

**1. PRODUCT/PREPARATION/COMPANY**

 Trade name: **BIOTUB KIT**

Company:

 Biotools, B & M Labs, S.A.  
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Product Number: 90.073

Emergency number: please contact Biotools distributor in your country. Spain only: 91 562 04 20







**2. COMPOSITION OF THE PRODUCT/INFORMATION ON INGREDIENTS**

Chemical characterisation: Solutions in buffer. Volume of each product package varies: 28µl- 1,8 ml.

The kits contain the following components:

- Amplification Mixture
- Nested Mixture
- DNA Polymerase
- MgCl<sub>2</sub>
- Positive Control

Active ingredients:

CAS-No	EC no	Name	Contents	Danger <sup>1</sup>	Risks
7732-18-5	231-791-2	<b>Water</b>	<80%	None	None
77-86-1	201-064-4	<b>Tris hydroxymethyl aminomethane (Tris)</b>	<1,5%	Xi 	R 36/38
7647-01-0	231-595-7	<b>Hydrochloric acid</b>	<0,1%	C  Xi 	R 34-37 S 26-36/37/39-45
60-00-4	200-449-4	<b>Ethylenediaminetetraacetic acid (EDTA)</b>	<0,5%	Xi 	R 36- 52/53 S 26-61
56-81-5	200-289-5	<b>Glycerol</b>	>80%	None	None
7447-40-7	231-211-8	<b>Potassium chloride</b>	<0,5%	Xi 	R36 S26- 39
9002-93-1	NA	<b>Triton X-100</b>	0,1%	Xn 	R 22-41 S 26-36-39
NA	NA	<b>Oligonucleotides</b>	<0,005%	None	None
7786-30-3	232-094-6	<b>Magnesium chloride</b>	< 0,5%	None	None
74299-50-6	277-809-2	<b>dATP</b>	0,0625-0,25 %	None	None
3770-58-9	223-208-5	<b>dCTP</b>	0,0625-0,25 %	None	None
93919-41-6	300-026-5	<b>dGTP</b>	0,0625-0,25 %	None	None
18423-43-3	NA	<b>dTTP</b>	0,0625-0,25 %	None	None
None	None	<b>Control DNA – non infective HPV sequences cloned in a pUC-derived plasmid</b>	<0.0001 %	None	None

<sup>1</sup> Dangers and risks on active ingredients are applicable to pure ingredients. Amounts present in the specified product are under threshold levels as per Directive 67/548/EC and other European Legislation in force.



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### 3. HAZARDS IDENTIFICATION

**Primary routes of entry**

Skin or eye contact from splashes  
Inhalation of the vapor at room temperature is unlikely

**Ingestion**

Harmful if swallowed. May cause irritation to the gastrointestinal tract.

**Skin contact**

May cause irritation

**Eye contact**

Irritating

**Evidence for reproductive toxicity, carcinogenicity and mutagenicity**

No data available.

<b>Hazard Ingredients</b>	
<b>Tris hydroxymethyl aminomethane (Tris)</b>	Irritating to eyes and skin.
<b>Hydrochloric acid</b>	Causes burns. Irritating to respiratory system. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately. (Show the label where possible).
<b>Ethylenediaminetetraacetic acid</b>	Irritating to eyes. Harmful to aquatic organisms, may cause long- term adverse effects in the aquatic environment. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Avoid release to the environment. Refer to special instructions/ Safety data sheets.
<b>Potassium chloride</b>	Irritating to eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eyes/face protection.
<b>Triton X-100</b>	Harmful if swallowed. Risk of serious damage to eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eyes/face protection. Wear suitable protective clothing.

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### 4. FIRST AID MEASURES

**Skin contact**

Wash skin with water and soap and rinse thoroughly. Remove contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse. Get medical attention.

**Eye contact**

Rinse opened eyes for at least 15 min with copious amounts of water. Check for and remove any contact lenses. Call a physician.

**Ingestion**

Do NOT induce vomiting unless directed to do so by medical personnel. Rinse mouth with plenty of water. Call a physician. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

**Inhalation**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

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## 5. FIRE FIGHTING MEASURES

### Suitable extinguishing media

Water spray, carbon dioxide, dry chemical powder or appropriate foam.

### Fire and explosion hazards

Emits irritant or toxic fumes under fire conditions.

### Protective equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes

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## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Wear protective gloves and goggles. Evacuate area. Shut off all sources of ignition.

### Environmental precautions

Product must not enter ground, sewerage system or water course

### Measures for cleaning/collecting

Collect spilled liquid with liquid-binding material or inert absorbent and place it in a container for disposal. Wash spill site after material pickup is complete.

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## 7. HANDLING AND STORAGE

### Handling

Always keep the containers tightly closed. Observe good laboratory technique when handling.

### Storage

Store each component of the kit in the original container, at  $-15\pm 8^{\circ}\text{C}$ .

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## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Exposure limits

Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.

### Eye protection

Wear goggles

### Hand protection

Wear protective gloves

### Skin protection

Wear labcoat

### Hygiene measures

General industrial hygiene practice.

### Breathing equipment

Use an approved/certified respirator or equivalent.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form:** Liquid

**Colour:** Colorless

**Odour:** Odorless

**Boiling point:** no data available.

**Flash point:** no data available

**Explosive properties:** no data available

**Vapor pressure:** no data available

**pH:** NA

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## 10. STABILITY AND REACTIVITY

### Stability

Stable under normal handling and storage conditions

### Decomposition

Carbon monoxide, carbon dioxide, nitrogen oxides

### Conditions to avoid

Avoid strong oxidising agents, peroxides, acids, acid chlorides, acid anhydrides, alkali metals, ammonia.

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## 11. TOXICOLOGICAL INFORMATION

### Inhalation

May be harmful if inhaled. May cause respiratory tract irritation.

### Skin

May be harmful if absorbed through skin. May cause skin irritation.

### Eyes

May cause eye irritation.

### Ingestion

May be harmful if swallowed.

### Acute toxicity

**Tris hydroxymethyl aminomethane (Tris):** oral; rat; LD50: 5900 mg/kg

**Hydrochloric acid:** inhalative, rat: 3124 ppm(V)/1 h (pure substance)

**Ethylenediaminetetraacetic acid (EDTA):** oral, rat, LD50: 4000 mg/kg

**Triton- X-100:** oral, rat, LD50: 1800 mg/kg

**Potassium chloride:** oral, rat, LD50: 2430 mg/kg

**Glycerol:** oral; rat; LD50: 12600 mg/kg

**Magnesium chloride:** oral; rat; LD50: 8100 mg/kg

### Chronic exposure

Products may cause allergic reactions in certain sensitive individuals

### Sensitization

No data available

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## 12. ECOLOGICAL INFORMATION

No data available.

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## 13. DISPOSAL CONSIDERATIONS

Controlled disposal in waste system. Product disposal (leftovers or residues resulting from normal use) does not pose any serious hazards in the adequate proportion.

The product and packaging should be disposed of in accordance with the instructions of the local authorities.

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## 14. TRANSPORT INFORMATION

### RID/ADR

Non-hazardous for road transport

### IMDG

Non-hazardous for sea transport

### IATA

Non-hazardous for air transport

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**15. REGULATORY INFORMATION**

DANGERS AND RISKS ON ACTIVE INGREDIENTS ARE APPLICABLE TO PURE INGREDIENTS. AMOUNTS PRESENT IN THE SPECIFIED PRODUCT ARE UNDER THRESHOLD LEVELS AS PER DIRECTIVE 67/548/EC AND OTHER EUROPEAN LEGISLATION IN FORCE.

BIOTUB kit		
AMPLIFICATION MIXTURE	Indication of Danger	-
	R phrases	R36/38 Irritating to eyes and skin.
	S Phrases	S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
NESTED MIXTURE	Indication of Danger	Xn Harmful
	R phrases	R22 Harmful if swallowed. R36 Irritating to eyes
	S Phrases	S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
DNA POLYMERASE	Indication of Danger	-
	R phrases	R22 Harmful if swallowed. R36/38 Irritating to eyes and skin.
	S Phrases	S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
POSITIVE CONTROL	Indication of Danger	Xn Harmful
	R phrases	R22 Harmful if swallowed. R36 Irritating to eyes
	S Phrases	S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
MgCl <sub>2</sub>	Indication of Danger	-
	R phrases	-
	S Phrases	-

**16. OTHER INFORMATION**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge, and is applicable to the product with regards to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Biotoools, B & M Labs, S.A. shall not be held liable for any damage resulting from handling or from contact with the above product.

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