

# MATERIAL SAFETY DATA SHEET

According to EC Directive 1907/2006  
Revision Date: 30.08.12 MS-50128 V02



A Meridian Life Science® Company

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

Trade Name : ISOLATE II Plasmid Buffer Set

Catalogue Number : BIO-52078 300 preps

Manufacturer/ Supplier: Headquarters  
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**Other regions**  
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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	WARNING  H302 – Acute Tox. 4 oral H319 – Eye Irrit. 2
RNase A (lyophilized)	<b>HARMFUL</b>  R42/43 – May cause sensitisation by inhalation and skin contact	WARNING  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)

H290	Maybe corrosive to metals.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled

### Precautionary statement(s)

P261S	Avoid breathing dust/fume/gas/mist/vapours/spray
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P280sh  
P302+352  
P304+341  
P333+313  
P342+311  
P363

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 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 P3				
Guanidine hydrochloride	50-01-1	200-002-3	36-50%	H302; H319; R22-36
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 or 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
CAS No.	1310-73-2
TRGS 900 (DE)	(2E) mg/m <sup>3</sup>
Short term exposure factor	=1=
SUVA(CH) MAK value	2e mg/m <sup>3</sup>
TRGS 903 (DE)	-
TRGS 905 (DE)	-
NIOSH REL	-
NIOSH STEL	-
OSHA PEL	-

### 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	-	-
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 P3 Guanidine hydrochloride 50-01-1	RNase A RNase 9001-99-4
LD50 <sub>ori rat</sub>	500 100% mg/kg	475 mg/kg	-
LD50 <sub>ihl rat</sub>	-	5.3 <sub>ah</sub> mg/m <sup>3</sup>	-
LD50 <sub>drm rbt</sub>	10 g/kg	>2000 mg/kg	-
LD <sub>LoW</sub> <sub>ihl qpg</sub>	-	-	-
LD <sub>LoW</sub> <sub>ori hmn</sub>	-	-	-
LD50 <sub>ihl 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	Neutralisation buffer P3	RNase A
	<1% no declaration necessary	Sodium hydroxide solution 1310-73-2	Guanidine hydrochloride 50-01-1	RNase 9001-99-4
Bio Toxicity	-	-	3/2.6/2.2-3.4	-
WGK (DE)	1	1 (0142)	1 (0788)	1
Storage class (VCI)	12	8B	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**

Class 3 III, **excepted quantities** ( $\leq 30\text{ml}/\Sigma \leq 1\text{L}$ ) = ADR/IATA E1

**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)**

H290

Maybe corrosive to metals.

H302

Harmful if swallowed.

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H319  
H334

Causes serious eye irritation.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled

**Precautionary statement(s)**

P261S

Avoid breathing  
dust/fume/gas/mist/vapours/spray

P280sh  
P302+352

Wear protective gloves/protective clothing  
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  
Xn

Irritant  
Harmful

**R-phrases(s)**

R36  
R42/43

Irritating to eyes.  
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  
Wear eye/face protection. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S26-39

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

**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.