin Sens. 1 H301; H311; H314; H317; H331; H400; H410	Acute Tox. Dermal 3 Acute Tox. Inhal. 3 Acute Tox. Oral 3 Aquatic Acute 1 Aquatic Longterm 1 Skin Corr. 1B Skin Sens. 1 H301; H311; H314; H317; H331; H400; H410	

See section 8 for available Occupational exposure limits
See Section 15 for additional regulatory information
See Section 16 for hazard class, hazard statements and risk phrase description
4 FIRST AID MEASURES
4.1 Description of first aid measures

Inhalation If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration immediately and obtain medical attention.

Eye Contact If product enters eyes, rinse eyes gently with water as a precaution.

Skin Contact In case of skin contact, rinse with water as a precaution.

Ingestion If product is ingested, rinse mouth with water. If irritation or discomfort occurs, obtain medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

May produce an allergic reaction in some people.

See Section 11 Toxicological Information for more detailed health information.
4.3 Indication of any immediate medical attention and special treatment needed

No specific medical attention or treatment required.

5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

In case of fire use carbon dioxide (CO₂), dry chemical, water spray or foam.
For large fires use extinguishing media suitable for surrounding fire.

5.2 Special hazards arising from the substance or mixture

Special Fire and Explosion Hazards: No special Hazards determined.

Hazardous Combustion Products: No Combustible products posing significant hazards are expected from this product (an aqueous solution).

5.3 Advice for fire fighters

Protective Equipment: Self-contained breathing apparatus is recommended for firefighters in all chemical fire situations.

5.4 Additional information

No further relevant information available.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precaution, protective equipment and emergency procedures

Personal Precautions: This product contains material of human and animal origin and should be handled as though capable of transmitting infectious diseases. Observe general safety guidelines for protection during clean up procedures.

Wear protective gloves, protective clothing and eye/face protection.

6.2 Environmental Precautions

Isolate area and absorb spill with sand, vermiculite or other inert absorbent material. Place absorbed material in container suitable for disposal.

Do not allow the undiluted product to enter sewers/surface or ground water.

Dispose of all waste material in accordance with local and facility guidelines.

6.3 Methods and material for containment and cleaning-up

Spill and Leak Procedures: As a precautionary measure, treat spilled material with a 1:10 bleach/water solution. Absorb liquid and place in container suitable for disposal. Avoid generation of aerosols during clean up. Comply with applicable waste disposal regulations.

6.4 Reference to other sections

Refer sections 8 and 13.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

This product should be handled as though capable of transmitting infectious diseases. Universal precautions should be followed when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Store at 2 to 8°C, as directed on the product label.

To maintain product quality, store according to the instructions in the product labeling.

Store away from strong acids, strong bases, strong oxidizers and incompatible materials (section 10).

7.3 Specific end uses

No further relevant information available.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure Limits

US OSHA	None established
ACGIH	None established
DFG MAK	None established
Ireland	None established
IOELVs	None established
NIOSH	None established
Japan	None established

8.2 Exposure controls

Engineering Controls	Place vial behind a metal shield, away from the user.
Eye Protection	Safety glasses or chemical goggles should be worn to prevent eye contact. Refer U.S. OSHA 29 CFR 1910.133, European Standard EN166 or appropriate government standards.
Skin Protection	Impervious gloves, such as Nitrile or equivalent, should be worn to prevent skin contact. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.
Respiratory Protection	Under normal conditions, the use of this product should not require respiratory protection. If overexposure should occur and ventilation is not adequate to maintain airborne concentrations at acceptable levels, the use of respiratory protection should be evaluated by a qualified professional.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State	Liquid	Specific Gravity (water = 1.0)	1.00 @20°C
Color	Colorless	Solubility:	
Transparency	Clear	Water	Miscible
Odor	Odorless	Organic	Not applicable
pH	8.0	Coefficient of Water/Oil Distribution	Not determined
Freezing Point	Not determined	Autoignition Temp.	Not applicable
Boiling Point	Not determined	Decomposition Temperature	Not determined
Flash Point	Not applicable	Percent Volatiles	Not determines
Evaporate Rate	Not determined	Vapor Pressure	Not determined
Flammability (Solid, Gas)	Not applicable	Viscosity	Not determined
Flammable Limits	Not determined	Explosive Properties	Not applicable
Vapor Density	Not determined	Oxidizing Properties	Not determined
Odor threshold	Not applicable		

9.2 Other information

No further relevant information available.

10 STABILITY AND REACTIVITY**10.1 Reactivity**

No further relevant information available.

10.2 Chemical Stability

The product is stable in accordance with recommended storage conditions.

10.3 Possibility of hazardous reactions

No further relevant information available.

10.4 Conditions to Avoid

To maintain product performance keep away from strong acids, strong bases, strong oxidizers. Avoid exposure to heat and direct sunlight.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous Decomposition Products

No decomposition products posing significant hazards would be expected from this product (an aqueous solution).

11 TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Toxicity Data for Hazardous
Ingredients**

reaction mass of: 5-chloro-2-methyl-4-
isothiazolin-3-one [EC# 247-500-7] and 2-
methyl-4-isothiazolin-3-one [EC# 220-239-
6](3:1)
CAS # 55965-84-9

Oral LD50 Rat 53mg/kg

Primary Routes of Exposure

Common routes of entry include inhalation, ingestion and eye/skin contact. Specific paths of concern for potentially infectious materials are skin puncture, contact with broken skin, contact with mucous membranes and inhalation of aerosolized material.

Acute Toxicity

Not classified based on available data.

Skin Corrosion/Irritation

Not classified based on available data.

Serious eye damage/eye irritation

Not classified based on available data.

Respiratory/skin sensitization

May cause an allergic skin reaction.

Carcinogenicity

This product does not contain a reportable concentration ($\geq 0.1\%$) of any ingredient listed as carcinogen by ACGIH, IARC, NTP, OSHA or 1272/2008 EC regulation.

Germ cell mutagenicity

Not classified based on available data.

Reproductive Toxicity

Not classified based on available data.

**Specific target organ toxicity - single
exposure**

Not classified based on available data.

**Specific target organ toxicity -
repeated exposure**

Not classified based on available data.

Aspiration hazard

Not classified based on available data.

Other information

This product contains materials of human and animal origin and should be considered as potentially capable of transmitting infectious diseases.

12 ECOLOGICAL INFORMATION**12.1 Ecotoxicity**

Fresh Water Species	No information available
Microtox	No information available
Water Flea	No information available
Fresh Water Algae	No information available

12.2 Persistence and degradability

Not determined for the product.

12.3 Bioaccumulation

Not determined for the product.

12.4 Mobility in soil

Not determined for the product.

12.5 Results of PBT and vPvB assessment

Not determined for the product. PBT: Not applicable, vPvB: Not applicable.

12.6 Other adverse effects

No further relevant information available.

13 DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Product Waste Disposal:**

Chemical residues and remains should be routinely handled as special waste. This must be disposed of in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or an approved waste-disposal company for information.

Dispose of as potentially biohazardous waste and in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or and approved waste-disposal company for information.

Package disposal:

Dispose of waste product, unused product and contaminated packaging in compliance with federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information.

13.2 Additional Information

Suggested European waste catalogue 18 01 07 - chemicals other than those mentioned in 18 01 06. Dispose in accordance with national, state and local waste regulations.

14 TRANSPORT INFORMATION

Transportation of this product is not regulated under ICAO, IATA DGR, IMDG, US DOT, European ADR and RID or Canadian TDG.

14.1 UN/ID Number

Not regulated for transportation

14.2 Shipping Name

Not regulated for transportation

14.3 Hazard Class

Not regulated for transportation

14.4 Packing Group

Not regulated for transportation

14.5 Environmental Hazards

Not regulated for transportation

14.6 Special Precautions for user

None

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

15 REGULATORY INFORMATION**15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture****Us Federal and State Regulations****SARA 313**

No ingredients listed

CERCLA (The Comprehensive Environmental Response, Compensation and Liability Act) 40 CFR 302.4

No ingredients listed

California Proposition 65**WARNING:** This product can expose you to chemical which is known to the State of California to cause cancer and/or harm. For more information, go to www.P65Warnings.ca.gov

Chemical which is known to the State of California to cause cancer

No ingredients listed

Chemical which is known to the State of California to cause development toxicity

No ingredients listed

Chemical which is known to the State of California to cause male reproductive toxicity

No ingredients listed

Chemical which is known to the State of California to cause female reproductive toxicity

No ingredients listed

Massachusetts MSL

No ingredients listed

New Jersey Dept. of Health RTK List

No ingredients listed

Pennsylvania RTK

No ingredients listed

EU regulations

This SDS complies with EC Regulations 1907/2006 (REACH) and amendments.

Water Hazard Class (Germany)

WGK 1, low water endangering

REACH 1907/2006 EC - Annex XIV No ingredients listed.

- list of substances subject to authorization

Canada

This product is exempt from WHMIS label and SDS requirements.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out...

Some hazardous ingredients listed in Section 15 are below the cutoff of 0.1% for carcinogen, mutagen and reproductive toxin and 1% for other health hazards required for reporting in Section 3.

16 OTHER INFORMATION

DIAsource ImmunoAssays Safety Rating	Flammability: 0 Health: 2 Reactivity with water: 1 Contact: 2	<u>Code</u> 0 = None 1 = Slight 2 = Caution 3 = Severe
<p>Hazard Class, hazard statements and risk phrase description from section 3</p> <p>Aquatic Acute 1 - Aquatic Hazard Acute, Category 1 Acute Tox. Dermal 3 - Acute Toxicity Dermal, Category 3 Acute Tox. Inhal. 3 - Acute Toxicity Inhalation, Category 3 Acute Tox. Oral 3 - Acute Toxicity Oral, Category 3 Aquatic Longterm 1 - Aquatic Hazard Long term, Category 1 Skin Corr. 1B - Skin Corrosion Category 1B Skin Sens. 1 - Skin Sensitization Category 1 H301 - Toxic if swallowed. H311 - Toxic in contact with skin. H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H331 - Toxic if inhaled. H400 - Very toxic to aquatic life. H410 - Very toxic to aquatic life with long lasting effects.</p> <p>Abbreviations and Acronyms</p> <p>ACGIH - American Conference of Governmental Industrial Hygienists ADR and RID - European Agreement Concerning The International Carriage Of Dangerous Goods By Road and Rail CERCLA - The Comprehensive Environmental Response, Compensation, and Liability Act CLP - Classification, Labeling and Packaging DFGMAK - Republic Germany's maximum exposure limit GHS - Globally Harmonized System HCS - Hazard Communication Standard IARC - International Agency for Research on Cancer IATA DGR - International Air Transport Association Dangerous Goods Regulation ICAO - International Civil Aviation Organization IMDG - International Maritime Dangerous Goods IOELVs - European Unions' Indicative Occupational Exposure Limit Values NIOSH - National Institute for Occupational Safety and Health NTP - National Toxicology Program OSHA - Occupational Safety and Health Administration PBT - Persistent bioaccumulative and toxic substances SARA - Superfund Amendments and Reauthorization Act TDG - Canadian Transportation Of Dangerous Goods Regulations.</p>		

UN GHS - United Nations Globally Harmonized System US DOT - United States Department of Transportation WHMIS - Workplace Hazardous Material Information System vPvB - Very persistent and very bioaccumulative substances LD50 - Lethal Dose, 50%

For further information, please contact your local DIAsource ImmunoAssays representative.

Notification:

English is acceptable for our MSDS as the following conditions are met:

- Medical specialists (users) are well educated in the English language

WHILE DIASOURCE IMMUNOASSAYS S.A. BELIEVES THE INFORMATION CONTAINED HERE IN IS VALID AND ACCURATE, DIASOURCE IMMUNOASSAYS MAKES NO WARRANTY OR REPRESENTATION AS TO ITS VALIDITY, ACCURACY, OR CURRENCY . DIASOURCE IMMUNOASSAYS SHALL NOT BE LIABLE OR OTHERWISE RESPONSIBLE IN ANY WAY FOR USE OF EITHER THIS INFORMATION OR MATERIALS TO WHICH IT APPLIES. DISPOSAL OF HAZARDOUS MATERIALS MAY BE SUBJECT TO LOCAL LAWS OR REGULATIONS.

ELUTION SOLUTION

1 INFORMATION OF THE SUBSTANCE/PREPARATION AND COMPANY

1.1 Product identifier

Product Name: Elution Solution
 Catalog #: Component of KAP1921

1.2 Intended Use

For In Vitro Diagnostic Use. See product literature for details.

1.3 Company

DIAsource ImmunoAssays S.A.
 Rue du Bosquet, 2
 B-1348 Louvain-la-Neuve
 Belgium
 Tel. Nr. +32 (0)10/84.99.11
 E-mail: products.support@diasource.be

1.4 Emergency telephone

DIAsource (only office hours): +32 (0)10/84.99.23
 Centre Anti-Poisons (BE) 070 245 245
 Please refer to your local Anti-Poison Center!

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Product Description	Colorless; Clear; Liquid; Odorless
Classification according to EC 1272/2008 (CLP/GHS)	Flammable liquids Category 2 Acute toxicity, Oral Category 3 Acute toxicity, Inhalation Category 3 Acute toxicity, Dermal Category 3 Specific target organ toxicity - single exposure Category 1, Eyes, Central nervous system
Classification according to US-OSHA (HCS 29 CFR 1910.1200) and UN GHS	Classified as hazardous per US-OSHA HCS 2012 and UN GHS

2.2 Label elements according to the regulation (EC) n°1272/2008 (CLP) and its amendments

Danger symbol



Signal word

Danger

Product Identifier

Methanol <= 100%

Danger

H225 Highly flammable liquid and vapor.
 H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled.
 H370 Causes damage to organs (Eyes, Central nervous system).

Supplemental Hazard Information	-
Prevention statements	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.
Response statements	P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor.
Storage statements	-
Disposal statements	-

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

See Section 11 Toxicological Information for more detailed health information.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Hazardous Ingredients:		Hazard Classification of Pure Ingredients		
Chemical Name	% by wt.	EU 1272/2008 CLP/GHS	GHS	
Methanol CAS # 67-56-1 EINECS# 200-659-6 Index # 603-001-00-X	<= 100	Flam. Liq. 2; Acute Tox. 3; STOT SE 1; H225, H301, H331, H311, H370	Flam. Liq. 2; Acute Tox. 3; STOT SE 1; H225, H301, H331, H311, H370	2,8
2 - Substance with Community workplace exposure limits 8 - Present at concentration below the cut-off limits.				

See section 8 for available Occupational exposure limits

See Section 15 for additional regulatory information

See Section 16 for hazard class, hazard statements and risk phrase description

4 FIRST AID MEASURES

4.1 Description of first aid measures

General advice	First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.
Inhalation	If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration immediately and obtain medical attention.
Eye Contact	If product enters eyes, rinse eyes gently with water as a precaution. Call in ophthalmologist. Remove contact lenses.
Skin Contact	In case of skin contact, rinse with water as a precaution. Call a physician immediately
Ingestion	If product is ingested, rinse mouth with water. If irritation or discomfort occurs, obtain medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

May produce an allergic reaction in some people.

See Section 11 Toxicological Information for more detailed health information.

4.3 Indication of any immediate medical attention and special treatment needed

No specific medical attention or treatment required.

5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

In case of fire use carbon dioxide (CO₂), dry chemical, water spray or foam.
For large fires use extinguishing media suitable for surrounding fire.

5.2 Special hazards arising from the substance or mixture

Special Fire and Explosion Hazards: No special Hazards determined.

Hazardous Combustion Products: No Combustible products posing significant hazards are expected from this product (an aqueous solution).

5.3 Advice for fire fighters

Protective Equipment: Self-contained breathing apparatus is recommended for firefighters in all chemical fire situations.

5.4 Additional information

No further relevant information available.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precaution, protective equipment and emergency procedures

Personal Precautions: This product contains material of human and animal origin and should be handled as though capable of transmitting infectious diseases. Observe general safety guidelines for protection during clean up procedures.

Wear protective gloves, protective clothing and eye/face protection.

6.2 Environmental Precautions

Isolate area and absorb spill with sand, vermiculite or other inert absorbent material. Place absorbed material in container suitable for disposal.

Do not allow the undiluted product to enter sewers/surface or ground water.

Dispose of all waste material in accordance with local and facility guidelines.

6.3 Methods and material for containment and cleaning-up

Spill and Leak Procedures: As a precautionary measure, treat spilled material with a 1:10 bleach/water solution. Absorb liquid and place in container suitable for disposal. Avoid generation of aerosols during clean up. Comply with applicable waste disposal regulations.

6.4 Reference to other sections

Refer sections 8 and 13.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

This product should be handled as though capable of transmitting infectious diseases. Universal precautions should be followed when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Store at 2 to 8°C, as directed on the product label.

To maintain product quality, store according to the instructions in the product labeling.
Store away from strong acids, strong bases, strong oxidizers and incompatible materials (section 10).

7.3 Specific end uses

No further relevant information available.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Ingredients with workplace control parameters

Derived No Effect Level (DNEL)

Application Area	Routes of exposure	Health effect	Value
Workers	Skin contact	Long-term systemic effects	40mg/kg BW/d
Consumers	Skin contact	Long-term systemic effects	8mg/kg BW/d
Consumers	Ingestion	Long-term systemic effects	8mg/kg BW/d
Workers	Skin contact	Acute systemic effects	40mg/kg BW/d
Consumers	Skin contact	Acute systemic effects	8mg/kg BW/d
Consumers	Ingestion	Acute systemic effects	8mg/kg BW/d
Workers	Inhalation	Acute systemic effects	260 mg/m ³
Workers	Inhalation	Acute local effects	260 mg/m ³
Workers	Inhalation	Long-term systemic effects	260 mg/m ³
Workers	Inhalation	Long-term local effects	260 mg/m ³
Consumers	Inhalation	Acute systemic effects	50 mg/m ³
Consumers	Inhalation	Acute local effects	50 mg/m ³
Consumers	Inhalation	Long-term systemic effects	50 mg/m ³
Consumers	Inhalation	Long-term local effects	50 mg/m ³

Predicted No Effect Concentration (PNEC)

Compartment	Value
Soil	23,5 mg/kg
Sea water	15,4 mg/l
Fresh water	154 mg/l
Fresh water sediment	570,4 mg/kg
Onsite sewage treatment plant	100 mg/kg

8.2 Exposure controls

Engineering Controls	Place vial behind a metal shield, away from the user.
Eye Protection	Safety glasses or chemical goggles should be worn to prevent eye contact. Refer U.S. OSHA 29 CFR 1910.133, European Standard EN166 or appropriate government standards.
Skin Protection	Impervious gloves, such as Nitrile or equivalent, should be worn to prevent skin contact. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.
Respiratory Protection	Under normal conditions, the use of this product should not require respiratory protection. If overexposure should occur and ventilation is not adequate to maintain airborne concentrations at acceptable levels, the use of respiratory protection should be evaluated by a qualified professional.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State	Liquid	Specific Gravity (water = 1.0)	0,791 @25°C
Color	Colorless	Solubility:	
Transparency	Clear	Water	Miscible
Odor	Characteristic	Organic	Not applicable
pH	No data available	Coefficient of Water/Oil Distribution	No data available
Freezing Point	No data available	Autoignition Temp.	455,0°C
Boiling Point	64,7°C	Decomposition Temperature	Distillable in an undecomposed state at normal pressure.
Flash Point	9,7 °C - closed cup - Regulation (EC) No. 440/2008, Annex, A.9	Percent Volatiles	No data available
Evaporate Rate	No data available	Vapor Pressure	169,27 hPa @ 25°C
Flammability (Solid, Gas)	No data available	Viscosity	Viscosity, kinematic: 0,54 - 0,59 mm ² /s @ 20°C
Flammable Limits	Upper explosion limit: 44 %(V) Lower explosion limit: 5,5 %(V)	Explosive Properties	No data available
Vapor Density	1,11	Oxidizing Properties	No data available
Odor threshold	No data available		

9.2 Other information

No further relevant information available.

10 STABILITY AND REACTIVITY

10.1 Reactivity

No further relevant information available.

10.2 Chemical Stability

The product is stable in accordance with recommended storage conditions.

10.3 Possibility of hazardous reactions

Risk of explosion with:

Oxidizing agents, perchloric acid, perchlorates, salts of oxyhalogenic acids, chromium (VI) oxide, halogen oxides, nitrogen oxides, nonmetallic oxides, chromosulfuric acid, chlorates, hydrides, zinc diethyl, halogens, powdered magnesium, hydrogen peroxide, nitric acid, sulfuric acid, permanganic acid, sodium hypochlorite.

Exothermic reaction with:

Acid halides, acid anhydrides, reducing agents, acids, bromine, chlorine, chloroform, magnesium, tetrachloromethane.

Risk of ignition or formation of inflammable gases or vapours with:

Fluorine, oxides of phosphorus, Raney-nickel.

Generates dangerous gases or fumes in contact with:

Alkaline earth metals, alkali metals.

10.4 Conditions to Avoid

Warming.

10.5 Incompatible materials

No data available

10.6 Hazardous Decomposition Products

In the event of fire: see section 5.

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Toxicity Data for Hazardous Ingredients

Oral 101,1 mg/kg

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Symptoms: Nausea, Vomiting

Primary Routes of Exposure

Acute toxicity estimate Inhalation - 4 h - 3,1 mg/l - vapor
Common routes of entry include inhalation, ingestion and eye/skin contact.

Specific paths of concern for potentially infectious materials are skin puncture, contact with broken skin, contact with mucous membranes and inhalation of aerosolized material.

Skin Corrosion/Irritation

No data available.

Serious eye damage/eye irritation

No data available.

Respiratory/skin sensitization

No data available.

Carcinogenicity

This product does not contain a reportable concentration ($\geq 0.1\%$) of any ingredient listed as carcinogen by ACGIH, IARC, NTP, OSHA or 1272/2008 EC regulation.

Germ cell mutagenicity

No data available.

Reproductive Toxicity

No data available.

Specific target organ toxicity - single exposure

No data available.

Specific target organ toxicity - repeated exposure

No data available.

Aspiration hazard

No data available.

Other information

This product contains material of animal origin and should be considered as potentially capable of transmitting infectious diseases.

11.2 Additional Information

Endocrine disrupting properties

Product:

Assessment: The substance/mixture 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.

RTECS: PC1400000

Acute effects: Headache, Dizziness, Drowsiness, narcosis, Blindness, Impairment of vision, irritant effects, Nausea, Vomiting, agitation, spasms, inebriation, Coma Drying-out effect resulting in rough and chapped skin.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Systemic effects: Acidosis
Drop in blood pressure
Agitation, spasms
Inebriation
Dizziness
Drowsiness
Headache
Impairment of vision
Blindness
Narcosis
Coma
Symptoms may be delayed.

Damage to: Liver
Kidney
Cardiac
Irreversible damage of the optical nerve.

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

12 ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Fresh Water Species

Flow-through test LC50 - *Lepomis macrochirus* (Bluegill) - 15.400,0 mg/l - 96 h (US-EPA)
Semi-static test EC50 - *Daphnia magna* (Water flea) - 18.260 mg/l - 96 h (OECD Test Guideline 202)

Microtox

No information available

Water Flea

No information available

Fresh Water Algae

static test ErC50 - *Pseudokirchneriella subcapitata* (green algae) - ca. 22.000,0 mg/l - 96 h (OECD Test Guideline 201)

12.2 Persistence and degradability

Biodegradability Result: 99 % - Readily biodegradable.
(OECD Test Guideline 301D)

Biochemical Oxygen Demand (BOD) 600 - 1.120 mg/g
Remarks: (IUCLID)

Chemical Oxygen Demand (COD) 1.420 mg/g.
Remarks: (IUCLID)

Theoretical oxygen demand 1.500 mg/g
Remarks: (Lit.)

Ratio BOD/ThBOD 76 %
Remarks: Closed Bottle test(IUCLID)

12.3 Bioaccumulation

Bioaccumulation *Cyprinus carpio* (Carp) - 72 d
at 20 °C - 5 mg/l(Methanol)

Bioconcentration factor (BCF): 1,0

12.4 Mobility in soil

Will not adsorb on soil.

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Additional ecological information Avoid release to the environment.

Stability in water at 19 °C 83 - 91 % - 72 h
Remarks: Hydrolyzes on contact with water. Hydrolyzes readily.
- 2,2 yr
Remarks: reaction with hydroxyl radicals(IUCLID).

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product Waste Disposal:

Chemical residues and remains should be routinely handled as special waste. This must be disposed of in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or an approved waste-disposal company for information.

Package disposal

Dispose of waste product, unused product and contaminated packaging in compliance with federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information.

13.2 Additional Information

Suggested European waste catalogue 18 01 07 - chemicals other than those mentioned in 18 01 06. Dispose in accordance with national, state and local waste regulations.

14 TRANSPORT INFORMATION

Transportation of this product is not regulated under ICAO, IATA DGR, IMDG, US DOT, European ADR and RID or Canadian TDG.

14.1 UN/ID Number

Not regulated for transportation

14.2 Shipping Name

Not regulated for transportation

14.3 Hazard Class

Not regulated for transportation

14.4 Packing Group

Not regulated for transportation

14.5 Environmental Hazards

Not regulated for transportation

14.6 Special Precautions for user

None

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

15 REGULATORY INFORMATION

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

Us Federal and State Regulations

SARA 313

Methanol CAS # 67-56-1 is subject to reporting requirements of Section 313, Title III of SARA. 1.0 % de minimis concentration.

CERCLA RG's, 40 CFR 302.4

Methanol CAS # 67-56-1 is listed.

California Proposition 65

Methanol CAS # 67-56-1 is listed.

Massachusetts MSL

Methanol CAS # 67-56-1 is listed.

New Jersey Dept. of Health RTK List

Methanol CAS # 67-56-1 is listed.

Pennsylvania RTK

Methanol CAS # 67-56-1 is listed.

EU regulations

This SDS complies with EC Regulations 1907/2006 (REACH) and amendments.

REACH 1907/2006 EC - Annex XIV No ingredients listed.
 - list of substances subject to authorization

Canada

This product is exempt from WHMIS label and SDS requirements.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out...

Some hazardous ingredients listed in Section 15 are below the cutoff of 0.1% for carcinogen, mutagen and reproductive toxin and 1% for other health hazards required for reporting in Section 3.

16 OTHER INFORMATION

DIAsource ImmunoAssays Safety Rating	Flammability: 3 Health: 1 Reactivity with water: 1 Contact: 2	<u>Code</u> 0 = None 1 = Slight 2 = Caution 3 = Severe
Hazard Class, hazard statements and risk phrase description from section 3 Flammable liquids Category 2 Acute toxicity, Oral Category 3 Acute toxicity, Inhalation Category 3 Acute toxicity, Dermal Category 3 Specific target organ toxicity - single exposure Category 1, Eyes, Central nervous system Acute Tox. Oral 2 - Acute Toxicity Oral, Category 2 H225 Highly flammable liquid and vapor. H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled. H370 Causes damage to organs (Eyes, Central nervous system). Abbreviations and Acronyms ACGIH - American Conference of Governmental Industrial Hygienists		

ADR and RID - European Agreement Concerning The International Carriage Of Dangerous Goods By Road and Rail
CERCLA - The Comprehensive Environmental Response, Compensation, and Liability Act
CLP - Classification, Labeling and Packaging
DFGMAK - Republic Germany's maximum exposure limit
GHS - Globally Harmonized System
HCS - Hazard Communication Standard
IARC - International Agency for Research on Cancer
IATA DGR - International Air Transport Association Dangerous Goods Regulation
ICAO - International Civil Aviation Organization
IMDG - International Maritime Dangerous Goods
IOELVs - European Unions' Indicative Occupational Exposure Limit Values
NIOSH - National Institute for Occupational Safety and Health
NTP - National Toxicology Program
OSHA - Occupational Safety and Health Administration
PBT - Persistent bioaccumulative and toxic substances
SARA - Superfund Amendments and Reauthorization Act
TDG - Canadian Transportation Of Dangerous Goods Regulations.
UN GHS - United Nations Globally Harmonized System
US DOT - United States Department of Transportation
WHMIS - Workplace Hazardous Material Information System
vPvB - Very persistent and very bioaccumulative substances
LD50 - Lethal Dose, 50%

For further information, please contact your local DIAsource ImmunoAssays representative.

Notification:

English is acceptable for our MSDS as the following conditions are met:

- Medical specialists (users) are well educated in the English language

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CONJUGATE BUFFER

1 INFORMATION OF THE SUBSTANCE/PREPARATION AND COMPANY

1.1 Product identifier

Product Name: Conjugate Buffer
 Catalog #: Component of KAP1921

1.2 Intended Use

For In Vitro Diagnostic Use. See product literature for details.

1.3 Company

DIAsource ImmunoAssays S.A.
 Rue du Bosquet, 2
 B-1348 Louvain-la-Neuve
 Belgium
 Tel. Nr. +32 (0)10/84.99.11
 E-mail: products.support@diasource.be

1.4 Emergency telephone

DIAsource (only office hours): +32 (0)10/84.99.23
 Centre Anti-Poisons (BE) 070 245 245
 Please refer to your local Anti-Poison Center!

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Product Description	Colorless; Clear; Liquid; Odorless
Classification according to EC 1272/2008 (CLP/GHS)	Skin Sensitization Category 1
Classification according to US-OSHA (HCS 29 CFR 1910.1200) and UN GHS	Not classified as hazardous per US-OSHA HCS 2012 and UN GHS

2.2 Label elements according to the regulation (EC) n°1272/2008 (CLP) and its amendments

Danger symbol



Signal word

Warning

Product Identifier

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC# 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC# 220-239-6](3:1)

Danger

H317 May cause an allergic skin reaction.

Supplemental Hazard Information

-

Prevention statements

P261 Avoid breathing vapours.
 P272 Contaminated work clothing should not be allowed out of the workplace.

Response statements

P280 Wear protective gloves, protective clothing and eye/face protection.
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before use.
 P501 Dispose of contents/container in accordance with local/national regulations.

Storage statements -

Disposal statements -

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

See Section 11 Toxicological Information for more detailed health information.
3 COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients:		Hazard Classification of Pure Ingredients		
Chemical Name	% by wt.	EU 1272/2008 CLP/GHS	GHS	
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC# 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC# 220-239-6](3:1) CAS # 55965-84-9 EINECS# Not available Index # Not available	<0.1	Acute Tox. Dermal 3 Acute Tox. Inhal. 3 Acute Tox. Oral 3 Aquatic Acute 1 Aquatic Longterm 1 Skin Corr. 1B Skin Sens. 1 H301; H311; H314; H317; H331; H400; H410	Acute Tox. Dermal 3 Acute Tox. Inhal. 3 Acute Tox. Oral 3 Aquatic Acute 1 Aquatic Longterm 1 Skin Corr. 1B Skin Sens. 1 H301; H311; H314; H317; H331; H400; H410	

See section 8 for available Occupational exposure limits
See Section 15 for additional regulatory information
See Section 16 for hazard class, hazard statements and risk phrase description
4 FIRST AID MEASURES
4.1 Description of first aid measures

Inhalation If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration immediately and obtain medical attention.

Eye Contact If product enters eyes, rinse eyes gently with water as a precaution.

Skin Contact In case of skin contact, rinse with water as a precaution.

Ingestion If product is ingested, rinse mouth with water. If irritation or discomfort occurs, obtain medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

May produce an allergic reaction in some people.

See Section 11 Toxicological Information for more detailed health information.

4.3 Indication of any immediate medical attention and special treatment needed

No specific medical attention or treatment required.

5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

In case of fire use carbon dioxide (CO₂), dry chemical, water spray or foam.
For large fires use extinguishing media suitable for surrounding fire.

5.2 Special hazards arising from the substance or mixture

Special Fire and Explosion Hazards: No special Hazards determined.

Hazardous Combustion Products: No Combustible products posing significant hazards are expected from this product (an aqueous solution).

5.3 Advice for fire fighters

Protective Equipment: Self-contained breathing apparatus is recommended for firefighters in all chemical fire situations.

5.4 Additional information

No further relevant information available.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precaution, protective equipment and emergency procedures

Personal Precautions: This product contains material of human and animal origin and should be handled as though capable of transmitting infectious diseases. Observe general safety guidelines for protection during clean up procedures.

Wear protective gloves, protective clothing and eye/face protection.

6.2 Environmental Precautions

Isolate area and absorb spill with sand, vermiculite or other inert absorbent material. Place absorbed material in container suitable for disposal.

Do not allow the undiluted product to enter sewers/surface or ground water.

Dispose of all waste material in accordance with local and facility guidelines.

6.3 Methods and material for containment and cleaning-up

Spill and Leak Procedures: As a precautionary measure, treat spilled material with a 1:10 bleach/water solution. Absorb liquid and place in container suitable for disposal. Avoid generation of aerosols during clean up. Comply with applicable waste disposal regulations.

6.4 Reference to other sections

Refer sections 8 and 13.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

This product should be handled as though capable of transmitting infectious diseases. Universal precautions should be followed when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Store at 2 to 8°C, as directed on the product label.

To maintain product quality, store according to the instructions in the product labeling.

Store away from strong acids, strong bases, strong oxidizers and incompatible materials (section 10).

7.3 Specific end uses

No further relevant information available.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure Limits

US OSHA	None established
ACGIH	None established
DFG MAK	None established
Ireland	None established
IOELVs	None established
NIOSH	None established
Japan	None established

8.2 Exposure controls

Engineering Controls	Place vial behind a metal shield, away from the user.
Eye Protection	Safety glasses or chemical goggles should be worn to prevent eye contact. Refer U.S. OSHA 29 CFR 1910.133, European Standard EN166 or appropriate government standards.
Skin Protection	Impervious gloves, such as Nitrile or equivalent, should be worn to prevent skin contact. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.
Respiratory Protection	Under normal conditions, the use of this product should not require respiratory protection. If overexposure should occur and ventilation is not adequate to maintain airborne concentrations at acceptable levels, the use of respiratory protection should be evaluated by a qualified professional.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State	Liquid	Specific Gravity (water = 1.0)	1.00 @20°C
Color	Colorless	Solubility:	
Transparency	Clear	Water	Miscible
Odor	Odorless	Organic	Not applicable
pH	7.4	Coefficient of Water/Oil Distribution	Not determined
Freezing Point	Not determined	Autoignition Temp.	Not applicable
Boiling Point	Not determined	Decomposition Temperature	Not determined
Flash Point	Not applicable	Percent Volatiles	Not determines
Evaporate Rate	Not determined	Vapor Pressure	Not determined
Flammability (Solid, Gas)	Not applicable	Viscosity	Not determined
Flammable Limits	Not determined	Explosive Properties	Not applicable
Vapor Density	Not determined	Oxidizing Properties	Not determined
Odor threshold	Not applicable		

9.2 Other information

No further relevant information available.

10 STABILITY AND REACTIVITY**10.1 Reactivity**

No further relevant information available.

10.2 Chemical Stability

The product is stable in accordance with recommended storage conditions.

10.3 Possibility of hazardous reactions

No further relevant information available.

10.4 Conditions to Avoid

To maintain product performance keep away from strong acids, strong bases, strong oxidizers. Avoid exposure to heat and direct sunlight.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous Decomposition Products

No decomposition products posing significant hazards would be expected from this product (an aqueous solution).

11 TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Toxicity Data for Hazardous
Ingredients**

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC# 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC# 220-239-6](3:1)
CAS # 55965-84-9

Oral LD50 Rat 53mg/kg

Primary Routes of Exposure

Common routes of entry include inhalation, ingestion and eye/skin contact. Specific paths of concern for potentially infectious materials are skin puncture, contact with broken skin, contact with mucous membranes and inhalation of aerosolized material.

Acute Toxicity

Not classified based on available data.

Skin Corrosion/Irritation

Not classified based on available data.

Serious eye damage/eye irritation

Not classified based on available data.

Respiratory/skin sensitization

May cause an allergic skin reaction.

Carcinogenicity

This product does not contain a reportable concentration ($\geq 0.1\%$) of any ingredient listed as carcinogen by ACGIH, IARC, NTP, OSHA or 1272/2008 EC regulation.

Germ cell mutagenicity

Not classified based on available data.

Reproductive Toxicity

Not classified based on available data.

Specific target organ toxicity - single exposure

Not classified based on available data.

Specific target organ toxicity - repeated exposure

Not classified based on available data.

Aspiration hazard

Not classified based on available data.

Other information

This product contains materials of human and animal origin and should be considered as potentially capable of transmitting infectious diseases.

12 ECOLOGICAL INFORMATION**12.1 Ecotoxicity**

Fresh Water Species	No information available
Microtox	No information available
Water Flea	No information available
Fresh Water Algae	No information available

12.2 Persistence and degradability

Not determined for the product.

12.3 Bioaccumulation

Not determined for the product.

12.4 Mobility in soil

Not determined for the product.

12.5 Results of PBT and vPvB assessment

Not determined for the product. PBT: Not applicable, vPvB: Not applicable.

12.6 Other adverse effects

No further relevant information available.

13 DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Product Waste Disposal:**

Chemical residues and remains should be routinely handled as special waste. This must be disposed of in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or an approved waste-disposal company for information.

Dispose of as potentially biohazardous waste and in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or and approved waste-disposal company for information.

Package disposal:

Dispose of waste product, unused product and contaminated packaging in compliance with federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information.

13.2 Additional Information

Suggested European waste catalogue 18 01 07 - chemicals other than those mentioned in 18 01 06. Dispose in accordance with national, state and local waste regulations.

14 TRANSPORT INFORMATION

Transportation of this product is not regulated under ICAO, IATA DGR, IMDG, US DOT, European ADR and RID or Canadian TDG.

14.1 UN/ID Number

Not regulated for transportation

14.2 Shipping Name

Not regulated for transportation

14.3 Hazard Class

Not regulated for transportation

14.4 Packing Group

Not regulated for transportation

14.5 Environmental Hazards

Not regulated for transportation

14.6 Special Precautions for user

None

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

15 REGULATORY INFORMATION**15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture****Us Federal and State Regulations****SARA 313**

No ingredients listed

CERCLA (The Comprehensive Environmental Response, Compensation and Liability Act) 40 CFR 302.4

No ingredients listed

California Proposition 65**WARNING:** This product can expose you to chemical which is known to the State of California to cause cancer and/or harm. For more information, go to www.P65Warnings.ca.gov

Chemical which is known to the State of California to cause cancer

No ingredients listed

Chemical which is known to the State of California to cause development toxicity

No ingredients listed

Chemical which is known to the State of California to cause male reproductive toxicity

No ingredients listed

Chemical which is known to the State of California to cause female reproductive toxicity

No ingredients listed

Massachusetts MSL

No ingredients listed

New Jersey Dept. of Health RTK List

No ingredients listed

Pennsylvania RTK

No ingredients listed

EU regulations

This SDS complies with EC Regulations 1907/2006 (REACH) and amendments.

Water Hazard Class (Germany)

WGK 1, low water endangering

REACH 1907/2006 EC - Annex XIV No ingredients listed.

- list of substances subject to authorization

Canada

This product is exempt from WHMIS label and SDS requirements.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out...

Some hazardous ingredients listed in Section 15 are below the cutoff of 0.1% for carcinogen, mutagen and reproductive toxin and 1% for other health hazards required for reporting in Section 3.

16 OTHER INFORMATION

DIAsource ImmunoAssays Safety Rating	Flammability: 0 Health: 2 Reactivity with water: 1 Contact: 2	<u>Code</u> 0 = None 1 = Slight 2 = Caution 3 = Severe
Hazard Class, hazard statements and risk phrase description from section 3 Aquatic Acute 1 - Aquatic Hazard Acute, Category 1 Acute Tox. Dermal 3 - Acute Toxicity Dermal, Category 3 Acute Tox. Inhal. 3 - Acute Toxicity Inhalation, Category 3 Acute Tox. Oral 3 - Acute Toxicity Oral, Category 3 Aquatic Longterm 1 - Aquatic Hazard Long term, Category 1 Skin Corr. 1B - Skin Corrosion Category 1B Skin Sens. 1 - Skin Sensitization Category 1 H301 - Toxic if swallowed. H311 - Toxic in contact with skin. H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H331 - Toxic if inhaled. H400 - Very toxic to aquatic life. H410 - Very toxic to aquatic life with long lasting effects.		
Abbreviations and Acronyms ACGIH - American Conference of Governmental Industrial Hygienists ADR and RID - European Agreement Concerning The International Carriage Of Dangerous Goods By Road and Rail CERCLA - The Comprehensive Environmental Response, Compensation, and Liability Act CLP - Classification, Labeling and Packaging DFGMAK - Republic Germany's maximum exposure limit GHS - Globally Harmonized System HCS - Hazard Communication Standard IARC - International Agency for Research on Cancer IATA DGR - International Air Transport Association Dangerous Goods Regulation ICAO - International Civil Aviation Organization IMDG - International Maritime Dangerous Goods IOELVs - European Unions' Indicative Occupational Exposure Limit Values NIOSH - National Institute for Occupational Safety and Health NTP - National Toxicology Program OSHA - Occupational Safety and Health Administration PBT - Persistent bioaccumulative and toxic substances SARA - Superfund Amendments and Reauthorization Act TDG - Canadian Transportation Of Dangerous Goods Regulations.		

UN GHS - United Nations Globally Harmonized System US DOT - United States Department of Transportation WHMIS - Workplace Hazardous Material Information System vPvB - Very persistent and very bioaccumulative substances LD50 - Lethal Dose, 50%

For further information, please contact your local DIAsource ImmunoAssays representative.

Notification:

English is acceptable for our MSDS as the following conditions are met:

- Medical specialists (users) are well educated in the English language

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CONTROLS

1 INFORMATION OF THE SUBSTANCE/PREPARATION AND COMPANY

1.1 Product identifier

Product Name: Controls
 Catalog #: Component of KAP1921

1.2 Intended Use

For In Vitro Diagnostic Use. See product literature for details.

1.3 Company

DIAsource ImmunoAssays S.A.
 Rue du Bosquet, 2
 B-1348 Louvain-la-Neuve
 Belgium
 Tel. Nr. +32 (0)10/84.99.11
 E-mail: products.support@diasource.be

1.4 Emergency telephone

DIAsource (only office hours): +32 (0)10/84.99.23
 Centre Anti-Poisons (BE) 070 245 245
 Please refer to your local Anti-Poison Center!

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Product Description	Light brun; Clear; Lyophilised; Odorless
Classification according to EC 1272/2008 (CLP/GHS)	Skin Sensitization Category 1
Classification according to US-OSHA (HCS 29 CFR 1910.1200) and UN GHS	Not classified as hazardous per US-OSHA HCS 2012 and UN GHS

2.2 Label elements according to the regulation (EC) n°1272/2008 (CLP) and its amendments

Danger symbol



Signal word

Warning

Product Identifier

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC# 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC# 220-239-6](3:1)

Danger

H317 May cause an allergic skin reaction.

Supplemental Hazard Information

-

Prevention statements

P261 Avoid breathing vapours.
 P272 Contaminated work clothing should not be allowed out of the workplace.

Response statements

P280 Wear protective gloves, protective clothing and eye/face protection.
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before use.
 P501 Dispose of contents/container in accordance with local/national regulations.

Storage statements -

Disposal statements -

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

See Section 11 Toxicological Information for more detailed health information.
3 COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients:		Hazard Classification of Pure Ingredients		
Chemical Name	% by wt.	EU 1272/2008 CLP/GHS	GHS	
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC# 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC# 220-239-6](3:1) CAS # 55965-84-9 EINECS# Not available Index # Not available	<0.1	Acute Tox. Dermal 3 Acute Tox. Inhal. 3 Acute Tox. Oral 3 Aquatic Acute 1 Aquatic Longterm 1 Skin Corr. 1B Skin Sens. 1 H301; H311; H314; H317; H331; H400; H410	Acute Tox. Dermal 3 Acute Tox. Inhal. 3 Acute Tox. Oral 3 Aquatic Acute 1 Aquatic Longterm 1 Skin Corr. 1B Skin Sens. 1 H301; H311; H314; H317; H331; H400; H410	

See section 8 for available Occupational exposure limits
See Section 15 for additional regulatory information
See Section 16 for hazard class, hazard statements and risk phrase description
4 FIRST AID MEASURES
4.1 Description of first aid measures

Inhalation If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration immediately and obtain medical attention.

Eye Contact If product enters eyes, rinse eyes gently with water as a precaution.

Skin Contact In case of skin contact, rinse with water as a precaution.

Ingestion If product is ingested, rinse mouth with water. If irritation or discomfort occurs, obtain medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

May produce an allergic reaction in some people.

See Section 11 Toxicological Information for more detailed health information.
4.3 Indication of any immediate medical attention and special treatment needed

No specific medical attention or treatment required.

5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

In case of fire use carbon dioxide (CO₂), dry chemical, water spray or foam.
For large fires use extinguishing media suitable for surrounding fire.

5.2 Special hazards arising from the substance or mixture

Special Fire and Explosion Hazards: No special Hazards determined.

Hazardous Combustion Products: No Combustible products posing significant hazards are expected from this product (an aqueous solution).

5.3 Advice for fire fighters

Protective Equipment: Self-contained breathing apparatus is recommended for firefighters in all chemical fire situations.

5.4 Additional information

No further relevant information available.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precaution, protective equipment and emergency procedures

Personal Precautions: This product contains material of human and animal origin and should be handled as though capable of transmitting infectious diseases. Observe general safety guidelines for protection during clean up procedures.

Wear protective gloves, protective clothing and eye/face protection.

6.2 Environmental Precautions

Isolate area and absorb spill with sand, vermiculite or other inert absorbent material. Place absorbed material in container suitable for disposal.

Do not allow the undiluted product to enter sewers/surface or ground water.

Dispose of all waste material in accordance with local and facility guidelines.

6.3 Methods and material for containment and cleaning-up

Spill and Leak Procedures: As a precautionary measure, treat spilled material with a 1:10 bleach/water solution. Absorb liquid and place in container suitable for disposal. Avoid generation of aerosols during clean up. Comply with applicable waste disposal regulations.

6.4 Reference to other sections

Refer sections 8 and 13.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

This product should be handled as though capable of transmitting infectious diseases. Universal precautions should be followed when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Store at 2 to 8°C, as directed on the product label.

To maintain product quality, store according to the instructions in the product labeling.

Store away from strong acids, strong bases, strong oxidizers and incompatible materials (section 10).

7.3 Specific end uses

No further relevant information available.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure Limits

US OSHA	None established
ACGIH	None established
DFG MAK	None established
Ireland	None established
IOELVs	None established
NIOSH	None established
Japan	None established

8.2 Exposure controls

Engineering Controls	Place vial behind a metal shield, away from the user.
Eye Protection	Safety glasses or chemical goggles should be worn to prevent eye contact. Refer U.S. OSHA 29 CFR 1910.133, European Standard EN166 or appropriate government standards.
Skin Protection	Impervious gloves, such as Nitrile or equivalent, should be worn to prevent skin contact. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.
Respiratory Protection	Under normal conditions, the use of this product should not require respiratory protection. If overexposure should occur and ventilation is not adequate to maintain airborne concentrations at acceptable levels, the use of respiratory protection should be evaluated by a qualified professional.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State	Lyophilised	Specific Gravity (water = 1.0)	1.027 @20°C
Color	Light brun	Solubility:	
Transparency	Clear	Water	Miscible
Odor	Odorless	Organic	Not applicable
pH	7.0 – 7,5	Coefficient of Water/Oil Distribution	Not determined
Freezing Point	Not determined	Autoignition Temp.	Not applicable
Boiling Point	Not determined	Decomposition Temperature	Not determined
Flash Point	Not applicable	Percent Volatiles	Not determines
Evaporate Rate	Not determined	Vapor Pressure	Not determined
Flammability (Solid, Gas)	Not applicable	Viscosity	Not determined
Flammable Limits	Not determined	Explosive Properties	Not applicable
Vapor Density	Not determined	Oxidizing Properties	Not determined
Odor threshold	Not applicable		

9.2 Other information

No further relevant information available.

10 STABILITY AND REACTIVITY**10.1 Reactivity**

No further relevant information available.

10.2 Chemical Stability

The product is stable in accordance with recommended storage conditions.

10.3 Possibility of hazardous reactions

No further relevant information available.

10.4 Conditions to Avoid

To maintain product performance keep away from strong acids, strong bases, strong oxidizers. Avoid exposure to heat and direct sunlight.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous Decomposition Products

No decomposition products posing significant hazards would be expected from this product (an aqueous solution).

11 TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Toxicity Data for Hazardous Ingredients**

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC# 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC# 220-239-6](3:1)
CAS # 55965-84-9

Oral LD50 Rat 53mg/kg

Primary Routes of Exposure

Common routes of entry include inhalation, ingestion and eye/skin contact. Specific paths of concern for potentially infectious materials are skin puncture, contact with broken skin, contact with mucous membranes and inhalation of aerosolized material.

Acute Toxicity

Not classified based on available data.

Skin Corrosion/Irritation

Not classified based on available data.

Serious eye damage/eye irritation

Not classified based on available data.

Respiratory/skin sensitization

May cause an allergic skin reaction.

Carcinogenicity

This product does not contain a reportable concentration ($\geq 0.1\%$) of any ingredient listed as carcinogen by ACGIH, IARC, NTP, OSHA or 1272/2008 EC regulation.

Germ cell mutagenicity

Not classified based on available data.

Reproductive Toxicity

Not classified based on available data.

Specific target organ toxicity - single exposure

Not classified based on available data.

Specific target organ toxicity - repeated exposure

Not classified based on available data.

Aspiration hazard

Not classified based on available data.

Other information

This product contains materials of human and animal origin and should be considered as potentially capable of transmitting infectious diseases.

12 ECOLOGICAL INFORMATION**12.1 Ecotoxicity**

Fresh Water Species	No information available
Microtox	No information available
Water Flea	No information available
Fresh Water Algae	No information available

12.2 Persistence and degradability

Not determined for the product.

12.3 Bioaccumulation

Not determined for the product.

12.4 Mobility in soil

Not determined for the product.

12.5 Results of PBT and vPvB assessment

Not determined for the product. PBT: Not applicable, vPvB: Not applicable.

12.6 Other adverse effects

No further relevant information available.

13 DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Product Waste Disposal:**

Chemical residues and remains should be routinely handled as special waste. This must be disposed of in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or an approved waste-disposal company for information.

Dispose of as potentially biohazardous waste and in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or and approved waste-disposal company for information.

Package disposal:

Dispose of waste product, unused product and contaminated packaging in compliance with federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information.

13.2 Additional Information

Suggested European waste catalogue 18 01 07 - chemicals other than those mentioned in 18 01 06. Dispose in accordance with national, state and local waste regulations.

14 TRANSPORT INFORMATION

Transportation of this product is not regulated under ICAO, IATA DGR, IMDG, US DOT, European ADR and RID or Canadian TDG.

14.1 UN/ID Number

Not regulated for transportation

14.2 Shipping Name

Not regulated for transportation

14.3 Hazard Class

Not regulated for transportation

14.4 Packing Group

Not regulated for transportation

14.5 Environmental Hazards

Not regulated for transportation

14.6 Special Precautions for user

None

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

15 REGULATORY INFORMATION**15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture****Us Federal and State Regulations****SARA 313**

No ingredients listed

CERCLA (The Comprehensive Environmental Response, Compensation and Liability Act) 40 CFR 302.4

No ingredients listed

California Proposition 65**WARNING:** This product can expose you to chemical which is known to the State of California to cause cancer and/or harm. For more information, go to www.P65Warnings.ca.gov

Chemical which is known to the State of California to cause cancer

No ingredients listed

Chemical which is known to the State of California to cause development toxicity

No ingredients listed

Chemical which is known to the State of California to cause male reproductive toxicity

No ingredients listed

Chemical which is known to the State of California to cause female reproductive toxicity

No ingredients listed

Massachusetts MSL

No ingredients listed

New Jersey Dept. of Health RTK List

No ingredients listed

Pennsylvania RTK

No ingredients listed

EU regulations

This SDS complies with EC Regulations 1907/2006 (REACH) and amendments.

Water Hazard Class (Germany)

WGK 1, low water endangering

REACH 1907/2006 EC - Annex XIV No ingredients listed.

- list of substances subject to authorization

Canada

This product is exempt from WHMIS label and SDS requirements.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out...

Some hazardous ingredients listed in Section 15 are below the cutoff of 0.1% for carcinogen, mutagen and reproductive toxin and 1% for other health hazards required for reporting in Section 3.

16 OTHER INFORMATION

DIAsource ImmunoAssays Safety Rating	Flammability: 0 Health: 2 Reactivity with water: 1 Contact: 2	<u>Code</u> 0 = None 1 = Slight 2 = Caution 3 = Severe
<p>Hazard Class, hazard statements and risk phrase description from section 3</p> <p>Aquatic Acute 1 - Aquatic Hazard Acute, Category 1 Acute Tox. Dermal 3 - Acute Toxicity Dermal, Category 3 Acute Tox. Inhal. 3 - Acute Toxicity Inhalation, Category 3 Acute Tox. Oral 3 - Acute Toxicity Oral, Category 3 Aquatic Longterm 1 - Aquatic Hazard Long term, Category 1 Skin Corr. 1B - Skin Corrosion Category 1B Skin Sens. 1 - Skin Sensitization Category 1 H301 - Toxic if swallowed. H311 - Toxic in contact with skin. H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H331 - Toxic if inhaled. H400 - Very toxic to aquatic life. H410 - Very toxic to aquatic life with long lasting effects.</p> <p>Abbreviations and Acronyms</p> <p>ACGIH - American Conference of Governmental Industrial Hygienists ADR and RID - European Agreement Concerning The International Carriage Of Dangerous Goods By Road and Rail CERCLA - The Comprehensive Environmental Response, Compensation, and Liability Act CLP - Classification, Labeling and Packaging DFGMAK - Republic Germany's maximum exposure limit GHS - Globally Harmonized System HCS - Hazard Communication Standard IARC - International Agency for Research on Cancer IATA DGR - International Air Transport Association Dangerous Goods Regulation ICAO - International Civil Aviation Organization IMDG - International Maritime Dangerous Goods IOELVs - European Unions' Indicative Occupational Exposure Limit Values NIOSH - National Institute for Occupational Safety and Health NTP - National Toxicology Program OSHA - Occupational Safety and Health Administration PBT - Persistent bioaccumulative and toxic substances SARA - Superfund Amendments and Reauthorization Act TDG - Canadian Transportation Of Dangerous Goods Regulations.</p>		

UN GHS - United Nations Globally Harmonized System US DOT - United States Department of Transportation WHMIS - Workplace Hazardous Material Information System vPvB - Very persistent and very bioaccumulative substances LD50 - Lethal Dose, 50%

For further information, please contact your local DIAsource ImmunoAssays representative.

Notification:

English is acceptable for our MSDS as the following conditions are met:

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STOP SOLUTION

1 INFORMATION OF THE SUBSTANCE/PREPARATION AND COMPANY

1.1 Product identifier

Product Name: Stop Solution
 Catalog #: Component the kits mentioned on the first page

1.2 Intended Use

For In Vitro Diagnostic Use. See product literature for details.

1.3 Company

DIAsource ImmunoAssays S.A.
 Rue du Bosquet, 2
 B-1348 Louvain-la-Neuve
 Belgium
 Tel. Nr. +32 (0)10/84.99.11
 E-mail: products.support@diasource.be

1.4 Emergency telephone

DIAsource (only office hours): +32 (0)10/84.99.23
 Centre Anti-Poisons (BE) 070 245 245
 Please refer to your local Anti-Poison Center!

2 HAZARDS IDENTIFICATION

2.1 Classification according to the regulation (EC) n°1272/2008 (CLP) and its amendments

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

2.2 Label elements according to the regulation (EC) n°1272/2008 (CLP) and its amendments

Danger symbol



Signal word Warning
Product Identifier Hydrochloric Acid, 3.08% v/v

Danger H314 Causes severe skin burns and eye damage.

Supplemental Hazard Information -

Prevention statements P280 Wear protective gloves, protective clothing, eye protection, face protection.

Response statements P301+330+331 If swallowed: rinse mouth. Do NOT induce vomiting.
 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P309+310 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

Storage statements -

Disposal statements -

2.3 Other hazards
PBT & vPvB: PBT: Not applicable
vPvB: Not applicable

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	(% w/w)	Classification	Specific concentration limits
Hydrochloric acid...%* CAS: 7647-01-0 EC: 231-595-7 Index number: 017-002-01-X	< 5%	Skin Corr. 1B, H314	Skin Corr. 1B; H314: 10 - < 25% Eye Irrit. 2; H319: >= 10%

***Note B:** Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ...%'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

4 FIRST AID MEASURES
4.1 Description of first aid measures

General information In general, in case of doubt or if symptoms persist, always call a doctor. Never give anything by mouth to an unconscious person.

Following inhalation If person experiences nausea, headache or dizziness, person should stop work immediately and move to fresh air until these symptoms disappear. If breathing is difficult, administer oxygen by a qualified person, keep the person warm and at rest. Call a physician. In the event that an individual inhales enough vapour to lose consciousness, person should be moved to fresh air at once and a physician should be called immediately. If breathing has stopped, artificial respiration should be given immediately. In all case, ensure adequate ventilation and provide respiratory protection before the person returns to work.

Following skin contact IF ON SKIN (or hair): Remove contaminated clothing. Rinse skin with water / with vegetable oil. Take a shower.
If irritation or rash occurs: Get medical advice.

Following eye contact IF IN EYES: Rinse cautiously with plenty water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Following ingestion IF SWALLOWED: Rinse thoroughly mouth with water. Immediately call a POISON CENTER/doctor.
Do NOT induce vomiting.

For emergency responders No data available.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms No data available.

Effects No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

5 FIRE FIGHTING MEASURES**5.1 Extinguishing media**

Appropriated: Use water spray or other suitable agent on fires adjacent to non-leaking tanks or intact containers of acid. If only a small amount of combustibles is present, smother fire with dry chemical.

Small fire: Dry powder or CO₂. Move containers from fire area, if it can be done without risk.

Large fire: Flood fire area with large quantities of water, while knocking down vapours with water fog. Cool containers with flooding quantities of water until well after fire is out. Do not get water inside containers. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

Non-appropriated: For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Hydrogen chloride gas

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for fire fighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system

6 ACCIDENTAL RELEASE MEASURES**6.1 Personal precaution, protective equipment and emergency procedures**

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental Precautions

Do not let product enter drains.

6.3 Methods and material for containment and cleaning-up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®).

Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

7 HANDLING AND STORAGE**7.1 Precautions for safe handling**

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities**Storage conditions**

No metal containers.

Tightly closed.

Corrodes metal Metal containers must be lined.

Storage class

Storage class (TRGS 510): 8B: Non-combustible, corrosive hazardous materials.

7.3 Specific Use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls



Appropriate engineering controls

Good general ventilation should be provided to keep vapour and mist concentrations below the exposure limits.

Eye/face protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses.

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario

Body Protection: protective clothing.

Respiratory protection: required when vapours/aerosols are generated.

Recommended Filter type: Filter type ABEK.

Environmental exposure controls Do not let product enter drains.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Color	Colorless
Odour	Not available
Odor threshold	Not available
pH	<1
Melting / Freezing point	Not available
Boiling point	Not available
Flash point	Not applicable
Evaporation rate	Not available
Flammability	Not available
Lower limit of flammability or explosive	Not applicable
Upper limit of flammability or explosive	Not applicable
Vapour pressure	23hPa @ 20°C
Vapour density	Not available
Relative density	Not available
Water solubility	Completely miscible @ 20°C soluble
Solubility in other Solvents	Not available
Log Kow	Not available
Auto-inflammability temperature	Not applicable
Decomposition temperature	Not available
Viscosity	Kinematic: Not available Dynamic: Not available
Explosive properties	Not explosive
Oxidizing properties	None
Refractive index	Not available

9.2 Other information

No data available.

10 STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical Stability

Stable.

10.3 Possibility of hazardous reactions

Violent reactions possible with:
The generally known reaction partners of water.

10.4 Conditions to Avoid

No information available.

10.5 Incompatible materials

Reactions with: metals.

10.6 Hazardous Decomposition Products

In the event of fire: see section 5.

11 TOXICOLOGICAL INFORMATION

Acute toxicity	Oral: No data available. Inhalation: No data available. Dermal: No data available.
Skin irritation	Slight irritation.
Skin corrosion	Slight irritation.
Eye damage	Slight irritation.
Respiratory sensibilisation	Not available.
Germ cell mutagenicity	No data available.
Carcinogenicity	No data available.
Toxic for reproduction	No data available.
Unique specific toxicity	The substance or mixture is not classified as specific target organ toxicant, single exposure.
Repeated specific toxicity	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration hazard	No data available.
Other information	Ingestion of large amounts may cause: Local irritation Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately. Components hydrochloric acid <u>Acute toxicity</u> Oral: No data available Inhalation: Cough Difficulty in breathing Inhalation: Absorption Symptoms: Mucosal irritations, Cough, Shortness of breath, Inhalation may lead to the formation of oedemas in the respiratory tract., Possible damages:., damage of respiratory tract, tissue damage Dermal: No data available <u>Skin corrosion/irritation</u> Skin - reconstructed human epidermis (RhE) Result: Corrosive (OECD Test Guideline 431) <u>Serious eye damage/eye irritation</u> Eyes - Bovine cornea Result: Corrosive (OECD Test Guideline 437) <u>Respiratory or skin sensitization</u> Maximization Test - Guinea pig Result: negative (OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster ovary cells

Result: Conflicting results have been seen in different studies.

Carcinogenicity

Carcinogenicity - Did not show carcinogenic effects in animal experiments. (IUCLID)

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

May cause respiratory irritation.

The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath, Inhalation may lead to the formation of oedemas in the respiratory tract., Possibledamages:, damage of respiratory tract, tissue damage

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

No aspiration toxicity classification

12 ECOLOGICAL INFORMATION**12.1 Ecotoxicity**Mixture: No data available.**12.2 Persistence and degradability**

No data available.

12.3 Bioaccumulation

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

May be harmful to aquatic organisms due to the shift of the pH.

Components: hydrochloric acid

No data available

Toxicity to fish LC50 - *Gambusia affinis* (Mosquito fish) - 282 mg/l - 96 h

Remarks: (IUCLID).

13 DISPOSAL CONSIDERATIONS
13.1 Waste treatment methods

Do not use the empty containers.

Waste disposal according to the Directives EC 75/442/EEC and 91/689/EEC in their latest versions by incineration or dispose of waste material.

13.2 Waste code numbers/Waste identification

No data available.

14 TRANSPORT INFORMATION

	ADR	ADN/ADNR	IMDG	IATA
14.1. UN number	Not applicable			
14.2. UN proper shipping name	Not applicable			
14.3. Transport hazard class(es)	Not applicable		Not applicable	Not applicable
14.4. Packing group	Not applicable		Not applicable	Not applicable
14.5. Environmental hazards	Not available	Not available	Not available	Not available
Hazard label	Not applicable			
Classification code	Not applicable			
14.6. Special precautions for user	Not available			
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not available			
Other information	Not available	Not available	Not available	Not available

15 REGULATORY INFORMATION
15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture

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

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16 OTHER INFORMATION

DIAsource ImmunoAssays Safety Rating	Flammability: 0 Health: 2 Reactivity with water: 1 Contact: 2	Code 0 = None 1 = Slight 2 = Caution
---	--	--

		3 = Severe
Hazard Class, hazard statements and risk phrase description from section 3 Skin Corr. 1B - Skin Corrosion Category 1B Eye Irritation Category 2 H314 - Causes severe skin burns and eye damage.		
Abbreviations and Acronyms ACGIH - American Conference of Governmental Industrial Hygienists ADR and RID - European Agreement Concerning The International Carriage Of Dangerous Goods By Road and Rail CERCLA - The Comprehensive Environmental Response, Compensation, and Liability Act CLP - Classification, Labeling and Packaging DFGMAK - Republic Germany's maximum exposure limit GHS - Globally Harmonized System HCS - Hazard Communication Standard IARC - International Agency for Research on Cancer IATA DGR - International Air Transport Association Dangerous Goods Regulation ICAO - International Civil Aviation Organization IMDG - International Maritime Dangerous Goods IOELVs - European Unions' Indicative Occupational Exposure Limit Values NIOSH - National Institute for Occupational Safety and Health NTP - National Toxicology Program OSHA - Occupational Safety and Health Administration PBT - Persistent bioaccumulative and toxic substances SARA - Superfund Amendments and Reauthorization Act TDG - Canadian Transportation Of Dangerous Goods Regulations. UN GHS - United Nations Globally Harmonized System US DOT - United States Department of Transportation WHMIS - Workplace Hazardous Material Information System vPvB - Very persistent and very bioaccumulative substances LD50 - Lethal Dose, 50%		

For further information, please contact your local DIASource ImmunoAssays representative.

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MSDS established : 2023-09-12

Revision number : 5