

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

Product identification

Product name : **Cyt-All Diluent**

Product type : *Mixture*

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

Use of the substance/mixture : *Fixative for biological samples - In Vitro Diagnostic reagent*

Details of the supplier of the safety data sheet

Manufacturer/Supplier :

Alphapath

101 Chemin des Pêcheurs

Les Ateliers de la Louvade

34130 MAUGIO - France

Tel. : +33 (0)4 67 60 74 79

Fax : +33 (0)4 67 60 98 27

Mail : contact@alphapath.fr

Emergency telephone number

ORFILA-INRS Tel. : +33 (0)1 45 42 59 59

Site : <http://www.centres-antipoison.net>

2 Hazards identification

Classification of the substance or mixture

Classification according to Regulations (EC) No 1272/2008

The mixture is classified as hazardous according to the criteria of the Regulations 1272/2008.

Flam. Liq. 3



GHS 02

H226 : Flammable liquid and vapour

Signal word : Wng - Warning

Label elements

Labelling according to Regulations (EC) No 1272/2008

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

Hazard pictograms



GHS 02

Signal word

Warning - Wng

Hazard statements

H226 : Flammable liquid and vapour

2 Hazards identification (following)

. Precautionary statements

- P210 : Keep away from heat/sparks/open flames/hot surfaces - No smoking
P233 : Keep container tightly closed
P240 : Ground/bond container and receiving equipment
P241 : Use explosion-proof electrical/ventilating/lighting/.../equipment
P242 : Use only non-sparking tools
P243 : Take precautionary measures against static discharge
P280 : Wear protective gloves/protective clothing/eye protection/face protection
P303+P361+P353 : IF ON SKIN (or hair) : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P370+P378 : In case of fire: Use CO2, extinguishing powder or water spray for extinction
P403+P235 : Store in a well-ventilated place. Keep cool
P501 : Dispose of contents/container in accordance with local/regional/national/international regulations

. Hazard-determining components of labelling

Ethanol

. Other hazards

. None

. Results of PBT and vPvB assessment

- . PBT: Not applicable
. vPvB: Not applicable


3 Composition/information on ingredients

. Chemical characterization Mixture solution

. Description / Composition

. Mixture made primarily by the following substances

. Additional information : For the wording of the hazard statements refer to section 16.

Chemical Name	No Index	No CE /EINECS	No CAS	%	Classification	Hazard statement
Ethanol	603-002-00-5	200-578-6	64-17-5	< 30 %	Flam. Liq. 2 	H225

4 First aid measures

. Description of first aid measures

. General advice :

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

. After inhalation :

Supply fresh air; consult a doctor in case of complaints.

In case of unconsciousness, laid and transported the person into stable side position.

. After skin contact :

Wash immediately affected area with water and soap and fully rinse.

If skin irritation continues, consult a doctor.

. After eye contact :

Rinse opened eye for several minutes under running water.

If irritation occurs, seek medical attention.

. After swallowing :

Do not induce vomiting

Wash out immediately and profusely mouth with water.

Get medical attention if symptoms occur.

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4 First aid measures (following)**· Advice to doctor :**

Show the doctor this Material Safety Data Sheet.

· Most important symptoms and effects, both acute and delayed

No further relevant information available.

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures**· General advice**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, and full protective gear.

· Extinguishing media**· Suitable extinguishing agents :**

CO2, extinguishing powder or water spray.

Fight larger fires with water spray or alcohol resistant foam.

· For safety reasons unsuitable extinguishing agents :

Water with full jet.

· Special hazards arising from the substance or mixture

Carbon monoxide and carbon dioxide.

· Advice for firelighters**· Protective equipment :**

Wear a self-contained breathing apparatus in pressure-demand, and full protective gear.

Do not inhale gases in case of fire or combustion.

· Additional information

Keep receptacles cool with water spray.

6 Accidental release measures**· General Information**

Use proper personal protective equipment as indicated in Section 8.

· Personal precautions, protective equipment and emergency procedures

Keep away any ignition source.

Wear protective equipment. Keep unprotected persons away.

Use respiratory protective device against the effects of fumes.

Take precautions to minimize direct contact with skin or eyes and prevent inhalation.

Use good laboratory practice.

6 Accidental release measures (following)

· Environmental precautions

Collect the liquid with absorbent material.

Wipe the product carefully and place in an appropriate waste container.

Dilute with plenty of water after collecting the liquid.

Prevent seepage into sewage system, work pits and cellars.

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

See section 13 for waste disposal.

· Methods and material for containment and cleaning up

Collect the liquid with absorbent material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· Handling

· Precautions for safe handling :

Keep container tightly closed.

Protect from heat and direct sunlight.

Ensure good ventilation / exhaustion at the workplace.

Open the vial carefully. Avoid contact with eyes and skin. Wash hands after handling. Observe usually taken when handling chemicals precautions.

· Information about fire and explosion protection :



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· Conditions for safe storage, including any incompatibilities

· Requirements to be met by storerooms and receptacles :

Store in a cool location.

· Information about storage in one common storage facility :

Store away from oxidizing agents.

· Further information about storage conditions :

Keep tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· Specific end use(s):

No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical facilities

No further data; see item 7.

· Control parameters

· Ingredients with limit values that require monitoring at the workplace :	
64-17-5 - Ethanol (< 30 %)	
VME (France)	Short-term value : 9500 mg/m ³ , 5000 ppm Long-term value : 1950 mg/m ³ , 1000 ppm

· Additional information :

The lists valid during the making were used as basis.

· Exposure controls

· Personal protective equipment :

· General protective and hygienic measures :

Keep away from foodstuffs, beverages and feed for animals.

Wash hands before breaks and after end of work.

Avoid contact with eyes and skin ..

· Respiratory protection :

Not required.

In case of intensive or longer exposure use self-contained breathing apparatus ambient air.

· Protection of hands :

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

After use, contaminated gloves will be disposed of according to regulation and good laboratory practices.



Protective gloves

· Material of gloves :

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

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

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

· Eye protection :



Tightly sealed goggles

· Body protection :

Special personal protection is not required.

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information	
Appearance :	
Form :	Liquid
Colour :	According to product specification
Odour :	Characteristic
Odour threshold :	Not determined
pH-value :	Not determined
Change in condition	
Melting point :	Not determined
Boiling point :	Not determined
Flash point :	24.5°C
Flammability (solid, gaseous) :	Not applicable
Ignition temperature :	Not applicable
Decomposition temperature :	Not determined
Auto-flammability :	The product does not ignite spontaneously
Explosion hazard :	The product is not explosive
Vapour pressure at 20°C :	Not determined
Solubility (water) :	Miscible
Other information	No further relevant information available

10 Stability and reactivity

Reactivity

No known reactivity in accordance storage conditions.

Chemical stability

Stable under ordinary conditions of use and storage.

Thermal decomposition / conditions to be avoided

No decomposition if used according to specifications.

Conditions to Avoid : Heat, flames and sparks.

Possibility of hazardous reactions

No dangerous reactions known.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

No further relevant information available.

Hazardous decomposition products

No dangerous decomposition products known under normal conditions of use and storage.

11 Toxicological information

. Acute toxicity

No acute toxicity is listed product under the conditions of concentration of the product components.

. LD / LC50 Values 64-17-5 - Absolute Ethanol :

Oral LD50 >6 200 mg/kg (rat) - Dermal LD50 >20 000 mg/kg (rabbit) - Inhalation >8 000 mg/kg (rat)

. Toxic effect

No toxicological problems are to be expected when the product is handled and used carefully.

. Primary irritant effect

- Skin corrosion / irritation

No problem irritation is to be expected when the product is handled and used carefully.

- Serious eye damage / eye irritation

Causes serious eye irritation.

. Sensitization

No sensitizing effects known under the conditions of concentration of the product components.

. CMR effects (carcinogenic, mutagenic and toxic for reproduction)

- Germ cell mutagenicity

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

- Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

- Reproductive toxicity

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

- Specific target organ toxicity - single exposure

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

- Specific target organ toxicity - repeated exposure

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

- Aspiration hazard

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

. Carcinogenicity

No components of this product present at levels greater than or equal to 0.1% is identified as carcinogenicity probable, possible or confirmed for human by IARC.

. Additional toxicological information

According to the calculating method of the prevailing version of the General EU Classification Guidelines for Preparations, the product presents no danger.

12 Ecological information

. Toxicity

No further relevant information available.

. Aquatic toxicity

No further relevant information available.

. Persistence and degradability

No further relevant information available.

. Behaviour in environmental systems:

. Bio accumulative potential :

No further relevant information available.

. Mobility in soil :

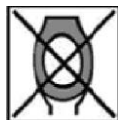
No further relevant information available.

12 Ecological information (following)

. Additional ecological information:

. General notes :

Water hazard class 1(D) (Classification clean) : Slightly hazardous for water



Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

. Other information :

The product is biodegradable.

. Results of PBT and vPvB assessment

. **PBT** : Not applicable.

. **vPvB** : Not applicable.

. Other adverse effects

No further relevant information available.

13 Disposal considerations

. Waste treatment methods

Recommendation :



Must not be disposed together with household garbage.

Do not allow product to reach sewage system.

Disposal according to official regulations.

Comply with environmental regulations and other regulations of the country concerned.

. Unclean packaging :

The containers and packing materials contaminated with dangerous substances or preparations, have the same treatment products.

Directive 94/62/EC of the European Parliament and the Council of 20 December 1994 on packaging and packaging waste.

. Recommended cleansing agents :

Water, if necessary together with cleansing agents.

14 Transport information

. ONU Number

ADR/RID - IMDG - IATA :

UN 1170

. UN proper shipping name

ADR : 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

IMDG : ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

IATA : ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

. Transport hazard class(es)

ADR - IMDG - IATA : 3 Liquides inflammables / Flammable liquids

. Hazard classification code for carriage

ADR : F1

. Transport labels

ADR - IMDG - IATA : 3



14 Transport information (following)

. Packing group

ADR - IMDG - IATA : III

. Environmental hazards

ADR/RID : No IMDG : Marine pollutant : No IATA : No

. Special precautions for user

Warning : Flammable liquids

Danger code (Kemler) : 30

No EMS : F-E,S-D

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code :

Not applicable

. Transport/Additional information

ADR - IMDG : Limited quantities (LQ) : 5L

IATA Passenger and Cargo Aircraft : Limited quantities (LQ) : 10L

IATA Passenger and Cargo Aircraft : Maximum Net Quantity : 60L

IATA Cargo Aircraft : Maximum Net Quantity : 120L

Excepted quantities (EQ) : E1

Maximum net quantity per inner packaging : 30 ml

Maximum net quantity per outer packaging : 1000 ml

Transport category : 3

Tunnel restriction code : D/E

. UN "Model Regulation"

UN1170, ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, III

15 Regulatory information

This MSDS complies with the requirements of Regulations (EC) 1907/2006 (Article 31 & Annex II) and (EU) 453/2010 (Annex I)

Classification according to Regulations (EC) No 1272/2008

The mixture is classified as hazardous according to the criteria of the Regulations 1272/2008.

Flam. Liq. 3

. Signal word

Warning - Wng

. Hazard statements

H226 : Flammable liquid and vapour

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

• Directive 2012/18 / EU

Designated Hazardous Substances - APPENDIX I : None of the components are included.

SEVESO Category P5c FLAMMABLE LIQUIDS

- Threshold quantity (tonnes) for the application of the low threshold requirements 5.000 t

- Threshold quantity (tonnes) for the application of the high threshold requirements 50.000 t

• REGULATION (EC) No 1907/2006 ANNEX XVII

Conditions of limitation: 3

• National requirements

- Indications on work restrictions

Personnel must not be exposed to carcinogenic hazardous substances.

Authorities may allow exceptions in special cases.

• Technical guidelines air

Class	%
Wasser	25-50
NK	25-50

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15 Regulatory information (following)

Water hazard class

Water hazard class 1(D) (Classification clean) : Slightly hazardous for water

Transport hazard class(es)

ADR - IMDG - IATA : 3 Flammable liquids

Chemical safety assessment

A chemical safety assessment has not been carried out.

17 Other information

For more information, contact your supplier.

This MSDS complies with the requirements of Regulations (EC) 1907/2006 (Article 31 & Annex II) and (EU) 453/2010 (Annex I)

This information is based on our present knowledge.

It describes the security measures to be taken about the product concerned.

This information does not claim to be exhaustive and should be considered as a guide.

The Supplier shall not be liable for any damage resulting from handling or from contact with the above mentioned product.

However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviation of the hazards

Flam. Liq. 3 : Flammable liquids category 3

Significant hazard statements

H226 : Flammable liquid and vapour

Acronymes et abréviations

INRS : Institut National de Recherche et de Sécurité pour la prévention des accidents du travail et des maladies professionnelles

PBT - Persistent, Bioaccumulative and Toxic

vPvB - very Persistent, very Bioaccumulative

VME - Valeur moyenne d'exposition

ADR : Accord européen sur le transport des marchandises dangereuses par Route

RID : Règlement international concernant le transport des marchandises dangereuses par chemin de fer

IMDG : International Maritime Code for Dangerous Goods

IATA : International Air Transport Association

ICAO : International Civil Aviation Organization

GHS : Globally Harmonized System of Classification and Labelling of Chemicals

CLP - Regulation on Classification, Labelling and Packaging of Substances and Mixtures

LC50 : Lethal concentration, 50 percent

LD50 : Lethal dose, 50 percent

<p>Modifications</p>	<p>Version 01 - 22/08/2013 - Creation Version 02 - 30/01/2017 - Alphapath address update Version 02 EN - 03/05/2018 - English version Version 03 EN - 12/07/2018 - Update UN Code: 1170 and Related Transport Information - Update of Ethanol Concentration Version D - 25/05/2022 - Modification of the document version reference for integration into Symalean. MSDS review. Version E - 09/11/2022 - Update of the classification according to the determined flash point (24.5°C) - Update of the address</p>
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