

# MATERIAL SAFETY DATA SHEET

According to EC Directive 1907/2006  
Revision Date: 30.08.12 MS-50122 V01



A Meridian Life Science® Company

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Trade Name : ISOLATE II Plasmid Mini Kit

Catalogue Number : BIO-52055 10 preps  
BIO-52056 50 preps  
BIO-52057 250 preps

Manufacturer/ Supplier: Headquarters  
  
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## 2. HAZARD IDENTIFICATION

<b>Product name</b>	<b>Directive 1999/45/EC</b>	<b>GHS Directive 1272/2008/EC</b>
Resuspension Buffer P1 Lysis Buffer P2	Does not need labelling as hazardous Does not need labelling as hazardous	Does not need labelling as hazardous WARNING  H290 – Met. Corr. 1 H315 – Skin Irrit.2 H319 – Eye Irrit.2
Neutralization Buffer P3	<b>IRRITANT</b>  R36 – Irritating to eyes	 H302 – Acute Tox. 4 oral H319 – Eye Irrit. 2
Wash Buffer PW1	<b>IRRITANT</b>  R36 – Irritating to eyes	<b>WARNING</b>  H226 – Flam. Liq 3 H302 – Acute Tox. 4 oral H319 – Eye Irrit. 2
Wash Buffer PW2 (Concentrate) Elution Buffer P	Does not need labelling as hazardous Does not need labelling as hazardous	H336 – STOT SE 3 Does not need labelling as hazardous Does not need labelling as hazardous
RNase A (lyophilized)	<b>HARMFUL</b>  R42/43 – May cause sensitisation by inhalation and skin contact	<b>WARNING</b>  H317 – Skin Sens. 1A/1B H334 – Resp. Sens. 1A/1B

According to Regulation (EC) No1272/2008  
 Flammable Liquid (Category 3)  
 Substance or mixture corrosive to metals (Category 1)  
 Acute Toxicity, Oral (Category 4)  
 Skin Irritant (Category 2)  
 Eye Irritant (Category 2)  
 Specific Target Organ Toxicity – Single Exposure (Category 3)

According to European Directive 67/548/EEC as amended.  
 Xi – Irritant. Irritating to eyes.  
 Xn – Harmful. May cause sensitisation by inhalation and skin contact.

### Label elements

Pictogram



Signal word

Warning

**Hazard statement(s)**

H226 Flammable liquid and vapour.  
 H290 Maybe corrosive to metals.  
 H302 Harmful if swallowed.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

**Precautionary statement(s)**

P261S Avoid breathing dust/fume/gas/mist/vapours/spray  
 P280sh Wear protective gloves/protective clothing  
 P302+352 IF ON SKIN: wash with plenty of soap and water  
 P304+341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing  
 P333+313 IF SKIN irritation or rash occurs: Get medical advice  
 P342+311 If experiencing respiratory symptoms: call a POISON CENTER or doctor  
 P363 Wash contaminated clothing before reuse

**Hazard symbol(s)**

Xi Irritant  
 Xn Harmful

**R-phrases(s)**

R36 Irritating to eyes.  
 R42/43 May cause sensitization by inhalation and skin contact.

**S-phrases(s)**

S26-37/39 Wear suitable protective clothing and gloves. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice  
 S26-39 Wear eye/face protection. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice  
 S16-26-39 Keep away from sources of ignition - No smoking. Wear eye/face protection. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice  
 S22 Do not breathe dust

**Other hazards**

none

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Mixture of hazardous substances listed below with non-hazardous additions.

Chemical name	CAS-No.	EC-No.	Concentration	Classification
Lysis Buffer P2				
Sodium hydroxide solution	1310-73-2	215-185-5	0.5-2%	H290; H315; H319; R36/38
Neutralization buffer A3				
Guanidine hydrochloride	50-01-1	200-002-3	36-50%	H302; H319; R22-36
Binding Buffer PB				

Guanidine hydrochloride	50-01-1	200-002-3	36-50%	H302; H319; R22-36
2-propanol	67-63-0	200-661-7	20-50%	H226; H319; H336; R10-36-67
RNase A (lyophilized)				
RNase	9001-99-4	232-646-6	90-100%	H317; H334; R42/43

#### 4. FIRST AID MEASURES

##### After Inhalation

Remove to fresh air. Keep airways free.

##### After Swallowing

Drink lots of water after ingestion.

##### After Contact with Eyes

Rinse eyes with running water with eyelids open. Tilt the head to prevent chemical transferring to uncontaminated eye.

##### After Contact with Skin

Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. Use soap if possible.

##### Note to Physician

No additional recommendations

#### 5. FIRE FIGHTING MEASURES

##### Suitable Extinguishing Media

All extinguishers can be used, including fire blankets.

##### Unusual Fire Hazard

Formation of hazardous and caustic vapour-air mixtures possible. Only when there is a large scale leak is there danger to the environment, or on the formation of hazardous substances.

##### Fire Fighting Protective Measures

Wear full protective clothing to prevent contact with the skin and eyes.

Wear self-contained breathing equipment to prevent inhalation of explosive or combustion gases. Fight fire from a safe distance and a protected location due to the potential of hazardous vapours and decomposition products. Product package burns like paper of plastic. Spray vapours with water. Retain fire water. Use only acid-resistant safety equipment.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal Precautions

Ensure ventilation is adequate. Only to be used by trained staff. Refer to section 8 for personal protection equipment recommendations.

##### Environmental Precautions

Allow into drains only in small amounts with copious amounts of water.

##### Clean-up Measures

Prevent the spread of any spill in order to minimise harm to human health and the environment if it is safe to do so. Use a liquid-binding material (e.g. sand, sawdust, diatomite etc.) to absorb the spillage. Place in closed containers for disposal. Ventilate area well after clean-up procedures have taken place.

#### 7. HANDLING AND STORAGE

**Handling**

In accordance with the instructions that come with the product. Use good laboratory handling procedures.

**Storage**

Packaging allows safe storage. Refer to section 12 for further details.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Engineering Measures**

Local exhaust ventilation or other engineering controls are normally required when handling this product to avoid overexposure.

**Ingredients with Limit Values**

	Sodium hydroxide	2-propanol
CAS No.	1310-73-2	67-63-0
TRGS 900 (DE)	(2E) mg/m <sup>3</sup>	200 ppm / 500 mg/m <sup>3</sup>
Short term exposure factor	=1=	2 (II)
SUVA(CH) MAK value	2e mg/m <sup>3</sup>	200 ppm / 500 mg/m <sup>3</sup>
TRGS 903 (DE)	-	B/b, U/b 50 <sub>Aceton</sub> µg/L
TRGS 905 (DE)	-	R <sub>F</sub> C
NIOSH REL	-	500 ppm
NIOSH STEL	-	1225 mg/m <sup>3</sup>
OSHA PEL	-	400 ppm; 980 mg/m <sup>3</sup>

**Personal Protection**

**Respiratory Protection:** Only if additional recommendations in test instruction or packing insert.

**Eye Protection:** An eye wash station must be available where this product is used. Wear chemically resistant, tightly fitting safety goggles or glasses with side-shields, according to EN 166.

**Skin Protection:** Prevent all contact with this product. Protective gloves, apron, face and further skin protection should be used depending on conditions of use, according to EN 374. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment thoroughly after each use.

**Hygiene Practices:** Avoid contact with skin or eyes. Do not place in mouth. Do not eat, drink or smoke when handling this product. Upon completion of the use of this product, dispose of protective gloves safely and wash hands thoroughly with soap and water.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

	Colour	Odour	Appearance	pH	Flash point	Sol. In water
Resuspension Buffer P1	Colourless	Odourless	Liquid	7.5-8.5	-	-
Lysis Buffer P2	Colourless	Odourless	Liquid	>12	-	-
Neutralization Buffer P3	Colourless	Acetic	Liquid	4-4.5	-	-
Wash Buffer PW1	Yellow	Odourless	Liquid	7-8	-	-
Wash Buffer PW2	Colourless	Odourless	Liquid	8-9	-	-
Elution Buffer P	Colourless	Alcoholic	Liquid	7-8	25°C	-
RNase A (lyophilized)	Colourless	Odourless	Solid (lyoph)	-	-	0-100%

## 10. STABILITY AND REACTIVITY

### Stability

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

### Reactivity

Can form reactive substances with oxidizing agents.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

	Lysis buffer P2 Sodium hydroxide 1310-73-2	Neutralisation buffer P2 Guanidine hydrochloride 50-01-1	Wash buffer PW1 Guanidine hydrochloride 50-01-1		2-propanol 67-63-0	RNase A 9001-99-4
LD50 <sub>ori rat</sub>	500 100% mg/kg	475 mg/kg	475 mg/kg	475 mg/kg	5045 mg/kg	-
LD50 <sub>inh rat</sub>	-	5.3 <sub>4h</sub> mg/m <sup>3</sup>	5.3 <sub>4h</sub> mg/m <sup>3</sup>	5.3 <sub>4h</sub> mg/m <sup>3</sup>	16 g/m <sup>3</sup> /4h	-
LD50 <sub>drm rbt</sub>	10 g/kg	>2000 mg/kg	>2000 mg/kg	>2000 mg/kg	12.8 g/kg	-
LD <sub>LoW</sub> <sub>inh opa</sub>	-	-	-	-	-	-
LD <sub>LoW</sub> <sub>orl hmn</sub>	-	-	-	-	3570 mg/kg	-
LD50 <sub>inh mouse</sub>	-	-	-	-	-	-
LD50 <sub>oral mouse</sub>	-	-	-	-	-	-
LD50 <sub>intrapitoneaal rat</sub>	-	-	-	-	-	392 mg/kg

Data on other components is either not available or not required.

## 12. ECOLOGICAL INFORMATION

	Resuspension buffer P1	Lysis buffer P2 Sodium hydroxide solution 1310-73-2	Neutralisation buffer P3 Guanidine hydrochloride 50-01-1	Wash buffer PW1 Guanidine hydrochloride 50-01-1		2-propanol 67-63-0	Wash buffer PW2 <1% no declaration necessary	Elution Buffer P <1% no declaration necessary	RNase A 9001-99-4
Bio Toxicity	<1% no declaration necessary	<1% no declaration necessary	<1% no declaration necessary	<1% no declaration necessary	<1% no declaration necessary	<1% no declaration necessary	<1% no declaration necessary	<1% no declaration necessary	<1% no declaration necessary
WGK (DE)	1	1 (0142)	1 (0788)	1 (0788)	1 (0135)	1	1	1	1
Storage class (VCI)	12	8B	12	12	3A	12	12	12	13

Data on other components is either not available or not required.

## 13. DISPOSAL CONSIDERATIONS

**Product Disposal**

Must be disposed of according to all local official regulations (waste code: 16 05 06).

**Packaging Disposal**

Unclean packaging should be disposed of according to all local official regulations.

**14. TRANSPORT INFORMATION**

Not necessary.

**15. REGULATORY INFORMATION**

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

**Label elements**

Pictogram



Signal word

Warning

**Hazard statement(s)**

H226  
H290  
H302  
H315  
H336

Flammable liquid and vapour.  
Maybe corrosive to metals.  
Harmful if swallowed.  
Causes skin irritation.  
May cause drowsiness or dizziness.

**Precautionary statement(s)**

P261S  
  
P280sh  
P302+352  
  
P304+341  
  
P333+313  
  
P342+311  
  
P363

Avoid breathing  
dust/fume/gas/mist/vapours/spray  
Wear protective gloves/protective clothing  
IF ON SKIN: wash with plenty of soap and  
water  
IF INHALED: If breathing is difficult, remove  
victim to fresh air and keep at rest in a position  
comfortable for breathing  
IF SKIN irritation or rash occurs: Get medical  
advice  
If experiencing respiratory symptoms: call a  
POISON CENTER or doctor  
Wash contaminated clothing before reuse

**Hazard symbol(s)**

Xi  
Xn

Irritant  
Harmful

**R-pharse(s)**

R36  
R42/43

Irritating to eyes.  
May cause sensitization by inhalation and skin  
contact.

**S-pharse(s)**

S26-37/39

Wear suitable protective clothing and gloves. In  
case of contact with eyes, rinse immediately  
with plenty of water and seek medical advice  
Wear eye/face protection. In case of contact  
with eyes, rinse immediately with plenty of

S26-39

S16-26-39	water and seek medical advice Keep away from sources of ignition - No smoking. Wear eye/face protection. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S22	Do not breathe dust
<b>Other hazards</b>	none

**16. OTHER INFORMATION**

The information provided in this Material Safety Data Sheet (MSDS) is accurate to the best of our present knowledge. However, this shall not constitute a guarantee for any specific product features. All substances and preparations may present unknown hazards and should be used with caution. Bioline shall not be held liable for any damage resulting from the handling of or from contact with the above product. The information supplied in this MSDS shall not establish a legally valid contractual relationship.