ACID PHOSPHATASE

Safety Data Sheet

According to ABNT NBR 14725-4

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SECTION 1: Identification of Product and Company

1.1. Product identifier

Trade name : ACID PHOSPHATASE

Product code : 39

Recommended use : For in vitro diagnostic use.

1.2. Company identification

Manufacturer:

Labtest Diagnóstica SA

Av. Paulo Ferreira da Costa, 600

Lagoa Santa - Brasil - 33240-152

CNPJ - 16.516.296/0001-38

Customer services

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GHS BR (ABNT NBR 14725)

Flammable liquids, Category 1

Acute toxicity (oral), Category 4

Acute toxicity (dermal), Category 5

Skin corrosion/irritation, Category 2

Serious eye damage/eye irritation, Category 1

Specific target organ toxicity — Single exposure, Category 2

Specific target organ toxicity — Single exposure, Category 3, Narcosis

2.2. Label elements

GHS BR labelling

Hazard pictograms (GHS BR) :

GHS02 GHS05 GHS07 GHS08

Signal word (GHS BR) : Danger

Hazard statements (GHS BR) : H224 - Extremely flammable liquid and vapour.
H302 - Harmful if swallowed.
H313 - May be harmful in contact with skin
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H336 - May cause drowsiness or dizziness.
H371 - May cause damage to organs.

Precautionary statements (GHS BR) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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.
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P311 - IF exposed or concerned: Call a POISON CENTER or doctor.
P310 - Immediately call a POISON CENTER or doctor.
P312 - Call a POISON CENTER or doctor if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P330 - Rinse mouth.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards not contributing to the classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
1-propanol	(CAS-No.) 71-23-8	≤ 70
diethyl ether	(CAS-No.) 60-29-7	≤ 70
sodium hydroxide; caustic soda	(CAS-No.) 1310-73-2	≤ 2.5
sodium citrate	(CAS-No.) 68-04-2	≤ 2
methanol	(CAS-No.) 67-56-1	≤ 2
sodium sulfate, anhydrous	(CAS-No.) 7757-82-6	≤ 1.3
Sodium carbonate	(CAS-No.) 497-19-8	≤ 1
formaldehyde	(CAS-No.) 50-00-0	≤ 0.5
polyoxyethylen lauryl ether (23)	(CAS-No.) 9002-92-0	≤ 0.1
sodium azide	(CAS-No.) 26628-22-8	≤ 0.01

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If medical advice is needed, have product container or label at hand.

First-aid measures after inhalation : When symptoms occur: go into open air and ventilate suspected area.

First-aid measures after skin contact : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. If skin irritation or rash occurs: get medical advice/attention.

First-aid measures after eye contact : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

First-aid measures after ingestion : If swallowed, seek medical advice immediately and show the container or label.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical, CO2, or water spray or regular foam.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Fight fire with normal precautions from a reasonable distance.

Protection during firefighting : Wear recommended personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Avoid contact with skin and eyes. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment : Wear recommended personal protective equipment. Gloves.

Emergency procedures : Stop leak if safe to do so. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter drains or water courses.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Absorb spilled material with sand or earth.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling : Do not eat, drink or smoke when using this product.

Hygiene measures : Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep cool.

Storage temperature : 2 – 8 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

formaldehyde (50-00-0)		
USA	ACGIH OEL TWA [ppm]	0.1 ppm
USA	ACGIH OEL STEL [ppm]	0.3 ppm

1-propanol (71-23-8)		
USA	ACGIH OEL TWA [ppm]	100 ppm

diethyl ether (60-29-7)		
USA	ACGIH OEL TWA [ppm]	400 ppm
USA	ACGIH OEL STEL [ppm]	500 ppm

8.2. Exposure controls

No additional information available

8.3. Personal protective equipment

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : See Section 16.

Odour : See Section 16.

Odour threshold	:	Not available
pH	:	Not available
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	Not available
Flash point	:	Not available
Relative evaporation rate (butylacetate=1)	:	Not available
Flammability (solid, gas)	:	Not available
Explosive limits	:	Not available
Vapour pressure	:	Not available
Relative vapour density at 20 °C	:	Not available
Relative density	:	Not available
Solubility	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
Viscosity, kinematic	:	Not available
Viscosity, dynamic	:	Not available

9.2. Other information

Not available

SECTION 10: Stability and reactivity

Chemical stability : Stable under normal conditions of use

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : May be harmful in contact with skin.
Acute toxicity (inhalation) : Not available

ATE BR (oral)	932.745 mg/kg bodyweight
ATE BR (dermal)	4105.952 mg/kg bodyweight

Sodium carbonate (497-19-8)	
LD50 oral rat	2800 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	2.3 mg/l

formaldehyde (50-00-0)	
LD50 dermal rabbit	270 mg/kg
LC50 Inhalation - Rat [ppm]	490 ppm

polyoxyethylen lauryl ether (23) (9002-92-0)	
LD50 oral rat	1000 mg/kg bodyweight

sodium citrate (68-04-2)	
LD50 oral rat	> 8000 mg/kg

1-propanol (71-23-8)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	4049 mg/kg
LC50 Inhalation - Rat	9.8 mg/l

diethyl ether (60-29-7)	
LD50 oral rat	1200 – 1700 mg/kg bodyweight
LD50 dermal rabbit	> 14200 mg/kg
LC50 Inhalation - Rat	99 mg/l
LC50 Inhalation - Rat [ppm]	32000 ppm

sodium sulfate, anhydrous (7757-82-6)	
LD50 oral rat	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat	> 2.4 mg/l air

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitisation : Not available

Germ cell mutagenicity	:	Not available
Carcinogenicity	:	Not available
Reproductive toxicity	:	Not available
STOT-single exposure	:	May cause damage to organs. May cause drowsiness or dizziness.
STOT-repeated exposure	:	Not available
Aspiration hazard	:	Not available

11.2. Most important symptoms and effects, both acute and delayed

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	:	Not available
Hazardous to the aquatic environment, long-term (chronic)	:	Not available

Sodium carbonate (497-19-8)	
LC50 - Fish [1]	300 mg/l
EC50 - Crustacea [1]	200 – 227 mg/l

formaldehyde (50-00-0)	
LC50 - Fish [1]	6.7 mg/l
EC50 - Crustacea [1]	5.8 mg/l
ErC50 algae	4.89 – 6.61 mg/l

polyoxyethylen lauryl ether (23) (9002-92-0)	
ErC50 algae	0.237 mg/l

sodium citrate (68-04-2)	
LC50 - Fish [1]	> 18000 mg/l
EC50 - Crustacea [1]	5600 mg/l

1-propanol (71-23-8)	
LC50 - Fish [1]	4480 mg/l
EC50 - Crustacea [1]	3644 mg/l

diethyl ether (60-29-7)	
LC50 - Fish [1]	2560 mg/l
EC50 - Crustacea [1]	1380 mg/l

sodium sulfate, anhydrous (7757-82-6)	
LC50 - Fish [1]	7960 mg/l

12.2. Persistence and degradability

formaldehyde (50-00-0)	
Biochemical oxygen demand (BOD)	0.64 g O_2/g substance
Chemical oxygen demand (COD)	1.06 g O_2/g substance
ThOD	1.068 g O_2/g substance
BOD (% of ThOD)	0.6

sodium citrate (68-04-2)	
Biochemical oxygen demand (BOD)	0.364 g O_2/g substance
Chemical oxygen demand (COD)	0.48 g O_2/g substance

1-propanol (71-23-8)	
Biochemical oxygen demand (BOD)	0.47 – 1.63 g O_2/g substance
Chemical oxygen demand (COD)	2.23 g O_2/g substance
ThOD	2.4 g O_2/g substance
BOD (% of ThOD)	0.2 – 0.44

diethyl ether (60-29-7)	
Biochemical oxygen demand (BOD)	0.03 g O_2/g substance
Chemical oxygen demand (COD)	0.026 g O_2/g substance
ThOD	2.6 g O_2/g substance
BOD (% of ThOD)	0.012

12.3. Bioaccumulative potential

Sodium carbonate (497-19-8)	
Partition coefficient n-octanol/water (Log Pow)	-6.19

formaldehyde (50-00-0)	
BCF - Fish [1]	< 1
Partition coefficient n-octanol/water (Log Pow)	0.35

polyoxyethylen lauryl ether (23) (9002-92-0)	
BCF - Fish [1]	81
Partition coefficient n-octanol/water (Log Pow)	1.937

sodium citrate (68-04-2)	
Partition coefficient n-octanol/water (Log Pow)	-0.28

1-propanol (71-23-8)	
Partition coefficient n-octanol/water (Log Pow)	0.25

diethyl ether (60-29-7)	
BCF - Fish [1]	0.9 – 9.1
Partition coefficient n-octanol/water (Log Pow)	0.82 – 0.89

sodium sulfate, anhydrous (7757-82-6)	
BCF - Other aquatic organisms [1]	0.5
Partition coefficient n-octanol/water (Log Pow)	-4.38

12.4. Mobility in soil

formaldehyde (50-00-0)	
Surface tension	73 mN/m
Partition coefficient n-octanol/water (Log Koc)	1.202

polyoxyethylen lauryl ether (23) (9002-92-0)	
Partition coefficient n-octanol/water (Log Koc)	2.176

1-propanol (71-23-8)	
Surface tension	0.024 N/m

diethyl ether (60-29-7)	
Surface tension	0.017 N/m

sodium sulfate, anhydrous (7757-82-6)	
Surface tension	71 mN/m

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : Must follow special treatment according to local regulation.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Comply with applicable regulations for solid waste disposal.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

14.1 National and international Regulations

Overland transport *Resolution No. 5232, of December 14, 2016 - Approves the Supplementary Instructions to the Terrestrial Regulation of the Transport of Dangerous Goods, and other measures.*

UN-No.(RES 5232) : 3316
Proper Shipping Name (RES 5232) : Chemical Kit or First Aid Kit
Class (RES 5232) : 9 - Miscellaneous dangerous substances and articles, including environmentally hazardous substances.
Risk Number (Res 5232) : 90 - Environmentally hazardous substance; miscellaneous dangerous substances
Packing group (Res 5232) : II - Substances presenting medium danger
Special provisions(Res 5232) : 251

Transport by sea *International Maritime Dangerous Goods*

UN-No. (IMDG) : 3316
Proper Shipping Name (IMDG) : Chemical Kit
Class (IMDG) : 9 - Miscellaneous dangerous substances and articles
EmS-No. (Fire) : F-A - Alpha Fire Fighting Form - General Fire Fighting Sheet

EmS-No. (Spillage)	: S-P - SPILLAGE SCHEDULE Papa - SUBSTANCES DANGEROUS WHEN WET (COLLECTABLE ARTICLES)
Marine pollutant (IMDG)	: No
Special provisions (IMDG)	: 251,340

Air transport *International Air Transport Association*

UN-No. (IATA)	: 3316
Proper Shipping Name (IATA)	: Chemical kit
Class (IATA)	: 9 - Miscellaneous Dangerous Goods
Packing group (IATA)	: II - Medium Danger
Special provisions (IATA)	: A44,A163

14.2 Other information

Special transport precautions : Avoid release to the environment,Prevent entry to sewers and public waters.

SECTION 15: Regulatory information

Brazil Local Regulations : Resolution No. 5232, of December 14, 2016 - Approves the Supplementary Instructions to the Terrestrial Regulation of the Transport of Dangerous Goods, and other measures. Standard ABNT NBR 14725.

SECTION 16: Other information

Other information : Kit composed of Substrate (Ref. 39.1) solid, yellowish, odorless, Color Reagent (Ref. 39.2) liquid, colorless, odorless, Standard (Ref. 39.3) liquid, colorless, characteristic odor and Buffer (39.4) liquid, colorless, odorless which are mixtures of compounds in isolation. The substrate, after reconstitution, contains thymolphthalein monophosphate. The Color Reagent contains sodium carbonate and sodium hydroxide. The Standard contains thymolphthalein. The Buffer contains pH 5.95 buffer and sodium azide.

SDS Labtest

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.