

# Safety Data Sheet

according to Regulations 1907/2006/EC (REACH) and 2015/830/EU

Edition: 8

SPEEDTOOLS DNA

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Date Updated: 23/04/2021

EXTRACTION KIT

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

REF 21.131 - 21.132  
Product name SPEEDTOOLS DNA EXTRACTION KIT

REACH Registration number(s):

A registration number for the substance(s) does not exist because the annual tonnage does not require registration or the substance or its use is excluded from registration.

1 x 15 mL BB3  
1 x 12 mL BB5  
1 x 13 mL BBE  
1 x 30 mL BBW  
1 x 1.8 mL PB  
1 x 1-75 mg Proteinase K (lyo)

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

**Relevant identified uses**

Product for analytical use.

Exposure Scenario Classification according REACH, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0

The exposure scenario is integrated into sections 1-16.

**Uses advised against**

not described

### 1.3 Details of the supplier of the safety data sheet

Biotools B&M Labs, S.A.  
Valle de Tobalina - 52 - Nave 39  
28021 Madrid  
SPAIN

Tel: +34 91 710 00 74  
Fax: +34 91 505 31 18

### 1.4 Emergency telephone number

Please contact Biotools distributor in your country. Spain only: 91 562 04 20

## SECTION 2: Hazard identification

### 2.0 Classification of the complete product



GHS02 GHS07 GHS08

Signal word DANGER

Hazard identification	Hazard classes/categories
H226	Flam. Liq. 3
H302	Acute Tox. 4 oral
H315	Skin Irrit. 2
H319	Eye Irrit. 2
H334	Resp. Sens. 1
H336, H335	STOT SE 3

### 2.1 Classification of the substance or mixture

15 mL BB3

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GHS07

Signal word

WARNING

**Hazard identification**

**Hazard classes/categories**

H302  
H319

Acute Tox. 4 oral  
Eye Irrit. 2

**12 mL BB5**

Signal word

Do not need labelling as hazardous  
-

No hazard class

**13 mL BBE**

Signal word

Do not need labelling as hazardous  
-

No hazard class

**30 mL BBW**



GHS02

GHS07

Signal word

WARNING

**Hazard identification**

**Hazard classes/categories**

H226  
H302  
H319  
H336, H335

Flam. Liq. 3  
Acute Tox. 4 oral  
Eye Irrit. 2  
STOT SE 3

**1.8 mL PB**

Signal word

Do not need labelling as hazardous  
-

No hazard class

**1-75 mg Proteinase K (Iyo)**



GHS07

GHS08

Signal word

DANGER

**Hazard identification**

**Hazard classes/categories**

H315  
H319  
H334

Skin Irrit. 2  
Eye Irrit. 2  
Resp. Sens. 1

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## 2.2 Label elements

According **CLP directive** inner packages must be only labelled with GHS symbol(s) and product identifier(s) (EU 1272/2008 Annex I - 1.5.1.2).

Harmful chemicals/mixtures with signal word: **WARNING** and highly flammable chemicals/mixtures must not be labelled with H and P phrases **until 125 mL** (EU 1272/2008 Annex I - 1.5.2). This labelling exemption is NOT valid for sensiblizing substances. The irritant hazard should be eliminated, because of buffer chemicals inside.

### 15 mL BB3



GHS07

Signal word: WARNING

### 12 mL BB5

Do not need labelling as hazardous

Signal word: -

### 13 mL BBE

Do not need labelling as hazardous

Signal word: -

### 30 mL BBW



GHS02



GHS07

Signal word: WARNING

### 1.8 mL PB

Do not need labelling as hazardous

Signal word: -

### 1-75 mg Proteinase K (Iyo)



GHS07



GHS08

Signal word: DANGER

H334

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

P261sh, P342+311

Avoid breathing dust/vapours. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

## 2.3 Other hazards

### Possible hazards from physicochemical properties

In the case of pH values are less than 5 or higher than 9 then it is irritant. Flammable properties. ---

### Information pertaining to particular risks to human and possible symptoms

Cause after oral intake, impairments of health when ingested in small quantities.

Kit contains small amounts of enzymes: May cause allergy or asthma symptoms or breathing difficulties if inhaled. -

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## Information pertaining to particular risks to the environment

PBT: not applicable

vPvB: not applicable

Other hazards

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## SECTION 3: Composition/information on ingredients

### 3.1 Substances or 3.2 Mixtures

#### 15 mL BB3

Chemical:	<i>guanidine hydrochloride</i>	CAS No.:	50-01-1
Classification:	H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2		
Formula:	CH <sub>6</sub> ClN <sub>3</sub>		
Pseudonym:	guanidinium chloride		
TSCA Inventory:	listed		
REACH Reg. No.:	01-2119977063-35-0005		
EC No.:	200-002-3	Indice No.:	607-148-00-0
RTECS:	MF4300000	MFCD:	00013026
KE No.:	KE-18111		
Concentration:	36 - <50 %		
acc. CLP (GHS):	H302, Acute Tox. 4 oral, H319, Eye Irrit. 2		

Chemical:	<i>polyoxyethylene sorbitan monolaurate (Tween® 20)</i>	CAS No.:	9005-64-5
Classification:	No criteria for classification or naming of chemical not required.		
Formula:	C <sub>58</sub> H <sub>114</sub> O <sub>26</sub>		
Pseudonym:	Sorbitan, monododecanoate, poly(oxy-1,2-ethanediyl) derivs.		
TSCA Inventory:	listed		
RTECS:	TR7400000	MFCD:	00165986
KE No.:	KE-31681		
Concentration:	10 - <20 %		
acc. CLP (GHS):	The criteria for classification are not fulfilled.		

#### 12 mL BB5

Chemical:	<i>chemicals/mixture &lt; 1%</i>	CAS No.:	-
Classification:	No criteria for classification or naming of chemical not required.		
TSCA Inventory:	all listed, <1%		
KE No.:	listed		
Concentration:	0.1 - <1 %		
acc. CLP (GHS):	The criteria for classification are not fulfilled.		

#### 13 mL BBE

Chemical:	<i>chemicals/mixture &lt; 1%</i>	CAS No.:	-
Classification:	No criteria for classification or naming of chemical not required.		
TSCA Inventory:	all listed, <1%		
KE No.:	listed		
Concentration:	0.1 - <1 %		
acc. CLP (GHS):	The criteria for classification are not fulfilled.		

#### 30 mL BBW

Chemical:	<i>guanidine hydrochloride</i>	CAS No.:	50-01-1
Classification:	H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2		
Formula:	CH <sub>6</sub> ClN <sub>3</sub>		
Pseudonym:	guanidinium chloride		
TSCA Inventory:	listed		
REACH Reg. No.:	01-2119977063-35-0005		
EC No.:	200-002-3	Indice No.:	607-148-00-0
RTECS:	MF4300000	MFCD:	00013026
KE No.:	KE-18111		
Concentration:	36 - <50 %		
acc. CLP (GHS):	H302, Acute Tox. 4 oral, H319, Eye Irrit. 2		

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Chemical:	<i>2-propanol</i>	CAS No.:	67-63-0
Classification:	H225, Flam. Liq. 2, H319, Eye Irrit. 2, H336, STOT SE 3		
Formula:	C <sub>3</sub> H <sub>8</sub> O		
Pseudonym:	isopropanol, IPA, propan-2-ol		
TSCA Inventory:	listed		
REACH Reg. No.:	01-2119457558-25-XXXX		
EC No.:	200-661-7	Indice No.:	603-117-00-0
RTECS:	NT8050000	MFCD:	00011674
KE No.:	KE-29363		
Concentration:	20 - <35 %		
acc. CLP (GHS):	H226, Flam. Liq. 3, H319, Eye Irrit. 2, H336, STOT SE 3		

## 1.8 mL PB

Chemical:	<i>glycerole</i>	CAS No.:	56-81-5
Classification:	No criteria for classification or naming of chemical not required.		
Formula:	C <sub>3</sub> H <sub>8</sub> O <sub>3</sub>		
Pseudonym:	glycerin, 1,2,3-propanetriol		
TSCA Inventory:	listed (1,2,3-Propanetriol)		
REACH Reg. No.:	01-2119471987-18-xxxx		
EC No.:	200-289-5	Indice No.:	n/a
RTECS:	MA8050000	MFCD:	00004722
KE No.:	KE-29297		
Concentration:	10 - <50 %		
acc. CLP (GHS):	The criteria for classification are not fulfilled.		

## 1-75 mg Proteinase K (Iyo)

Chemical:	<i>proteinase K (origin: tritirachium album)</i>	CAS No.:	39450-01-6
Classification:	H315, Skin Irrit. 2, H319, Eye Irrit. 2, H334, Resp. Sens. 1		
Formula:	Enzyme Comm. No. 3.4.21.64, origin: tritirachium album		
TSCA Inventory:	listed (CAS 102925-54-2)		
EC No.:	254-457-8	Indice No.:	647-014-00-9
RTECS:	-	MFCD:	00132129
KE No.:	not listed		
Concentration:	90 - <100 %		
acc. CLP (GHS):	H315, Skin Irrit. 2, H319, Eye Irrit. 2, H334, Resp. Sens. 1		

## 3.3 Remarks

When not listed, mixtures are added with water [CAS No. 7732-18-5] to 100%.

List of H and P phrases: see section 16.1

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately. Ensure quiet, warmth, and provide resuscitation if necessary. If necessary contact medical advice. Take to a doctor, in a raised position if there are breathing difficulties.

#### 4.1.1 After SKIN Contact

Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.

#### 4.1.2 After EYE Contact

After contact with the eyes rinse thoroughly under running water with the eyelid wide open with eye washing bottle, eye douche or running water (protect intact eye).

#### 4.1.3 After INHALATION of vapours

After inhalation of foam or vapour fresh air should be inhaled. Keep airways free. Administer a Dexamethasone spray as soon as possible. Ensure quiet, warmth, and provide resuscitation if necessary. In the event of respiratory distress ensure that the patient inhales oxygen. Secure the breathing, heart and circulatory function. ---

#### 4.1.4 After ORAL Intake

After oral intake lots of water should be drunk after it has been ingested. ---

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

Chronic Effects: May cause sensitization by skin contact, also in repeated contact of small amounts. May cause allergy or asthma symptoms or breathing difficulties if inhaled. ---

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

Inform patient respectively further measures and the possibility of long-term damages. ---

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.

### 5.2 Special hazards arising from the substance or mixture

WARNING: Flammable (GHS regulation). May form explosive vapour-air mixtures. Formation of hazardous and caustic vapour-air mixtures possible. ---

### 5.3 Advice for firefighters

No, for listed product. Product package burns like paper or plastic.

### 5.4 Additional information

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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours. Regular staff training is necessary, indicating hazards and precautions on the basis of operating instructions. Restrictions on activity must be observed.

### 6.2 Environmental precautions

not necessary

### 6.3 Methods and material for containment and cleaning up

Bind any escaping liquid with inert absorbent. And dispose in accordance to local regulations for the disposal of hazardous chemicals. Clean any contaminated equipment and floors with plenty of water. Collect small amounts of leaked liquid and flush with water into drains.

### 6.4 Reference to other sections

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product. Use only in well-ventilated working areas.

### 7.2 Conditions for safe storage, including any incompatibilities

Storage class (VCI): 3  
Water hazard class (DE): 1

### 7.2.1 Requirements for stock rooms and containers

Keep original product packages tightly closed during handling and storage.

### 7.3 Specific end use(s)

Product for analytical use.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### 15 mL BB3

Chemical: *guanidine hydrochloride*

CAS No.: 50-01-1

DNEL: [inh] 3.5 mg/m<sup>3</sup>

DNEL = Derived No-Effect Level (for workers)

PNEC<sub>(fresh water)</sub>: -

PNEC = Predicted No Effect Concentration

NIOSH: not listed

[TWA] Time-weighted average to a reference period of 8 hours, [STEL] Short-term exposure limit related to a 15-minute period

OSHA: not listed

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Chemical: *polyoxyethylene sorbitan monolaurate (Tween® 20)* CAS No.: 9005-64-5

### 12 mL BB5

Chemical: *chemicals/mixture < 1%* CAS No.: -

### 13 mL BBE

Chemical: *chemicals/mixture < 1%* CAS No.: -

### 30 mL BBW

Chemical: *guanidine hydrochloride* CAS No.: 50-01-1

DNEL: [inh] 3.5 mg/m<sup>3</sup>

DNEL = Derived No-Effect Level (for workers)

PNEC<sub>(fresh water)</sub>: -  
PNEC = Predicted No Effect Concentration

NIOSH: not listed  
[TWA] Time-weighted average to a reference period of 8 hours, [STEL] Short-term exposure limit related to a 15-minute period

OSHA: not listed

Chemical: *2-propanol* CAS No.: 67-63-0

DNEL: [inh] 500 mg/m<sup>3</sup>

DNEL = Derived No-Effect Level (for workers)

PNEC<sub>(fresh water)</sub>: 140.9 mg/L  
PNEC = Predicted No Effect Concentration

TRGS 900 (DE): 200 ppm / 500 mg/m<sup>3</sup>  
E/e respirable

Short-term exposure factor: 2 (II), Y  
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

SUVA(CH) MAK value: 200 ppm / 500 mg/m<sup>3</sup>

TRGS 903 (DE): [Aceton B/b, U/b] 25 mg/L  
B blood, U urine, a no limitation, b end of exposition or shift

NIOSH: [TWA] 400 ppm / 980 mg/m<sup>3</sup>  
NIOSH STEL: 500 ppm / 1225 mg/m<sup>3</sup>  
[TWA] Time-weighted average to a reference period of 8 hours, [STEL] Short-term exposure limit related to a 15-minute period

OSHA: [TWA] 400 ppm / 980 mg/m<sup>3</sup>

### 1.8 mL PB

Chemical: *glycerole* CAS No.: 56-81-5

DNEL: [inh] 56 mg/m<sup>3</sup>

DNEL = Derived No-Effect Level (for workers)

PNEC<sub>(fresh water)</sub>: 0.885 mg/L  
PNEC = Predicted No Effect Concentration

TRGS 900 (DE): 200 E mg/m<sup>3</sup>  
E/e respirable

Short-term exposure factor: 2 (I), Y  
skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded

SUVA(CH) MAK value: 50 e\* mg/m<sup>3</sup>

### 1-75 mg Proteinase K (Iyo)

Chemical: *proteinase K (origin: tritirachium album)* CAS No.: 39450-01-6

SUVA(CH) MAK value: 0,00006<sub>15min</sub> mg/m<sup>3</sup>

## 8.2 Exposure controls

Good ventilation and extraction system in the room, floor resistant to chemicals with floor drainage and washing facilities. The highest level of cleanliness must be maintained at the workplace.

### 8.2.1 Respiratory protection

Use for open access of these substances for example a protection filter, class A/AX. No additional recommendations.

### 8.2.2 Hand protection

Yes, gloves according EN 374 (permeation time >30 min - level 2), consist of PVC, natural latex, Neopren, or Nitril (f.ex. from Ansell or KCL). Use for short times chemical resistant latex gloves with code EN 374-3 level 1.

### 8.2.3 Eye protection

Yes, safety glasses according EN 166 with integrated side shields or wrap-around protection.

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## 8.2.4 Skin protection

Recommended to avoid contamination with these hazards.

## 8.2.5 Personal hygiene

Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled, and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating, and then apply protective skin cream.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### 15 mL BB3

Appearance: liquid	Colour: slightly yellow	Odor: odorless
pH:	3.5-4	
Specific gravity:	1.15 g/cm <sup>3</sup>	

#### 12 mL BB5

Appearance: liquid	Colour: colourless	Odor: odorless
pH:	7-8	
Specific gravity:	1.00 g/cm <sup>3</sup>	

#### 13 mL BBE

Appearance: liquid	Colour: colourless	Odor: odorless
pH:	8-9	
Specific gravity:	1.0 g/cm <sup>3</sup>	

#### 30 mL BBW

Appearance: liquid	Colour: colourless	Odor: alcoholic
pH:	7-8	
Flash point:	25 °C	
Specific gravity:	1.06 g/cm <sup>3</sup>	

#### 1.8 mL PB

Appearance: liquid	Colour: colourless	Odor: alcoholic
Specific gravity:	1.11 g/cm <sup>3</sup>	

#### 1-75 mg Proteinase K (Iyo)

Appearance: solid (lyoph.)	Colour: slightly grey	Odor: odorless
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### 9.2 Other information

Data for the other parameters of the mixtures are not available, because no registration and no chemical safety report is required.

#### Relevant Properties of Substance Group

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

no further data available.

### 10.2 Chemical stability

No known instability.

### 10.3 Possibility of hazardous reactions

Note: Can form very reactive substances with oxidizing agents. No further data available.

### 10.4 Conditions to avoid

Not necessary. ---

### 10.5 Incompatible materials

Avoid contact with strong acids or alkalines.

### 10.6 Hazardous decomposition products



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In the original package all parts/all reagents are safety and separated stored. Decompositions are not observed during the expiration period under recommended conditions.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Following information is valid for pure substances. Quantitative data on the toxicity of this product are not available.

#### 15 mL BB3

Chemical:	<i>guanidine hydrochloride</i>	CAS No.:	50-01-1
TSCA Inventory:	listed	California Proposition 65 List:	not listed
Australia NICNAS:	not listed	Canada CEPA 1999:	DSL yes
Japan CSCL/PRTR:	not listed, Japan PDSCL:		not listed
Japan ISHL:	not listed		
South Korea TCCA:	not listed		
Korea Exist.Chem.Inventory:	KE-18111		
LD50 <sub>orl rat</sub> :	475-907 mg/kg		
LC50 <sub>ihl rat</sub> :	[4h] 3181-7655 µg/m <sup>3</sup>		
LD50 <sub>drm rbt</sub> :	2000 mg/kg		

Acute Effects: Cause after oral intake, impairments of health when ingested in small quantities.

Chemical:	<i>polyoxyethylene sorbitan monolaurate (Tween® 20)</i>	CAS No.:	9005-64-5
TSCA Inventory:	listed		
Korea Exist.Chem.Inventory:	KE-31681		

#### 12 mL BB5

Chemical:	<i>chemicals/mixture &lt; 1%</i>	CAS No.:	-
TSCA Inventory:	all listed, <1%		
Korea Exist.Chem.Inventory:	listed		

#### 13 mL BBE

Chemical:	<i>chemicals/mixture &lt; 1%</i>	CAS No.:	-
TSCA Inventory:	all listed, <1%		
Korea Exist.Chem.Inventory:	listed		

#### 30 mL BBW

Chemical:	<i>guanidine hydrochloride</i>	CAS No.:	50-01-1
TSCA Inventory:	listed	California Proposition 65 List:	not listed
Australia NICNAS:	not listed	Canada CEPA 1999:	DSL yes
Japan CSCL/PRTR:	not listed, Japan PDSCL:		not listed
Japan ISHL:	not listed		
South Korea TCCA:	not listed		
Korea Exist.Chem.Inventory:	KE-18111		
LD50 <sub>orl rat</sub> :	475-907 mg/kg		
LC50 <sub>ihl rat</sub> :	[4h] 3181-7655 µg/m <sup>3</sup>		
LD50 <sub>drm rbt</sub> :	2000 mg/kg		

Acute Effects: Cause after oral intake, impairments of health when ingested in small quantities.

Chemical:	<i>2-propanol</i>	CAS No.:	67-63-0
TSCA Inventory:	listed	California Proposition 65 List:	not listed
ACGIH:	1230 ppm		
Exposure Routes:	inhalation, ingestion, skin and/or eye contact		
Target Organs:	Eyes, skin, respiratory system		
Symptoms:	irritation eyes, nose, throat; drowsiness, dizziness, headache; dry cracking skin; in animals: narcosis		
Australia NICNAS:		Canada CEPA 1999:	DSL yes
Japan CSCL/PRTR:	PAC yes, Japan PDSCL: -		
Japan ISHL:	listed ≥1,0%/≥0,1%, Article 57-2 (SDS required)		
South Korea TCCA:			
Korea Exist.Chem.Inventory:	KE-29363		
LD50 <sub>orl rat</sub> :	5045 mg/kg		
LC <sub>Low<sub>orl</sub> hmn</sub> :	3570 mg/kg		
LC50 <sub>ihl rat</sub> :	164h g/m <sup>3</sup>		
LD50 <sub>drm rbt</sub> :	12.8 g/kg		

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TRGS 905 (DE): R<sub>F</sub> C

## 1.8 mL PB

Chemical: *glycerole* CAS No.: 56-81-5  
 TSCA Inventory: listed (1,2,3-Propanetriol)  
 Exposure Routes: inhalation, skin and/or eye contact  
 Target Organs: Eyes, skin, respiratory system, kidneys  
 Symptoms: irritation eyes, skin, respiratory system; headache, nausea, vomiting; kidney injury  
 Japan CSCL/PRTR: not listed, Japan PDSCL: not listed  
 Japan ISHL: not listed  
 Korea Exist.Chem.Inventory: KE-29297  
 LD50<sub>orl rat</sub>: 12.6 g/kg  
 LD50<sub>drm rbt</sub>: >18.7 g/kg

TRGS 905 (DE): R<sub>F</sub> C

## 1-75 mg Proteinase K (Iyo)

Chemical: *proteinase K (origin: tritirachium album)* CAS No.: 39450-01-6  
 TSCA Inventory: listed (CAS 102925-54-2)  
 Japan CSCL/PRTR: not listed  
 Japan ISHL: not listed  
 Korea Exist.Chem.Inventory: not listed  
 Acute Effects: Cause after impairments of health when ingested in small quantities.  
 Chronic Effects: May cause sensitization by skin contact, also in repeated contact of small amounts. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

## SECTION 12: Ecological information

### 12.1 Toxicity

Following information is valid for pure substances.

#### 15 mL BB3

Chemical: *guanidine hydrochloride* CAS No.: 50-01-1  
 PNEC(fresh water): -  
 PNEC = Predicted No Effect Concentration  
 LC50<sub>leuciscus idus/96h</sub>: 1759 mg/L  
 LC50<sub>fish/96h</sub>: [4d] 690-1850; [48h] 1758-2420 mg/L  
 EC50<sub>daphnia/48h</sub>: 70.2 mg/L  
 EC10<sub>pseudomonas putita/16h</sub>: [72h] 11.8-33.5 mg/L  
 Water hazard class (DE): 1 WGK No.: 0788  
 Storage class (VCI): 12

Chemical: *polyoxyethylene sorbitan monolaurate (Tween® 20)* CAS No.: 9005-64-5  
 Water hazard class (DE): 1  
 Storage class (VCI): 10-11

#### 12 mL BB5

Chemical: *chemicals/mixture < 1%* CAS No.: -  
 Water hazard class (DE): 1  
 Storage class (VCI): 12-13

#### 13 mL BBE

Chemical: *chemicals/mixture < 1%* CAS No.: -  
 Water hazard class (DE): 1  
 Storage class (VCI): 12-13

#### 30 mL BBW

Chemical: *guanidine hydrochloride* CAS No.: 50-01-1  
 PNEC(fresh water): -  
 PNEC = Predicted No Effect Concentration  
 LC50<sub>leuciscus idus/96h</sub>: 1759 mg/L  
 LC50<sub>fish/96h</sub>: [4d] 690-1850; [48h] 1758-2420 mg/L  
 EC50<sub>daphnia/48h</sub>: 70.2 mg/L

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EC10<sub>pseudomonas putita/16h</sub> : [72h] 11.8-33.5 mg/L  
Water hazard class (DE): 1 WGK No.: 0788  
Storage class (VCI): 12

Chemical: *2-propanol* CAS No.: 67-63-0  
PNEC<sub>(fresh water)</sub> : 140.9 mg/L  
PNEC = Predicted No Effect Concentration  
LC50<sub>fish/96h</sub> : 1400 mg/L  
EC50<sub>daphnia/48h</sub> : 13.3 g/L  
IC50<sub>scenedesmus quadricauda/72h</sub> : >1000 mg/L  
EC10<sub>pseudomonas putita/16h</sub> : EC5: 1050 mg/L  
Water hazard class (DE): 1 WGK No.: 0135  
Dispersion coefficient<sub>(octanol-water)</sub> : 0.05  
Storage class (VCI): 3

## 1.8 mL PB

Chemical: *glycerole* CAS No.: 56-81-5  
PNEC<sub>(fresh water)</sub> : 0.885 mg/L  
PNEC = Predicted No Effect Concentration  
LC50<sub>fish/96h</sub> : >5000<sub>24h</sub> mg/L  
EC50<sub>daphnia/48h</sub> : >10<sub>24h</sub> g/L  
IC50<sub>scenedesmus quadricauda/72h</sub> : IC57<sub>d</sub> >10 g/L  
EC10<sub>pseudomonas putita/16h</sub> : EC5: >10 g/L  
Water hazard class (DE): 0  
Dispersion coefficient<sub>(octanol-water)</sub> : -1.76  
Storage class (VCI): 10

## 1-75 mg Proteinase K (Iyo)

Chemical: *proteinase K (origin: tritirachium album)* CAS No.: 39450-01-6  
Water hazard class (DE): 1  
Storage class (VCI): 13

## 12.2 Persistence and degradability

not necessary

## 12.3 Bioaccumulative potential

not necessary

## 12.4 Mobility in soil

not necessary

## 12.5 Results of PBT and vPvB assessment

no data available

## 12.6 Other adverse effects

no additional data available

## SECTION 13: Disposal considerations

Please observe local regulations for collection and disposal of hazardous waste and contact waste disposal company, where you will obtain information on laboratory waste disposal (waste code number 16 05 06).

### 13.1 Waste treatment methods

Normally it is possible to empty small amounts (diluted!) into drains.

## SECTION 14: Transport information

UN 1993 class 3 III, **Excepted Quantities** ( $\leq 30 \text{ mL} / \Sigma \leq 1 \text{ L}$ ) = ADR/ IATA E1

or

**14.1 UN number:** 1993 **14.2 UN proper shipping name:** Flammable liquid, n.o.s. (2-propanol mixture)

**14.3 Class:** 3 **14.4 Packing group:** III

Road transport

Classification code: F1

Limited Quantity: 5 L

Excepted Quantity: E 1

Air transport

PAX: 355

Tunnel restriction code: E

Special instructions: 640E

max. weight PAX: 60 L

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CAO:	366	max. weight CAO:	220 L
Maritime transport			
EmS:	F-E, S-E	Storage category:	A

## 14.5 Environmental hazards

none, contains only small quantities of hazardous substances

## 14.6 Special precautions for user

not necessary

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

not applicable

## SECTION 15: Regulatory information

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

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013  
 German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC  
 TRGS 200, German engineering rules governing the classification and labelling of hazardous substances, preparations and products, updated October 2011  
 MN Leaflet/User manual, also see [www.mn-net.com](http://www.mn-net.com)  
 Look for your country-specific regulations.

### 15.2 Chemical safety assessment

not necessary for these small amounts ---

## SECTION 16: Other information

### 16.1 List of H and P phrases

#### 16.1.1 List of relevant H phrases

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H336	May cause drowsiness or dizziness.

#### 16.1.2 List of relevant P phrases

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P260D	Do not breathe vapours.
P261sh	Avoid breathing dust/vapours.
P264W	Wash with water thoroughly after handling.
P280sh	Wear protective gloves/eye protection.
P301+312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P304+340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P330	Rinse mouth.
P342+311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

### 16.2 Training advice

Multiple safety training of staffs about danger and protection by using hazards in working area. Additionally training and introduction of staffs for using these products.

### 16.3 Recommended restriction on use

Only for professional user.

Look about employee restrictions for young people (f. ex. 94/33/EC or DE § 22 JArbSchG)!

Look about employee restrictions for pregnant women and nursing women (f.ex. 92/85/EEC or for DE §§ 11-13 MuSchG 2017)!

An individual package of this product or test kit has a moderate hazardous potential.

### 16.4 Further information

Biotoools B&M Labs S.A. provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

Biotoools B&M Labs S.A. makes NO REPRESENTATIONS or WARRANTIES, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly Biotoools B&M Labs S.A. will not be responsible for damages resulting

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from use of or reliance upon this information. See terms and conditions at the end of our price lists for additional information.

## 16.5 Sources of key data

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS

Regulation 487/2013/EU, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress

Regulation 669/2018/EU, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress

Regulation 1480/2018/EU, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress

TRGS 900, German engineering rules governing limits in air at work, updated 03/2019

SUVA .CH, Limits in air at work 2009, revised on 01.2009

TRGS 907, German engineering rules governing listing of substances and causes of sensitizations, updated November 2011

KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

### Revisions/Updates

*Reason for Revision: 2016-03 Adaptation of regulation 1221/2015/EU*

*2017-11 Adaptation of ECHA Registration dossier*