
SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product code: A371-006
Product name: Optimization mix for PEth from whole blood
REACH
Registration number: not relevant (mixture)

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

Relevant identified use: Product for in vitro diagnostics
Uses advised against: Do not use for private purposes.

1.3 Details of the supplier of the safety data sheet

Address: ARCHImedline GmbH
Leberstraße 20/2, 1110 Wien, Austria
E-Mail: info@archimedline.com
Tel: +43 1 3940020
Web: www.archimedline.com

1.4 Emergency telephone number

Austria:	0043 14064343	24 hours
Germany:	0049 3019240 (Berlin)	24 hours
	0049 22819240 (Bonn)	24 hours
	0049 361 730730 (Göttingen)	24 hours
	0049 613119240 (Mainz)	24 hours
	0049 8919240 (München)	24 hours
Switzerland:	0041 442515151 (Zürich) (from abroad)	24 hours
	145 (national)	24 hours

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Eye irritation (Category 2), H319

For the full text of abbreviations, see SECTION 16

2.2 Label elements

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

Signal word Warning
Pictograms GHS02, GHS07



Hazard statements

H225	Highly flammable liquid and vapor
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233	Keep container tightly closed
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Hazard pictogram(s):



H336 May cause drowsiness or dizziness.

Labelling of packages where the contents do not exceed 10 ml

Signal word: Not required

Hazard pictogram(s): Not required

Hazard statements: Not required

Precautionary statements: Not required

2.3 Other hazards

not relevant

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Substance name	Identifier	Wt.-%	Classification according to GHS
2-Propanol	CAS No 67-63-0 EC No 200-661-7 Index No 603-117-00-0 REACH Reg. No 01-2119457558- 25-xxxx	≥ 99%	Flam. Liq. 2; Eye Irrit. 2; STOT SE 3; H225, H319, H336 Concentration limits: ≥ 20 %: STOT SE 3, H336;

For the full text of the hazard statements listed in this section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General notes

Consult a physician. Show this safety data sheet to the physician in attendance.

Following inhalation

If inhaled, move the person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Following skin contact

Wash off with soap and plenty of water. Consult a physician.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Hold eyelids open and rinse with plenty of clean, flowing water for at least 10 minutes and consult a physician.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described on the label

(see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon monoxide (CO), carbon dioxide (CO₂)

5.3 Advice for fire fighting

Do not breathe explosion and combustion gases. Coordinate firefighting measures with the surroundings. Do not allow firefighting water to enter drains or watercourses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors/mist/gas. Ensure adequate ventilation.

For personal protective equipment, see section 8.

6.2 Environmental precautions

Prevent entry into drains, surface water and groundwater. Retain and dispose of contaminated wash water.

6.3 Methods and material for containment and cleaning up

Absorb with inert material and dispose of as hazardous waste requiring special supervision. Place in suitable, closed containers for disposal.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

For precautions, see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Management of the following risks

- Explosive atmospheres

Keep container tightly closed in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

Control of effects

Protect from sunlight. Protect from moisture.

- Ventilation requirements

Where possible, store hazardous substances that emit harmful vapors in areas with continuous extraction. Use local and general ventilation. Ground the container and receiving equipment.

- Suitable packaging

Only approved packaging (e.g. in accordance with ADR) may be used.

7.3 Specific end use(s)

Other than the uses specified in section 1.2, no further specific uses are intended.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limit values (workplace exposure limits)											
Country	Substance	CAS No	Identifier	SMW [ppm]	SMW [mg/m ³]	KZW [ppm]	KZW [mg/m ³]	Mow [ppm]	Mow [mg/m ³]	Not e	Source
DE	2-Propanol	67-63-0	AGW	200	500	400	1000			Y	TRGS 900

Note

H skin absorption

KZW short-term exposure limit: limit value that should not be exceeded, related to a period of 15 minutes (unless otherwise specified)

Mow ceiling value: limit value that should not be exceeded

SMW shift average value (long-term exposure limit): time-weighted average measured or calculated over a reference period of eight hours (unless otherwise specified)

Y a risk of damage to the unborn child need not be feared if the occupational exposure limit and biological limit value (BGW) are complied with

Relevant DNELs of components of the mixture						
Substance name	CAS No	Endpoint	Threshold value	Protection target, route of exposure	Used by	Exposure duration
2-Propanol	67-63-0	DNEL	500 mg/m ³	Human, inhalation	Workers (industrial)	Chronic - systemic effect
2-Propanol	67-63-0	DNEL	1000 mg/m ³	Human, inhalation	Workers (industrial)	Acute - systemic effect
2-Propanol	67-63-0	DNEL	888 mg/kg bw/day	Human, dermal	Workers (industrial)	Chronic - systemic effect

Relevant PNECs of components of the mixture						
Substance name	CAS No	Endpoint	Threshold value	Organism	Environmental compartment	Exposure duration
2-Propanol	67-63-0	PNEC	140.9 mg/L	Aquatic organisms	Fresh water	Short-term (single)

Safety Data Sheet

Optimization mix for PEth from whole blood

according to Regulation (EC) No 1907/2006 (REACH)

2-Propanol	67-63-0	PNEC	140.9 mg/L	Aquatic organisms	Marine water	Short-term (single)
2-Propanol	67-63-0	PNEC	2251 mg/L	Aquatic organisms	Sewage treatment plant (STP)	Short-term (single)
2-Propanol	67-63-0	PNEC	552 mg/kg	Aquatic organisms	Freshwater sediment	Short-term (single)
2-Propanol	67-63-0	PNEC	552 mg/kg	Aquatic organisms	Marine sediment	Short-term (single)
2-Propanol	67-63-0	PNEC	28 mg/kg	Terrestrial organisms	Soil	Short-term (single)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear safety goggles/face protection.

Skin protection

- Hand protection

Wear suitable protective gloves. Chemical protection gloves tested in accordance with EN 374 are suitable. Check for leaks/impermeability before use. If reuse is intended, clean gloves before removing them and ventilate them thoroughly afterwards. It is recommended to clarify the chemical resistance of the protective gloves stated above for specific applications with the glove manufacturer.

- Other protective measures

Allow recovery periods for skin regeneration. Preventive skin protection (protective creams/ointments) is recommended. Wash hands thoroughly after use.

Respiratory protection

Wear respiratory protection if ventilation is inadequate.

Environmental exposure controls

Use an appropriate container to avoid environmental contamination. Prevent entry into drains, surface water and groundwater.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Color	Colorless
Odor	alcohol-like
Melting point/freezing point	-89 °C
Boiling point or initial boiling point and boiling range	82–83 °C at 1,013 hP

Flammability	flammable liquid according to GHS criteria
Lower and upper explosion limit	2 vol.% (LEL) - 13.4 vol.% (UEL)
Flash point	12 °C (c.c.)
Auto-ignition temperature	425 °C (DIN 51794)
Decomposition temperature	No data available
pH	2.785 mm ² /s at 20 °C
Kinematic viscosity	No data available

Solubility

Solubility in water	miscible in all proportions
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Partition coefficient

Partition coefficient n-octanol/water (log value)	0.05
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Vapour pressure	43 hPa at 20 °C
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Density and/or relative density

Density	1.01 g/cm ³ at 20 °C
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Particle characteristics	No additional information is available
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9.2 Other information

Information with regard to physical hazard classes	No additional information is available
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Other safety characteristics

Miscibility	Completely miscible with water
Solvent content	100%
Solids content	0%

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

The material is stable under normal ambient conditions and under the temperature and pressure conditions anticipated during storage and handling.

10.3 Possibility of hazardous reactions

Exothermic reaction with: strong oxidizing agents, iron, nitric acid, strong acids, aldehydes, aluminum, amines,

Risk of explosion with: chlorates, nitro compounds, hydrogen peroxide, phosgene

10.4 Conditions to avoid

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

10.5 Incompatible materials

Plastics and rubber, oxidizing agents

10.6 Hazardous decomposition products

No hazardous decomposition products that may reasonably be expected to arise as a result of use, storage, spillage or heating are known. Hazardous combustion products: see section 5.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

No data available

Skin corrosion/irritation

No data available.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

Specific target organ toxicity - single exposure

No data available.

Specific target organ toxicity - repeated exposure

No data available.

Aspiration hazard

No data available.

11.2 Information on other hazards

No additional information is available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

According to Regulation (EC) No 1272/2008: shall not be classified as hazardous to the aquatic environment.

(Acute) aquatic toxicity

Substance name	CAS No	Endpoint	Species	Value	Exposure duration	Source
2-Propanol	67-63-0	LC50	Fish	10,000 mg/L	96 h	ECHA

Chronic aquatic toxicity

Substance name	CAS No	Endpoint	Species	Value	Exposure duration	Source
2-Propanol	67-63-0	NOELR	Fish	>1,000 mg/L	28 d	ECHA

12.2 Persistence and degradability

No data are available.

12.3 Bioaccumulative potential

No data are available.

12.4 Mobility in soil

No data are available.

12.5 Results of PBT and vPvB assessment

No data are available.

12.6 Endocrine-disrupting properties

No information is available on this property.

12.7 Other adverse effects

No data are available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of this product and its container as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packaging

This is hazardous waste; only approved packaging (e.g. in accordance with ADR) may be used

13.2 Relevant provisions relating to waste

Waste code numbers and waste descriptions must be assigned in accordance with the EAKV on an industry- and process-specific basis. Waste Catalogue Ordinance (the AVV replaces the EAK Ordinance/European Waste Catalogue Ordinance).

13.3 Remarks

Waste must be separated so that it can be treated separately by municipal or national waste disposal facilities. Please observe the relevant national or regional provisions.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

ADR/RID/ADN	UN1219
IMDG-Code	UN1219
ICAO-TI	UN1219

14.2 UN proper shipping name

ADR/RID/ADN	ISOPROPANOL
IMDG-Code	ISOPROPANOL
ICAO-TI	Isopropanol

14.3 Transport hazard class(es)

ADR/RID/ADN	3
IMDG-Code	3
ICAO-TI	3

14.4 Packing group

ADR/RID/ADN	II
IMDG-Code	II
ICAO-TI	II

14.5 Environmental hazards

Not environmentally hazardous according to the dangerous goods regulations.

14.6 Special precautions for user

The dangerous goods regulations (ADR) must also be observed within company premises.

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

The cargo is not transported in bulk.

14.8 Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

- Additional information

UN proper shipping name	ISOPROPANOL
Entries in the transport document	UN1219, ISOPROPANOL, 3, II, (D/E)
Classification code	F1
Hazard label	3



Special provisions (SP)	601
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
Transport category (TC)	2
Tunnel restriction code (TRC)	D/E
Hazard identification number	33

International Maritime Dangerous Goods Code (IMDG) -

Additional information

UN proper shipping name	ISOPROPANOL
Information in the transport document (shipper's declaration)	UN1219, ISOPROPANOL, 3, II, 12°C c.c.
Marine pollutant	-
Hazard label	3



Special provisions (SP)	-
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
EmS	F-E, S-D
Stowage category	B

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

UN proper shipping name	Isopropanol
Information in the transport document (shipper's declaration)	UN1219, Isopropanol, 3, II
Hazard label	3



Special provisions (SP)	A180
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L

SECTION 15: REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

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

15.2 Chemical safety assessment

Chemical safety assessments have not been carried out for substances in this mixture.

SECTION 16: OTHER INFORMATION**Abbreviations and acronyms**

2006/15/EC	Commission Directive establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road
ADR/RID/ADN	Agreement concerning the International Carriage of Dangerous Goods by road/rail/inland waterway (ADR/RID/ADN)
AGW	Occupational exposure limit
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BSB	Biochemical oxygen demand
CAS	Chemical Abstracts Service (database of chemical compounds and their unique identifier, the CAS Registry Number)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CSB	Chemical oxygen demand
DGR	Dangerous Goods Regulations; rules for the transport of dangerous goods, see IATA/DGR
EC50	Effective Concentration 50 %. EC50 is the concentration of a tested substance that changes an effect (e.g. growth) by 50 % over a given period
EC No	The EC inventory (EINECS, ELINCS and the NLP list) is the source of the seven-digit EC number used to identify substances in the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, the concentration of the test substance that results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) compared with the control
Eye Dam.	Causes serious eye damage
Eye Irrit.	Eye irritant
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals", developed by the United Nations

Safety Data Sheet**Optimization mix for PEth from whole blood**

according to Regulation (EC) No 1907/2006 (REACH)

IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
Index No	The index number is the identification code specified in Annex VI, Part 3, to Regulation (EC) No 1272/2008
IOELV	Indicative occupational exposure limit value
KZW	Short-term exposure limit
LC50	Lethal Concentration 50 %: LC50 is the concentration of a tested substance that causes 50 % lethality within a specified period
LD50	Lethal Dose 50 %: LD50 is the dose of a tested substance that causes 50 % lethality within a specified period
LGK	Storage class according to TRGS 510, Germany
log KOW	n-octanol/water
Mow	Ceiling value
NLP	No-Longer Polymer
PBT	Persistent, bioaccumulative and toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
Skin Corr.	Skin corrosive
Skin Irrit.	Skin irritant
SMW	Shift average value
SVHC	Substance of Very High Concern
TRGS	Technical Rules for Hazardous Substances (Germany)
TRGS 900	Occupational exposure limits (TRGS 900)
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.
Regulation (EC) No 1907/2006 (REACH), as amended by Regulation (EU) 2020/878.

Transport of dangerous goods by road, rail or inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for air transport (IATA).

Classification procedure

Physical and chemical properties: the classification is based on test results for the mixture. Health hazards, environmental hazards: the classification method for the mixture is based on the components of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in sections 2 and 3)

Code	Text
H225	Highly flammable liquid and vapor.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Disclaimer

The information provided is based on our current state of knowledge. This SDS has been compiled exclusively for this product and is intended exclusively for this product.