

1. PRODUCT/PREPARATION/COMPANY

Trade name: **SPEEDTOOLS PLANT DNA** Company: Biotoools, B & M Labs, S.A.
Extraction Kit Valle de Tobalina – 52 – Nave 39
 28021 Madrid
 Product Number: 21.171, 21.172 SPAIN
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Emergency number: please contact Biotoools distributor in your country. Spain only: 91 562 04 20

2. COMPOSITION OF THE PRODUCT/INFORMATION ON INGREDIENTS

Chemical characterisation: -. Volume of each product package varies: 15 ml- 150 ml.

The kits contain the following components:

- Buffer L
- Solution P
- Buffer W1
- Buffer W2
- Proteinase K
- Buffer E
- BIOTOOLS Binding Columns
- 2 ml Collecting tubes
- 1,5 ml Collecting tubes
- Protocol

Active ingredients:

CAS-No	EC no	Name	Contents	Danger ¹	Risks
7732-18-5	231-791-2	Water	<80%	None	None
593-84-0	615-004-00-3	Guanidiniumthiocyanate solution	<45%	Xn	✘ R 20/21/22-32 S13
67-63-0	200-661-7	2- Propanol	<90%	Xi F	✘ R 11-36-67 S 7-16-24/25- 26 🔥
12125-02-9	235-186-4	Ammonium chloride	<20%	Xn	✘ R 22-36 S 7-16
57-09-0	200-311-3	Centrimoniumbromid	<5%	Xn N	✘ R 22-37/38-41-50 🔥
39450-01-6	254-457-8	Proteinase K	>8%	Xi	✘ R 36/37/38- 42 S 22-24-26-36/37

3. HAZARDS IDENTIFICATION
Primary routes of entry

Skin or eye contact from splashes

Inhalation of the vapor at room temperature is unlikely

¹ 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.



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.

Hazard Ingredients

2-propanol	Highly flammable. Irritating to eyes. Vapours may cause drowsiness and dizziness. Keep container tightly closed. Keep away from sources of ignition- No smoking. Avoid contact with skin and eyes. In case with contact with eyes, rinse immediately with plenty of water and seek medical advice.
Guanidiniumthiocyanate	Harmful by inhalation, in contact with skin and if swallowed. Contact with acids liberates very toxic gase. Keep away from food, drink and animal feedingstuffs.
Ammonium chloride	Harmful if swallowed. Irritating to eyes. Keep container tightly closed. Keep away from sources of ignition- No smoking.
Centrimoniumbromide	Harmful if swallowed. Irritating to respiratory system and skin. Risk of serious damage to eyes. Very toxic to aquatic organisms.
Proteinase K	Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation. Do not breath dust. Avoid contact with skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves.

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.

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



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.

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 temperatures 25°C maximum.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: NA

Colour: NA

Odour: NA

Boiling point: no data available.

Flash point: no data available

Explosive properties: no data available

Vapor pressure: no data available

pH: NA

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.



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

2- propanol: No data available.
Ammonium chloride: No data available.
Centrimoniumbromide: No data available.
Guanidiniumthiocyanate: oral; rat; LD50: 593 mg/kg
Proteinase K: No data available

Chronic exposure

Products may cause allergic reactions in certain sensitive individuals

Sensitization

No data available

12. ECOLOGICAL INFORMATION

Various components of the kit may be very toxic to aquatic organisms. Avoid release to the environment.

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.

14. TRANSPORT INFORMATION

RID/ADR

Non-hazardous for road transport

IMDG

Non-hazardous for sea transport

IATA

Non-hazardous for air transport

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.

SPEEDTOOLS PLANT DNA Extraction Kit

Buffer W1	Indication of Danger	Xn Harmful
	R phrases	R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R32 Contact with acids liberates toxic gas. R52/53 Harmful to aquatic organisms, may cause long- term adverse effects in the aquatic environment.
	S Phrases	S13 Keep away from food, drink and animal feedingstuffs. S61 Avoid release to the environment. Refer to special instructions/Safety Data Sheets.
Buffer L	Indication of Danger	Xi Irritant
	R phrases	R36 Irritating to eyes.
	S Phrases	S24 Avoid contact with skin.
Buffers W2, L & E	Indication of Danger	-
	R phrases	-
	S Phrases	-
Solution P	Indication of Danger	Xi Irritant F Flammable
	R phrases	R36 Irritating to eyes. R11 Highly flammable R67 Vapours may cause drowsiness and dizziness.
	S Phrases	S7 Keep container tightly closed. S16 Keep away from sources of ignition- No smoking. S24/25 Avoid contact with skin and eyes. S26 In case with contact with eyes, rinse immediately with plenty of water and seek medical advice.



Proteinase K/ Proteinase Buffer	Indication of Danger	Xi Irritant
	R phrases	R42 May cause sensitization by inhalation. R36/37/38 Irritating to eyes, respiratory system and skin.
	S Phrases	S22 Do not breath dust S24 Avoid contact with skin. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37 Wear suitable protective clothing and gloves.

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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