



The Safety Data Sheet is usable for:
KAPL10-1500
2-CAT ELISA

Refer to the instructions for the full list of product components

Single components with dangerous ingredients  :

REF	Name	Symbol	Version
BA E-0040	Enzyme Conjugate	 CONJUGATE	1.0
BA E-0080	Stop Solution	- STOP-SOLN	1.0
BA E-6601	Standard A	- STANDARD A	1.0
BA E-6602	Standard B	- STANDARD B	1.0
BA E-6603	Standard C	- STANDARD C	1.0
BA E-6604	Standard D	- STANDARD D	1.0
BA E-6605	Standard E	- STANDARD E	1.0
BA E-6606	Standard F	- STANDARD F	1.0
BA E-6651	Control 1	- CONTROL 1	1.0
BA E-6652	Control 2	- CONTROL 2	1.0
BA R-6613	Assay Buffer	 ASSAY-BUFF	1.0

Read the MSDS for the component on the following pages.

Not listed single components contain no hazardous substances in concentrations to be declared, a labelling is not required.

1 Identification of substance/mixture and company

1.1 Product identifier

Product form : Mixture
 Product name : Enzyme Conjugate **CONJUGATE**
 Catalog # : BA E-0040 **REF**

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

1.2.1 Relevant identified uses

Use of the substance/mixture : Laboratory reagent, Immunoassays
 Use by professionals

1.2.2 Uses advised against

No additional information available

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer

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 number

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

Classification according to Regulation (EC) N° 1272/2008 (CLP)

Skin sensitisation, Category 1 H317 May cause an allergic skin reaction.

(Full test of H-statements: see section16)

Adverse physicochemical, human health and environmental effects

May cause an allergic skin reaction.

2.2 Label element

Labelling according to Regulation (EC) N° 1272/2008 (CLP)

Hazard symbol (CLP) :



Signal word (CLP) : Warning

Hazard statement (CLP) : H317 May cause an allergic skin reaction.

Precaution statement (CLP) : P261 Avoid breathing mist/vapours/spray.
 P280 Wear protective gloves.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P501 Dispose of contents/container to an authorised waste collection point.

Reduced labelling (contents of the package ≤ 125 ml) according to Regulation (EC) No. 1272/2008 [CLP]

Hazard symbol (CLP) :



Signal word (CLP) : Warning

Hazard statement (CLP) : H317 May cause an allergic skin reaction.

Precaution statement (CLP) : P261 Avoid breathing mist/vapours/spray.
 P280 Wear protective gloves.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P501 Dispose of contents/container to an authorised waste collection point.

2.3 Other hazards

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

3 Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-methyl-2H-isothiazol-3-one	(CAS-No) 2682-20-4 (EC-No) 220-239-6 (EC Index-No) 613-326-00-9 (REACH No) 01-2120764690-50-xxxx	0.01	Acute Tox. 2 (Inhalation), H330 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Oral), H301 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410

Name	Product identifier	Specific concentration limits according to Regulation (EC) No. 1272/2008 [CLP]
2-methyl-2H-isothiazol-3-one	(CAS-No) 2682-20-4 (EC-No) 220-239-6 (EC Index-No) 613-326-00-9 (REACH No) 01-2120764690-50-xxxx	(C ≥ 0.0015) Skin Sens. 1A, H317

Full text of H-statements: see section 16

4 First aid measures

4.1 Description of first aid measures

- First-aid measures general : Get medical advice/attention if you feel unwell. If possible show him this sheet. Failing this, show him the packaging or label. Never give anything by mouth to an unconscious person. Place the affected person in the recovery position.
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- First-aid measures after skin contact : Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Drink plenty of water as a precaution.

4.2 Most important symptom and effects, both acute and delayed

- Symptoms/effects : May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5 Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Adapt extinguishing agents to the environment. Carbon dioxide. Foam. Dry extinguishing powder. Water spray.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2 Special hazards arising from the substance or mixture

- Hazardous decomposition products in case of fire : Toxic gases may be formed. Carbon dioxide. Carbon monoxide. Sulphur oxides. Nitrogen oxides.

5.3 Advice for firefighters

- Firefighting instructions : Prevent firefighting water from entering the environment. Use water spray or fog for cooling exposed containers.
- Protection during firefighting : Use a self-contained breathing apparatus and also a protective suit.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- General measures : Stop leak if safe to do so. Ensure adequate air ventilation. Avoid contact with skin and eyes. Do not breathe vapours/spray.

6.1.1 For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2 For emergency responders

Protective equipment

: Use personal protective equipment as required. In case of inadequate ventilation wear respiratory protection.

6.2 Environmental precautions

Prevent entry to sewers and public waters.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up

: Absorb spillage to prevent material damage. Wipe up with absorbent material (for example cloth). Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Dispose of in accordance with relevant local regulations.

6.4 Reference to other sections

Exposure controls and personal protection, see section 8. Concerning disposal elimination after cleaning, see section 13.

7 Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapour/aerosol.

Hygiene measures

: Handle in accordance with good industrial hygiene and safety procedures. When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

: Store in original container. Keep container tightly closed. Store in a cool, well-ventilated place. Protect from direct sunlight.

Prohibitions on mixed storage

: Keep away from food, drink and animal feeding stuffs.

7.3 Specific end use(s)

Laboratory reagent, Immunoassays

8 Exposure controls/personnel protection

8.1 Control parameters

2-methyl-2H-isothiazol-3-one (CAS N° 2682-20-4)	
DNEL/DMEL (Workers)	
Long-term - local effects, inhalation	0.021 mg/m³
Acute - local effects, inhalation	0.046 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	0.027 mg/kg bodyweight/day
Acute - systemic effects, oral	0.053 mg/kg bodyweight/day
Long-term - local effects, inhalation	0.021 mg/m³
Acute - local effects, inhalation	0.043 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	3.39 µg/l
PNEC aqua (marine water)	3.39 µg/l
PNEC aqua (intermittent, freshwater)	3.39 µg/l
PNEC aqua (intermittent, marine water)	3.39 µg/l
PNEC (Soil)	
PNEC soil	0.047 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	0.23 mg/l

8.2 Exposure controls

Appropriate engineering controls

: Provide local exhaust or general room ventilation to minimize vapour concentrations.

Hand protection

: Wear suitable gloves (EN 374). Nitrile rubber, 0.35 mm. Butyl rubber, 0.5 mm. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection

: Wear safety glasses (EN 166).

Skin and body protection

: Wear suitable protective clothing.

Respiratory protection

: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Breathing apparatus with filter type P2.

Environmental exposure controls

: Avoid release to the environment.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: No data available
Odor	: No data available
Melting point/freezing point	: No data available
Boiling point or initial boiling point and boiling range	: No data available
Flammability	: No data available
Lower and upper explosion limit	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
pH	: No data available
Kinematic viscosity	: No data available
Solubility	: Completely soluble in Water
Partition coefficient n-octanol/water (log value)	: Not applicable
Vapour pressure	: No data available
Density and/or relative density	: No data available
Relative vapour density	: No data available
Particle size	: Not applicable

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties	: No explosive properties
Oxidising properties	: No oxidising properties

9.2.2 Other safety characteristics

No additional information available

10 Stability and reactivity

10.1 Reactivity

No dangerous reactions known under normal conditions of use.

10.2 Chemical stability

Stable under use and storage conditions as recommended in section 7.

10.3 Possibility of hazardous reactions

None under normal use.

10.4 Conditions to avoid

High temperatures.

10.5 Incompatible materials

Strong oxidizing agents. Strong bases. Strong acids.

10.6 Hazardous decomposition products

No hazardous decomposition products known at room temperature. In case of fire: Toxic gases may be formed. Carbon dioxide. Carbon monoxide.

11 Toxicological information

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

Acute toxicity	: Not classified
Based on available data, the classification criteria are not met	

2-methyl-2H-isothiazol-3-one (CAS N° 2682-20-4)	
LD50 oral rat	120 mg/kg
LD50 dermal rat	242 mg/kg
LC50 inhalation rat	0.1 mg/l/4h

Acute toxicity	: Not classified
Based on available data, the classification criteria are not met	
Skin corrosion/irritation	: Not classified
Based on available data, the classification criteria are not met	
Serious eye damage/irritation	: Not classified
Based on available data, the classification criteria are not met	
Respiratory or skin sensitization	: May cause an allergic skin reaction

Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure)	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met

11.2 Information on other hazards

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

12 Ecological information

12.1 Toxicity

Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

2-methyl-2H-isothiazol-3-one (CAS N° 2682-20-4)	
LC50 fish	4.77 mg/l 96 h, Oncorhynchus mykiss
EC50 daphnia	0.934 mg/l 48 h, Daphnia magna
EC50 algae	0.22 mg/l 120 h, Raphidocelis subcapitata
EC50 micro-organisms	41 mg/l 3 h, activated sludge
NOEC fish	4.93 mg/l 98 d, Oncorhynchus mykiss
NOEC daphnia	0.044 mg/l 21 d, Daphnia magna
NOEC algae	0.05 mg/l 120 h, Raphidocelis subcapitata

12.2 Persistence and degradability

2-methyl-2H-isothiazol-3-one (CAS N° 2682-20-4)	
Persistence and degradability	Not readily biodegradable
Biodegradation	50 % 29 d (OECD 301 B)

12.3 Bioaccumulative potential

2-methyl-2H-isothiazol-3-one (CAS N° 2682-20-4)	
Partition coefficient n-octanol/water (Log Pow)	-0.486 (20 °C)

12.4 Mobility in soil

No additional information available.

12.5 Results of PBT and vPvB assessment

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6 Endocrine disrupting properties

No additional information available.

12.7 Other adverse effects

No additional information available.

13 Disposal considerations

13.1 Waste treatment methods

Regional legislation (waste)	: Dispose in a safe manner in accordance with local/national regulations.
Waste treatment methods	: Do not empty into drains. Dispose of this material and its container in a safe way.
Waste code	: The waste code number according to the Ordinance on the European Waste Catalogue depends on the waste producer and can therefore vary for any given product. The waste code number is therefore to be gleaned separately from each waste producer.

14 Transport information

In accordance with ADR / IMDG / IATA

14.1 UN number or ID number

UN-No. (ADR) : Not applicable
 UN-No. (IMDG) : Not applicable
 UN-No. (IATA) : Not applicable

14.2 UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
 Proper Shipping Name (IMDG) : Not applicable
 Proper Shipping Name (IATA) : Not applicable

14.3 Transport hazard class(es)

Transport hazard class(es) (ADR) : Not applicable
 Transport hazard class(es) (IMDG) : Not applicable
 Transport hazard class(es) (IATA) : Not applicable

14.4 Packing group

Packing group (ADR) : Not applicable
 Packing group (IMDG) : Not applicable
 Packing group (IATA) : Not applicable

14.5 Environmental hazards

Dangerous for the environment : No
 Marine pollutant : No
 Other information : No supplementary information available

14.6 Special precautions for user

Overland transport : Not applicable
 Transport by sea : Not applicable
 Air transport : Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

15 Regulatory information

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

15.1.1 EU-Regulations

Contains no substance on the REACH candidate list.
 Contains no REACH Annex XIV substances.

15.1.2 National regulations

Comply with applicable local regulations.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

16 Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Change compared to the previous version : -

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	The effective concentration of substance that causes 50% of the maximum response (Median Effective Concentration)
IATA	International Air Transport Association
IMDG	"International Maritime Dangerous Goods Code" for the transport of dangerous goods by sea
LC50	Lethal Concentration to 50 % of a test population (Median Lethal Concentration)
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
LOAEL	Lowest Observed Adverse Effect Level
NOAEC/L	No Observed Adverse Effect Concentration/Level
NOEC/L	No Observed Effect Concentration/Level

OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, Bioaccumulative and Toxic substance
PNEC	Predicted No-Effect Concentration
REACH	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
SDS	Safety Data Sheet
STP	Sewage Treatment Plant
UFI	Unique Formula Identifier
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-phrases:

Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Eye Dam. 1	Serious eye damage/ irritation, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, Category 1A
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.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

1 Identification of substance/mixture and company

1.1 Product identifier

Product form : Mixture
Product name : Stop Solution **STOP-SOLN**
Catalog # : BA E-0080 **REF**

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

1.2.1 Relevant identified uses

Use of the substance/mixture : Laboratory reagent, Immunoassays
Use by professionals

1.2.2 Uses advised against

No additional information available

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer

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 number

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

Classification according to Regulation (EC) N° 1272/2008 (CLP)

Corrosive to metal, category 1 H290 May be corrosive to metal.

(Full test of H-statements: see section16)

Adverse physicochemical, human health and environmental effects

Causes severe skin burns and eye damage

2.2 Label element

Labelling according to Regulation (EC) N° 1272/2008 (CLP)

Hazard symbol (CLP) :



Signal word (CLP) : Warning

Hazard statement (CLP) : H290 May be corrosive to metal

Precaution statement (CLP) : P234 Keep only in original packaging
P390 Absorb spillage to prevent material damage
P406 Store in a corrosion resistant container with a resistant inner liner

Reduced labelling (contents of the package ≤ 125 ml) according to Regulation (EC) No. 1272/2008 [CLP]

Hazard symbol (CLP) : -

Signal word (CLP) : -

Hazard statement (CLP) : -

Precaution statement (CLP) : -

2.3 Other hazards

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

3 Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sulphuric acid	(CAS-No.) 7664-93-9 (EC-No.) 231-639-5 (EC Index-No.) 016-020-00-8	< 5	Met. Corr. 1, H290 Skin Corr. 1A, H314

Name	Product identifier	Specific concentration limits according to Regulation (EC) No. 1272/2008 [CLP]
Sulphuric acid	(CAS-No.) 7664-93-9 (EC-No.) 231-639-5 (EC Index-No.) 016-020-00-8	(5 ≤ C < 15) Eye Irrit. 2, H319 (5 ≤ C < 15) Skin Irrit. 2, H315 (C ≥ 15) Skin Corr. 1A, H314

Full text of H-statements: see section 16

4 First aid measures

4.1 Description of first aid measures

- First-aid measures general : Get medical advice/attention if you feel unwell. If possible show him this sheet. Failing this, show him the packaging or label. Never give anything by mouth to an unconscious person. Place the affected person in the recovery position.
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- First-aid measures after skin contact : Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Drink plenty of water as a precaution.

4.2 Most important symptom and effects, both acute and delayed

- Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5 Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Adapt extinguishing agents to the environment. Carbon dioxide. Foam. Dry extinguishing powder. Water spray.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2 Special hazards arising from the substance or mixture

- Hazardous decomposition products in case of fire : Toxic gases may be formed. Carbon dioxide. Carbon monoxide.

5.3 Advice for firefighters

- Firefighting instructions : Prevent firefighting water from entering the environment. Use water spray or fog for cooling exposed containers.
- Protection during firefighting : Use a self-contained breathing apparatus and also a protective suit.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- General measures : Ensure adequate air ventilation. Avoid contact with skin and eyes. Do not breathe vapours/spray.

6.1.1 For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2 For emergency responders

- Protective equipment : Use personal protective equipment as required. In case of inadequate ventilation wear respiratory protection.

6.2 Environmental precautions

Prevent entry to sewers and public waters.

6.3 Methods and material for containment and cleaning up

- Methods for cleaning up : Absorb spillage to prevent material damage. Wipe up with absorbent material (for example cloth). Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Dispose of in accordance with relevant local regulations.

6.4 Reference to other sections

Exposure controls and personal protection, see section 8. Concerning disposal elimination after cleaning, see section 13.

7 Handling and storage

7.1 Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapour/aerosol.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2 Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in corrosive resistant container with a resistant inner liner. Store in original container. Keep container tightly closed. Store in a cool, well-ventilated place. Protect from direct sunlight. To maintain product quality, store according to the instructions in the product labeling.
- Prohibitions on mixed storage : Keep away from food, drink and animal feeding stuffs.
- Incompatible materials : Metals.

7.3 Specific end use(s)

Laboratory reagent, Immunoassays

8 Exposure controls/personnel protection

8.1 Control parameters

Sulphuric acid (7664-93-9)		
EU	Local name	Sulphuric acid (mist)
EU	IOEL TWA	0.05 mg/m ³
Austria	Local name	Schwefelsäure
Austria	MAK (OEL TWA) (mg/m ³)	0.1 E mg/m ³
Austria	MAK (OEL STEL) (mg/m ³)	0.2 E mg/m ³
Belgium	Local name	Acide sulfurique (brume) # Zwavelzuur (nevel)
Belgium	OEL TWA (mg/m ³)	0.2 mg/m ³
Belgium	Remark	C
Germany	TRGS 900 Local name	Schwefelsäure
Germany	TRGS 900 Occupational Exposure Limit Value (mg/m ³)	0.1 E mg/m ³
Germany	TRGS 900 Remark	1(I), DFG, EU, Y
Luxembourg	Local name	Acide sulfurique (brume)
Luxembourg	OEL STEL (mg/m ³)	0.05 mg/m ³
Switzerland	Local name	Schwefelsäure
Switzerland	MAK (mg/m ³)	0.1 e mg/m ³
Switzerland	KZGW (mg/m ³)	0.2 e mg/m ³
Switzerland	Notation	C1# , SSc A

8.2 Exposure controls

- Appropriate engineering controls : Provide local exhaust or general room ventilation to minimize vapour concentrations.
- Hand protection : Wear suitable gloves (EN 374). Nitrile rubber, 0.35 mm. Butyl rubber, 0.5 mm. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection : Wear safety glasses (EN 166).
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Breathing apparatus with filter type P2.
- Environmental exposure controls : Avoid release to the environment.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Physical state : Liquid
- Colour : Colorless
- Odor : Odorless
- Melting point/freezing point : No data available
- Boiling point or initial boiling point and boiling range : No data available
- Flammability : No data available
- Lower and upper explosion limit : No data available

Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
pH	: < 1.0
Kinematic viscosity	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (log value)	: Not applicable
Vapour pressure	: No data available
Density and/or relative density	: No data available
Relative vapour density	: No data available
Particle size	: Not applicable

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties	: No explosive properties
Oxidising properties	: No oxidising properties

9.2.2 Other safety characteristics

No additional information available

10 Stability and reactivity

10.1 Reactivity

No dangerous reactions known under normal conditions of use.

10.2 Chemical stability

Stable under use and storage conditions as recommended in section 7.

10.3 Possibility of hazardous reactions

May be corrosive to metals.

10.4 Conditions to avoid

High temperatures.

10.5 Incompatible materials

Strong oxidizing agents. Strong bases. Strong acids. Metals.

10.6 Hazardous decomposition products

No hazardous decomposition products known at room temperature. In case of fire: Toxic gases may be formed. Carbon dioxide. Carbon monoxide.

11 Toxicological information

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

Acute toxicity	: Not classified
Based on available data, the classification criteria are not met	

Sulphuric acid (7664-93-9)	
LD50 oral rat	2140 mg/kg
LC50 inhalation rat	375 mg/m ³

Skin corrosion/irritation	: Not classified
Based on available data, the classification criteria are not met	
Serious eye damage/irritation	: Not classified
Based on available data, the classification criteria are not met	
Respiratory or skin sensitization	: Not classified
Based on available data, the classification criteria are not met	
Germ cell mutagenicity	: Not classified
Based on available data, the classification criteria are not met	
Carcinogenicity	: Not classified
Based on available data, the classification criteria are not met	
Reproductive toxicity	: Not classified
Based on available data, the classification criteria are not met	
Specific target organ toxicity (single exposure)	: Not classified
Based on available data, the classification criteria are not met	
Specific target organ toxicity (repeated exposure)	: Not classified
Based on available data, the classification criteria are not met	
Aspiration hazard	: Not classified

Based on available data, the classification criteria are not met

11.2 Information on other hazards

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

12 Ecological information

12.1 Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

Sulphuric acid (7664-93-9)	
LC50 fish	> 16 - < 28 mg/l 96 h, <i>Lepomis macrochirus</i>
EC50 crustacea	> 100 mg/l 48 h, <i>Daphnia magna</i>
EC50 algae	> 100 mg/l 72 h, <i>Desmodesmus subspicatus</i>
NOEC chronic fish	0.31 mg/l 213 d, <i>Salvelinus fontinalis</i>
NOEC chronic crustacea	0.15 mg/l, <i>Tanytarsus dissimilis</i>

12.2 Persistence and degradability

Not required for inorganic substances.

12.3 Bioaccumulative potential

Not required for inorganic substances.

12.4 Mobility in soil

No additional information available.

12.5 Results of PBT and vPvB assessment

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6 Endocrine disrupting properties

No additional information available.

12.7 Other adverse effects

No additional information available.

13 Disposal considerations

13.1 Waste treatment methods

- Regional legislation (waste) : Dispose in a safe manner in accordance with local/national regulations.
- Waste treatment methods : Do not empty into drains. Dispose of this material and its container in a safe way.
- Waste code : The waste code number according to the Ordinance on the European Waste Catalogue depends on the waste producer and can therefore vary for any given product. The waste code number is therefore to be gleaned separately from each waste producer.

14 Transport information

In accordance with ADR / IMDG / IATA

14.1 UN number or ID number

UN-No. (ADR) : Not applicable

UN-No. (IMDG) : Not applicable

UN-No. (IATA) : Not applicable

14.2 UN proper shipping name

Proper Shipping Name (ADR) : Not applicable

Proper Shipping Name (IMDG) : Not applicable

Proper Shipping Name (IATA) : Not applicable

14.3 Transport hazard class(es)

Transport hazard class(es) (ADR) : Not applicable

Transport hazard class(es) (IMDG) : Not applicable

Transport hazard class(es) (IATA) : Not applicable

14.4 Packing group

Packing group (ADR) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

14.5 Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

14.6 Special precautions for user

Overland transport : Not applicable

Transport by sea : Not applicable

Air transport : Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

15 Regulatory information

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

15.1.1 EU-Regulations

Contains no substance on the REACH candidate list.

Contains no REACH Annex XIV substances.

15.1.2 National regulations

Comply with applicable local regulations.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

16 Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Change compared to the previous version : -

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	The effective concentration of substance that causes 50% of the maximum response (Median Effective Concentration)
IATA	International Air Transport Association
IMDG	"International Maritime Dangerous Goods Code" for the transport of dangerous goods by sea
LC50	Lethal Concentration to 50 % of a test population (Median Lethal Concentration)
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
LOAEL	Lowest Observed Adverse Effect Level
NOAEC/L	No Observed Adverse Effect Concentration/Level
NOEC/L	No Observed Effect Concentration/Level
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, Bioaccumulative and Toxic substance
PNEC	Predicted No-Effect Concentration
REACH	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
SDS	Safety Data Sheet
STP	Sewage Treatment Plant
UFI	Unique Formula Identifier
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-phrases:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

1 Identification of substance/mixture and company

1.1 Product identifier

Product form	: Mixture	
Product name	: Standard A	STANDARD A
	: Standard B	STANDARD B
	: Standard C	STANDARD C
	: Standard D	STANDARD D
	: Standard E	STANDARD E
	: Standard F	STANDARD F
Catalog #	: BA E-6601	REF
	: BA E-6602	REF
	: BA E-6603	REF
	: BA E-6604	REF
	: BA E-6605	REF
	: BA E-6606	REF

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

1.2.1 Relevant identified uses

Use of the substance/mixture : Laboratory reagent, Immunoassays
Use by professionals

1.2.2 Uses advised against

No additional information available

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer

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 number

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

Classification according to Regulation (EC) N° 1272/2008 (CLP)
Corrosive to metal, category 1 H290 May be corrosive to metal.
(Full test of H-statements: see section16)

Adverse physicochemical, human health and environmental effects
May be corrosive to metals. Causes severe skin burns and eye damage.

2.2 Label element

Labelling according to Regulation (EC) N° 1272/2008 (CLP)

Hazard symbol (CLP) :



Signal word (CLP) : Warning
Hazard statement (CLP) : H290 May be corrosive to metal
Precaution statement (CLP) : P234 Keep only in original packaging
P390 Absorb spillage to prevent material damage
P406 Store in a corrosion resistant container with a resistant inner liner

Reduced labelling (contents of the package ≤ 125 ml) according to Regulation (EC) No. 1272/2008 [CLP]

Hazard symbol (CLP) : -
Signal word (CLP) : -
Hazard statement (CLP) : -
Precaution statement (CLP) : -

2.3 Other hazards

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

3 Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
hydrochloric acid ... %	(EC-No) 231-595-7 (EC Index-No) 017-002-01-X	< 1	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335

Name	Product identifier	Specific concentration limits according to Regulation (EC) No. 1272/2008 [CLP]
hydrochloric acid ... %	(EC-No) 231-595-7 (EC Index-No) 017-002-01-X	(10 ≤ C < 25) Skin Irrit. 2, H315 (10 ≤ C < 25) Eye Irrit. 2, H319 (10 ≤ C ≤ 100) STOT SE 3, H335 (25 ≤ C ≤ 100) Skin Corr. 1B, H314

Full text of H-statements: see section 16

4 First aid measures

4.1 Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell. If possible show him this sheet. Failing this, show him the packaging or label. Never give anything by mouth to an unconscious person. Place the affected person in the recovery position.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Drink plenty of water as a precaution.

4.2 Most important symptom and effects, both acute and delayed

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Adapt extinguishing agents to the environment. Carbon dioxide. Foam. Dry extinguishing powder. Water spray.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic gases may be formed. Carbon dioxide. Carbon monoxide. Hydrogen chloride. Chlorine.

5.3 Advice for firefighters

Firefighting instructions : Prevent firefighting water from entering the environment. Use water spray or fog for cooling exposed containers.

Protection during firefighting : Use a self-contained breathing apparatus and also a protective suit.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

General measures : Ensure adequate air ventilation. Avoid contact with skin and eyes. Do not breathe vapours/spray.

6.1.1 For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2 For emergency responders

Protective equipment : Use personal protective equipment as required. In case of inadequate ventilation wear respiratory protection.

6.2 Environmental precautions

Prevent entry to sewers and public waters.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Absorb spillage to prevent material damage. Wipe up with absorbent material (for example cloth). Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Dispose of in accordance with relevant local regulations.

6.4 Reference to other sections

Exposure controls and personal protection, see section 8. Concerning disposal elimination after cleaning, see section 13.

7 Handling and storage
7.1 Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapour/aerosol.

Hygiene measures

: Handle in accordance with good industrial hygiene and safety procedures. When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions : Store in corrosive resistant container with a resistant inner liner. Store in original container. Keep container tightly closed. Store in a cool, well-ventilated place. Protect from direct sunlight. To maintain product quality, store according to the instructions in the product labeling.

Prohibitions on mixed storage

: Keep away from food, drink and animal feeding stuffs.

Incompatible materials

: Metals.

7.3 Specific end use(s)

Laboratory reagent, Immunoassays

8 Exposure controls/personnel protection
8.1 Control parameters

Hydrochloric acid ... % (EC 231-595-7)		
EU	Local name	Hydrogen chloride
EU	IOELV TWA (mg/m³)	8 mg/m³
EU	IOELV TWA (ppm)	5 ppm
EU	IOELV STEL (mg/m³)	15 mg/m³
EU	IOELV STEL (ppm)	10 ppm
Austria	Local name	Chlorwasserstoff
Austria	MAK (OEL TWA) (mg/m³)	8 mg/m³
Austria	MAK (OEL TWA) (ppm)	5 ppm
Austria	MAK (OEL STEL) (mg/m³)	15 mg/m³
Austria	MAK (OEL STEL) (ppm)	10 ppm
Belgium	Local name	Hydrogène (chlorure d') # Waterstofchloride
Belgium	OEL TWA (mg/m³)	8 mg/m³
Belgium	OEL TWA (ppm)	5 ppm
Belgium	OEL STEL (mg/m³)	15 mg/m³
Belgium	OEL STEL (ppm)	10 ppm
Germany	TRGS 900 Local name	Hydrogenchlorid
Germany	TRGS 900 Occupational Exposure Limit Value (mg/m³)	3 mg/m³
Germany	TRGS 900 Occupational Exposure Limit Value (ppm)	2 ppm
Germany	TRGS 900 Remark	2(I), DFG, EU, Y
Luxembourg	Local name	Chlorure d'hydrogène
Luxembourg	OEL TWA (mg/m³)	8 mg/m³
Luxembourg	OEL TWA (ppm)	5 ppm
Luxembourg	OEL STEL (mg/m³)	15 mg/m³
Luxembourg	OEL STEL (ppm)	10 ppm

Switzerland	Local name	Acide chlorhydrique / Chlorwasserstoff [Salzsäure]
Switzerland	MAK (mg/m³)	3 mg/m³
Switzerland	MAK (ppm)	2 ppm
Switzerland	KZGW (mg/m³)	6 mg/m³
Switzerland	KZGW (ppm)	4 ppm
Switzerland	Notation	SSC

Hydrochloric acid ... % (EC 231-595-7)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	15 mg/m³
Long-term - local effects, inhalation	8 mg/m³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	15 mg/m³
Long-term - local effects, inhalation	8 mg/m³

8.2 Exposure controls

Appropriate engineering controls	: Provide local exhaust or general room ventilation to minimize vapour concentrations.
Hand protection	: Wear suitable gloves (EN 374). Nitrile rubber, 0.35 mm. Butyl rubber, 0.5 mm. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection	: Wear safety glasses (EN 166).
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Breathing apparatus with filter type P2.
Environmental exposure controls	: Avoid release to the environment.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colorless
Odor	: Odorless
Melting point/freezing point	: No data available
Boiling point or initial boiling point and boiling range	: No data available
Flammability	: No data available
Lower and upper explosion limit	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
pH	: 1.0 – 1.3
Kinematic viscosity	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (log value)	: Not applicable
Vapour pressure	: No data available
Density and/or relative density	: No data available
Relative vapour density	: No data available
Particle size	: Not applicable

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties	: No explosive properties
Oxidising properties	: No oxidising properties

9.2.2 Other safety characteristics

No additional information available

10 Stability and reactivity

10.1 Reactivity

No dangerous reactions known under normal conditions of use.

10.2 Chemical stability

Stable under use and storage conditions as recommended in section 7.

10.3 Possibility of hazardous reactions

May be corrosive to metals.

10.4 Conditions to avoid

High temperatures.

10.5 Incompatible materials

Strong oxidizing agents. Strong bases. Strong acids. Metals.

10.6 Hazardous decomposition products

No hazardous decomposition products known at room temperature. In case of fire: Toxic gases may be formed. Carbon dioxide. Carbon monoxide. Hydrogen chloride. Chlorine.

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

Acute toxicity : Not classified
Based on available data, the classification criteria are not met

Hydrochloric acid ... % (EC 231-595-7)	
LC50 inhalation rat	7051 mg/m³ 30 min

Skin corrosion/irritation : Not classified
Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified
Based on available data, the classification criteria are not met

Respiratory or skin sensitization : Not classified
Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified
Based on available data, the classification criteria are not met

Carcinogenicity : Not classified
Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated exposure) : Not classified
Based on available data, the classification criteria are not met

Aspiration hazard : Not classified
Based on available data, the classification criteria are not met

11.2 Information on other hazards

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

12 Ecological information
12.1 Toxicity

Acute aquatic toxicity : Not classified
Chronic aquatic toxicity : Not classified

Hydrochloric acid ... % (EC 231-595-7)	
LC50 fish	pH 3.25 – 3.5 96 h, Lepomis macrochirus
EC50 crustacea	pH 4.92 48 h, Daphnia magna
EC50 algae	pH 4.7 72 h, Chlorella vulgaris

12.2 Persistence and degradability

No additional information available.

12.3 Bioaccumulative potential

No additional information available.

12.4 Mobility in soil

No additional information available.

12.5 Results of PBT and vPvB assessment

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6 Endocrine disrupting properties

No additional information available.

12.7 Other adverse effects

No additional information available.

13 Disposal considerations

13.1 Waste treatment methods

Regional legislation (waste)

: Dispose in a safe manner in accordance with local/national regulations.

Waste treatment methods

: Do not empty into drains. Dispose of this material and its container in a safe way.

Waste code

: The waste code number according to the Ordinance on the European Waste Catalogue depends on the waste producer and can therefore vary for any given product. The waste code number is therefore to be gleaned separately from each waste producer.

14 Transport information

In accordance with ADR / IMDG / IATA

14.1 UN number or ID number

UN-No. (ADR)

: Not applicable

UN-No. (IMDG)

: Not applicable

UN-No. (IATA)

: Not applicable

14.2 UN proper shipping name

Proper Shipping Name (ADR)

: Not applicable

Proper Shipping Name (IMDG)

: Not applicable

Proper Shipping Name (IATA)

: Not applicable

14.3 Transport hazard class(es)

Transport hazard class(es) (ADR)

: Not applicable

Transport hazard class(es) (IMDG)

: Not applicable

Transport hazard class(es) (IATA)

: Not applicable

14.4 Packing group

Packing group (ADR)

: Not applicable

Packing group (IMDG)

: Not applicable

Packing group (IATA)

: Not applicable

14.5 Environmental hazards

Dangerous for the environment

: No

Marine pollutant

: No

Other information

: No supplementary information available

14.6 Special precautions for user

Overland transport

: Not applicable

Transport by sea

: Not applicable

Air transport

: Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

15 Regulatory information

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

15.1.1 EU-Regulations

Contains no substance on the REACH candidate list.

Contains no REACH Annex XIV substances.

15.1.2 National regulations

Comply with applicable local regulations.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

16 Other information

Data sources

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Change compared to the previous version : -

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	The effective concentration of substance that causes 50% of the maximum response (Median Effective Concentration)
IATA	International Air Transport Association
IMDG	"International Maritime Dangerous Goods Code" for the transport of dangerous goods by sea
LC50	Lethal Concentration to 50 % of a test population (Median Lethal Concentration)
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
LOAEL	Lowest Observed Adverse Effect Level
NOAEC/L	No Observed Adverse Effect Concentration/Level
NOEC/L	No Observed Effect Concentration/Level
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, Bioaccumulative and Toxic substance
PNEC	Predicted No-Effect Concentration
REACH	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
SDS	Safety Data Sheet
STP	Sewage Treatment Plant
UFI	Unique Formula Identifier
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-phrases:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

1 Identification of substance/mixture and company

1.1 Product identifier

Product form : Mixture

Product name : Control 1 **CONTROL 1**

Control 2 **CONTROL 2**

Catalog # : BA E-6651 **REF**

BA E-6652 **REF**

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

1.2.1 Relevant identified uses

Use of the substance/mixture : Laboratory reagent, Immunoassays

Use by professionals

1.2.2 Uses advised against

No additional information available

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer

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 number

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

Classification according to Regulation (EC) N° 1272/2008 (CLP)

Corrosive to metal, category 1 H290 May be corrosive to metal.

(Full test of H-statements: see section16)

Adverse physicochemical, human health and environmental effects

May be corrosive to metals. Causes severe skin burns and eye damage.

2.2 Label element

Labelling according to Regulation (EC) N° 1272/2008 (CLP)

Hazard symbol (CLP) :



Signal word (CLP) : Warning

Hazard statement (CLP) : H290 May be corrosive to metal

Precaution statement (CLP) : P234 Keep only in original packaging

P390 Absorb spillage to prevent material damage

P406 Store in a corrosion resistant container with a resistant inner liner

Reduced labelling (contents of the package ≤ 125 ml) according to Regulation (EC) No. 1272/2008 [CLP]

Hazard symbol (CLP) : -

Signal word (CLP) : -

Hazard statement (CLP) : -

Precaution statement (CLP) : -

2.3 Other hazards

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

3 Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
hydrochloric acid ... %	(EC-No) 231-595-7 (EC Index-No) 017-002-01-X	< 1	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335

Name	Product identifier	Specific concentration limits according to Regulation (EC) No. 1272/2008 [CLP]
hydrochloric acid ... %	(EC-No) 231-595-7 (EC Index-No) 017-002-01-X	(10 ≤ C < 25) Skin Irrit. 2, H315 (10 ≤ C < 25) Eye Irrit. 2, H319 (10 ≤ C ≤ 100) STOT SE 3, H335 (25 ≤ C ≤ 100) Skin Corr. 1B, H314

Full text of H-statements: see section 16

4 First aid measures

4.1 Description of first aid measures

- First-aid measures general : Get medical advice/attention if you feel unwell. If possible show him this sheet. Failing this, show him the packaging or label. Never give anything by mouth to an unconscious person. Place the affected person in the recovery position.
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- First-aid measures after skin contact : Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Drink plenty of water as a precaution.

4.2 Most important symptom and effects, both acute and delayed

- Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5 Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Adapt extinguishing agents to the environment. Carbon dioxide. Foam. Dry extinguishing powder. Water spray.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2 Special hazards arising from the substance or mixture

- Hazardous decomposition products in case of fire : Toxic gases may be formed. Carbon dioxide. Carbon monoxide. Hydrogen chloride. Chlorine.

5.3 Advice for firefighters

- Firefighting instructions : Prevent firefighting water from entering the environment. Use water spray or fog for cooling exposed containers.
- Protection during firefighting : Use a self-contained breathing apparatus and also a protective suit.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- General measures : Ensure adequate air ventilation. Avoid contact with skin and eyes. Do not breathe vapours/spray.

6.1.1 For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2 For emergency responders

- Protective equipment : Use personal protective equipment as required. In case of inadequate ventilation wear respiratory protection.

6.2 Environmental precautions

Prevent entry to sewers and public waters.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Absorb spillage to prevent material damage. Wipe up with absorbent material (for example cloth). Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Dispose of in accordance with relevant local regulations.

6.4 Reference to other sections

Exposure controls and personal protection, see section 8. Concerning disposal elimination after cleaning, see section 13.

7 Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapour/aerosol.

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions : Store in corrosive resistant container with a resistant inner liner. Store in original container. Keep container tightly closed. Store in a cool, well-ventilated place. Protect from direct sunlight. To maintain product quality, store according to the instructions in the product labeling.

Prohibitions on mixed storage : Keep away from food, drink and animal feeding stuffs.

Incompatible materials : Metals.

7.3 Specific end use(s)

Laboratory reagent, Immunoassays

8 Exposure controls/personnel protection

8.1 Control parameters

Hydrochloric acid ... % (EC 231-595-7)		
EU	Local name	Hydrogen chloride
EU	IOELV TWA (mg/m³)	8 mg/m³
EU	IOELV TWA (ppm)	5 ppm
EU	IOELV STEL (mg/m³)	15 mg/m³
EU	IOELV STEL (ppm)	10 ppm
Austria	Local name	Chlorwasserstoff
Austria	MAK (OEL TWA) (mg/m³)	8 mg/m³
Austria	MAK (OEL TWA) (ppm)	5 ppm
Austria	MAK (OEL STEL) (mg/m³)	15 mg/m³
Austria	MAK (OEL STEL) (ppm)	10 ppm
Belgium	Local name	Hydrogène (chlorure d') # Waterstofchloride
Belgium	OEL TWA (mg/m³)	8 mg/m³
Belgium	OEL TWA (ppm)	5 ppm
Belgium	OEL STEL (mg/m³)	15 mg/m³
Belgium	OEL STEL (ppm)	10 ppm
Germany	TRGS 900 Local name	Hydrogenchlorid
Germany	TRGS 900 Occupational Exposure Limit Value (mg/m³)	3 mg/m³
Germany	TRGS 900 Occupational Exposure Limit Value (ppm)	2 ppm
Germany	TRGS 900 Remark	2(I), DFG, EU, Y
Luxembourg	Local name	Chlorure d'hydrogène
Luxembourg	OEL TWA (mg/m³)	8 mg/m³
Luxembourg	OEL TWA (ppm)	5 ppm
Luxembourg	OEL STEL (mg/m³)	15 mg/m³
Luxembourg	OEL STEL (ppm)	10 ppm
Switzerland	Local name	Acide chlorhydrique / Chlorwasserstoff [Salzsäure]
Switzerland	MAK (mg/m³)	3 mg/m³
Switzerland	MAK (ppm)	2 ppm
Switzerland	KZGW (mg/m³)	6 mg/m³
Switzerland	KZGW (ppm)	4 ppm
Switzerland	Notation	SSC

Hydrochloric acid ... % (EC 231-595-7)

DNEL/DMEL (Workers)	
Acute - local effects, inhalation	15 mg/m³

Long-term - local effects, inhalation	8 mg/m³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	15 mg/m³
Long-term - local effects, inhalation	8 mg/m³

8.2 Exposure controls

Appropriate engineering controls	: Provide local exhaust or general room ventilation to minimize vapour concentrations.
Hand protection	: Wear suitable gloves (EN 374). Nitrile rubber, 0.35 mm. Butyl rubber, 0.5 mm. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection	: Wear safety glasses (EN 166).
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Breathing apparatus with filter type P2.
Environmental exposure controls	: Avoid release to the environment.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colorless
Odor	: Odorless
Melting point/freezing point	: No data available
Boiling point or initial boiling point and boiling range	: No data available
Flammability	: No data available
Lower and upper explosion limit	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
pH	: 1.0 – 1.3
Kinematic viscosity	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (log value)	: Not applicable
Vapour pressure	: No data available
Density and/or relative density	: No data available
Relative vapour density	: No data available
Particle size	: Not applicable

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties	: No explosive properties
Oxidising properties	: No oxidising properties

9.2.2 Other safety characteristics

No additional information available

10 Stability and reactivity

10.1 Reactivity

No dangerous reactions known under normal conditions of use.

10.2 Chemical stability

Stable under use and storage conditions as recommended in section 7.

10.3 Possibility of hazardous reactions

May be corrosive to metals.

10.4 Conditions to avoid

High temperatures.

10.5 Incompatible materials

Strong oxidizing agents. Strong bases. Strong acids. Metals.

10.6 Hazardous decomposition products

No hazardous decomposition products known at room temperature. In case of fire: Toxic gases may be formed. Carbon dioxide. Carbon monoxide. Hydrogen chloride. Chlorine.

11 Toxicological information

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

Acute toxicity : Not classified
Based on available data, the classification criteria are not met

Hydrochloric acid ... % (EC 231-595-7)	
LC50 inhalation rat	7051 mg/m³ 30 min

Skin corrosion/irritation : Not classified
Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified
Based on available data, the classification criteria are not met

Respiratory or skin sensitization : Not classified
Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified
Based on available data, the classification criteria are not met

Carcinogenicity : Not classified
Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated exposure) : Not classified
Based on available data, the classification criteria are not met

Aspiration hazard : Not classified
Based on available data, the classification criteria are not met

11.2 Information on other hazards

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

12 Ecological information

12.1 Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

Hydrochloric acid ... % (EC 231-595-7)	
LC50 fish	pH 3.25 – 3.5 96 h, <i>Lepomis macrochirus</i>
EC50 crustacea	pH 4.92 48 h, <i>Daphnia magna</i>
EC50 algae	pH 4.7 72 h, <i>Chlorella vulgaris</i>

12.2 Persistence and degradability

No additional information available.

12.3 Bioaccumulative potential

No additional information available.

12.4 Mobility in soil

No additional information available.

12.5 Results of PBT and vPvB assessment

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6 Endocrine disrupting properties

No additional information available.

12.7 Other adverse effects

No additional information available.

13 Disposal considerations

13.1 Waste treatment methods

Regional legislation (waste) : Dispose in a safe manner in accordance with local/national regulations.

Waste treatment methods : Do not empty into drains. Dispose of this material and its container in a safe way.

Waste code : The waste code number according to the Ordinance on the European Waste Catalogue depends on the waste producer and can therefore vary for any given product. The waste code number is therefore to be gleaned separately from each waste producer.

14 Transport information

In accordance with ADR / IMDG / IATA

14.1 UN number or ID number

UN-No. (ADR) : Not applicable
UN-No. (IMDG) : Not applicable
UN-No. (IATA) : Not applicable

14.2 UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

14.3 Transport hazard class(es)

Transport hazard class(es) (ADR) : Not applicable
Transport hazard class(es) (IMDG) : Not applicable
Transport hazard class(es) (IATA) : Not applicable

14.4 Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5 Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6 Special precautions for user

Overland transport : Not applicable
Transport by sea : Not applicable
Air transport : Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

15 Regulatory information

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

15.1.1 EU-Regulations

Contains no substance on the REACH candidate list.
Contains no REACH Annex XIV substances.

15.1.2 National regulations

Comply with applicable local regulations.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

16 Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Change compared to the previous version : -

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	The effective concentration of substance that causes 50% of the maximum response (Median Effective Concentration)
IATA	International Air Transport Association
IMDG	"International Maritime Dangerous Goods Code" for the transport of dangerous goods by sea
LC50	Lethal Concentration to 50 % of a test population (Median Lethal Concentration)
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)

LOAEL	Lowest Observed Adverse Effect Level
NOAEC/L	No Observed Adverse Effect Concentration/Level
NOEC/L	No Observed Effect Concentration/Level
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, Bioaccumulative and Toxic substance
PNEC	Predicted No-Effect Concentration
REACH	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
SDS	Safety Data Sheet
STP	Sewage Treatment Plant
UFI	Unique Formula Identifier
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-phrases:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

1 Identification of substance/mixture and company

1.1 Product identifier

Product form : Mixture
 Product name : Assay Buffer **ASSAY-BUFF**
 Catalog # : BA R-6613 **REF**

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

1.2.1 Relevant identified uses

Use of the substance/mixture : Laboratory reagent, Immunoassays
 Use by professionals

1.2.2 Uses advised against

No additional information available

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer

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 number

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

Classification according to Regulation (EC) N° 1272/2008 (CLP)

Corrosive to metal, category 1 H290 May be corrosive to metal.

Skin corrosion/irritation, Category 1 H314 Causes severe skin burns and eye damage.

Serious eye damage/eye irritation, Category 1 H318 Causes serious eye damage.

(Full test of H-statements: see section16)

Adverse physicochemical, human health and environmental effects

May be corrosive to metals. Causes severe skin burns and eye damage.

2.2 Label element

Labelling according to Regulation (EC) N° 1272/2008 (CLP)

Hazard symbol (CLP) :



Signal word (CLP) : Danger

Hazard statement (CLP) : H290 May be corrosive to metal

H314 Causes severe skin burns and eye damage

Precaution statement (CLP) : P280 Wear protective gloves, protective clothing, eye protection

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

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a doctor, a POISON CENTER.

P501 - Dispose of contents/container to an authorised waste collection point.

Reduced labelling (contents of the package ≤ 125 ml) according to Regulation (EC) No. 1272/2008 [CLP]

Hazard symbol (CLP) :



Signal word (CLP) :

Danger

Hazard statement (CLP) :

H290 May be corrosive to metal

H314 Causes severe skin burns and eye damage

Precaution statement (CLP) :

P280 Wear protective gloves, protective clothing, eye protection

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

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a doctor, a POISON CENTER.

P501 - Dispose of contents/container to an authorised waste collection point.

2.3 Other hazards

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

3 Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
hydrochloric acid ... %	(EC-No) 231-595-7 (EC Index-No) 017-002-01-X	1 - <5	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335

Name	Product identifier	Specific concentration limits according to Regulation (EC) No. 1272/2008 [CLP]
hydrochloric acid ... %	(EC-No) 231-595-7 (EC Index-No) 017-002-01-X	(10 ≤ C < 25) Skin Irrit. 2, H315 (10 ≤ C < 25) Eye Irrit. 2, H319 (10 ≤ C ≤ 100) STOT SE 3, H335 (25 ≤ C ≤ 100) Skin Corr. 1B, H314

Full text of H-statements: see section 16

4 First aid measures

4.1 Description of first aid measures

First-aid measures general :

Get medical advice/attention if you feel unwell. If possible show him this sheet. Failing this, show him the packaging or label. Never give anything by mouth to an unconscious person. Place the affected person in the recovery position.

First-aid measures after inhalation :

Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact :

Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.

First-aid measures after eye contact :

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid measures after ingestion :

Rinse mouth. Do NOT induce vomiting. Drink plenty of water as a precaution.

4.2 Most important symptom and effects, both acute and delayed

Symptoms/effects after skin contact :

Causes severe skin burns.

Symptoms/effects after eye contact :

Causes serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media :

Adapt extinguishing agents to the environment. Carbon dioxide. Foam. Dry extinguishing powder. Water spray.

Unsuitable extinguishing media :

Do not use a heavy water stream.

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic gases may be formed. Carbon dioxide. Carbon monoxide. Hydrogen chloride. Chlorine.

5.3 Advice for firefighters

Firefighting instructions : Prevent firefighting water from entering the environment. Use water spray or fog for cooling exposed containers.

Protection during firefighting : Use a self-contained breathing apparatus and also a protective suit.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Ensure adequate air ventilation. Avoid contact with skin and eyes. Do not breathe vapours/spray.

6.1.1 For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2 For emergency responders

Protective equipment : Use personal protective equipment as required. In case of inadequate ventilation wear respiratory protection.

6.2 Environmental precautions

Prevent entry to sewers and public waters.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Absorb spillage to prevent material damage. Wipe up with absorbent material (for example cloth). Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Dispose of in accordance with relevant local regulations.

6.4 Reference to other sections

Exposure controls and personal protection, see section 8. Concerning disposal elimination after cleaning, see section 13.

7 Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapour/aerosol.

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions : Store in corrosive resistant container with a resistant inner liner. Store in original container. Keep container tightly closed. Store in a cool, well-ventilated place. Protect from direct sunlight. Keep out of frost. Store locked up.

Prohibitions on mixed storage : Keep away from food, drink and animal feeding stuffs.

Incompatible materials : Metals.

7.3 Specific end use(s)

Laboratory reagent, Immunoassays

8 Exposure controls/personnel protection

8.1 Control parameters

Hydrochloric acid ... % (EC 231-595-7)		
EU	Local name	Hydrogen chloride
EU	IOELV TWA (mg/m³)	8 mg/m³
EU	IOELV TWA (ppm)	5 ppm
EU	IOELV STEL (mg/m³)	15 mg/m³
EU	IOELV STEL (ppm)	10 ppm
Austria	Local name	Chlorwasserstoff
Austria	MAK (OEL TWA) (mg/m³)	8 mg/m³
Austria	MAK (OEL TWA) (ppm)	5 ppm
Austria	MAK (OEL STEL) (mg/m³)	15 mg/m³
Austria	MAK (OEL STEL) (ppm)	10 ppm
Belgium	Local name	Hydrogène (chlorure d') # Waterstofchloride
Belgium	OEL TWA (mg/m³)	8 mg/m³
Belgium	OEL TWA (ppm)	5 ppm
Belgium	OEL STEL (mg/m³)	15 mg/m³
Belgium	OEL STEL (ppm)	10 ppm

Germany	TRGS 900 Local name	Hydrogenchlorid
Germany	TRGS 900 Occupational Exposure Limit Value (mg/m³)	3 mg/m³
Germany	TRGS 900 Occupational Exposure Limit Value (ppm)	2 ppm
Germany	TRGS 900 Remark	2(l), DFG, EU, Y
Luxembourg	Local name	Chlorure d'hydrogène
Luxembourg	OEL TWA (mg/m³)	8 mg/m³
Luxembourg	OEL TWA (ppm)	5 ppm
Luxembourg	OEL STEL (mg/m³)	15 mg/m³
Luxembourg	OEL STEL (ppm)	10 ppm
Switzerland	Local name	Acide chlorhydrique / Chlorwasserstoff [Salzsäure]
Switzerland	MAK (mg/m³)	3 mg/m³
Switzerland	MAK (ppm)	2 ppm
Switzerland	KZGW (mg/m³)	6 mg/m³
Switzerland	KZGW (ppm)	4 ppm
Switzerland	Notation	SSC

Hydrochloric acid ... % (EC 231-595-7)

DNEL/DMEL (Workers)

Acute - local effects, inhalation	15 mg/m³
Long-term - local effects, inhalation	8 mg/m³

DNEL/DMEL (General population)

Acute - local effects, inhalation	15 mg/m³
Long-term - local effects, inhalation	8 mg/m³

8.2 Exposure controls

Appropriate engineering controls	: Provide local exhaust or general room ventilation to minimize vapour concentrations.
Hand protection	: Wear suitable gloves (EN 374). Nitrile rubber, 0.35 mm. Butyl rubber, 0.5 mm. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection	: Wear safety glasses (EN 166).
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Breathing apparatus with filter type P2.
Environmental exposure controls	: Avoid release to the environment.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colorless
Odor	: Odorless
Melting point/freezing point	: No data available
Boiling point or initial boiling point and boiling range	: No data available
Flammability	: No data available
Lower and upper explosion limit	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
pH	: ~0 (calculated, undiluted), 1.70-1.98 (1:50 dilution)
Kinematic viscosity	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (log value)	: Not applicable
Vapour pressure	: No data available
Density and/or relative density	: No data available
Relative vapour density	: No data available
Particle size	: Not applicable

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties	: No explosive properties
Oxidising properties	: No oxidising properties

9.2.2 Other safety characteristics

No additional information available

10 Stability and reactivity

10.1 Reactivity

No dangerous reactions known under normal conditions of use.

10.2 Chemical stability

Stable under use and storage conditions as recommended in section 7.

10.3 Possibility of hazardous reactions

May be corrosive to metals.

10.4 Conditions to avoid

High temperatures.

10.5 Incompatible materials

Strong oxidizing agents. Strong bases. Strong acids. Metals.

10.6 Hazardous decomposition products

No hazardous decomposition products known at room temperature. In case of fire: Toxic gases may be formed. Carbon dioxide. Carbon monoxide. Hydrogen chloride. Chlorine.

11 Toxicological information

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

Acute toxicity : Not classified

Based on available data, the classification criteria are not met

Hydrochloric acid ... % (EC 231-595-7)	
LC50 inhalation rat	7051 mg/m³ 30 min

Skin corrosion/irritation	: Not classified Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Causes severe skin burns and eye damage. pH: ≤ 2
Respiratory or skin sensitization	: Serious eye damage, category 1, implicit pH: ≤ 2
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure)	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met

11.2 Information on other hazards

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

12 Ecological information

12.1 Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

Hydrochloric acid ... % (EC 231-595-7)	
LC50 fish	pH 3.25 – 3.5 96 h, <i>Lepomis macrochirus</i>
EC50 crustacea	pH 4.92 48 h, <i>Daphnia magna</i>
EC50 algae	pH 4.7 72 h, <i>Chlorella vulgaris</i>

12.2 Persistence and degradability

No additional information available.

12.3 Bioaccumulative potential

No additional information available.

12.4 Mobility in soil

No additional information available.

12.5 Results of PBT and vPvB assessment

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6 Endocrine disrupting properties

No additional information available.

12.7 Other adverse effects

No additional information available.

13 Disposal considerations

13.1 Waste treatment methods

- | | |
|------------------------------|--|
| Regional legislation (waste) | : Dispose in a safe manner in accordance with local/national regulations. |
| Waste treatment methods | : Do not empty into drains. Dispose of this material and its container in a safe way. |
| Waste code | : The waste code number according to the Ordinance on the European Waste Catalogue depends on the waste producer and can therefore vary for any given product. The waste code number is therefore to be gleaned separately from each waste producer. |

14 Transport information

In accordance with ADR / IMDG / IATA

14.1 UN number or ID number

- | | |
|---------------|------------------|
| UN-No. (ADR) | : Not applicable |
| UN-No. (IMDG) | : Not applicable |
| UN-No. (IATA) | : Not applicable |

14.2 UN proper shipping name

- | | |
|-----------------------------|------------------|
| Proper Shipping Name (ADR) | : Not applicable |
| Proper Shipping Name (IMDG) | : Not applicable |
| Proper Shipping Name (IATA) | : Not applicable |

14.3 Transport hazard class(es)

- | | |
|-----------------------------------|------------------|
| Transport hazard class(es) (ADR) | : Not applicable |
| Transport hazard class(es) (IMDG) | : Not applicable |
| Transport hazard class(es) (IATA) | : Not applicable |

14.4 Packing group

- | | |
|----------------------|------------------|
| Packing group (ADR) | : Not applicable |
| Packing group (IMDG) | : Not applicable |
| Packing group (IATA) | : Not applicable |

14.5 Environmental hazards

- | | |
|-------------------------------|--|
| Dangerous for the environment | : No |
| Marine pollutant | : No |
| Other information | : No supplementary information available |

14.6 Special precautions for user

- | | |
|--------------------|------------------|
| Overland transport | : Not applicable |
| Transport by sea | : Not applicable |
| Air transport | : Not applicable |

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

15 Regulatory information

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

15.1.1 EU-Regulations

Contains no substance on the REACH candidate list.

Contains no REACH Annex XIV substances.

15.1.2 National regulations

Comply with applicable local regulations.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

16 Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Change compared to the previous version : -

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	The effective concentration of substance that causes 50% of the maximum response (Median Effective Concentration)
IATA	International Air Transport Association
IMDG	"International Maritime Dangerous Goods Code" for the transport of dangerous goods by sea
LC50	Lethal Concentration to 50 % of a test population (Median Lethal Concentration)
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
LOAEL	Lowest Observed Adverse Effect Level
NOAEC/L	No Observed Adverse Effect Concentration/Level
NOEC/L	No Observed Effect Concentration/Level
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, Bioaccumulative and Toxic substance
PNEC	Predicted No-Effect Concentration
REACH	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
SDS	Safety Data Sheet
STP	Sewage Treatment Plant
UFI	Unique Formula Identifier
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-phrases:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.