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

#### 1.1. Product identifier

<table>
<thead>
<tr>
<th>Product form</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade name</td>
<td>POLYBRENE, 10MG/ML AQUEOUS SOLUTION</td>
</tr>
<tr>
<td>Product code</td>
<td>AB01643</td>
</tr>
</tbody>
</table>

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

Use of the substance/mixture: Laboratory use/Manufacturing component/Research

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

AmericanBio, Inc.
15 Erie Dr.
Natick, MA 01760 - USA
T 800.443.0600 - F 508.655.2754
info@americanbio.com - www.americanbio.com

#### 1.4. Emergency telephone number

Emergency number: 855.835.2572 (U.S.) :: 760.602.8703 (Outside U.S.)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

**Classification (GHS-US)**

Skin Irrit. 2  H315

#### 2.2. Label elements

**GHS-US labeling**

Hazard pictograms (GHS-US): ![GHS07]

Signal word (GHS-US): Warning

Hazard statements (GHS-US): H315 - Causes skin irritation

Precautionary statements (GHS-US):
- P264 - Wash hands, forearms, face thoroughly after handling
- P280 - Wear eye protection, protective clothing, protective gloves
- P302+P352 - IF ON SKIN: Wash with plenty of soap and water
- P321 - Specific treatment (see SECTION 4 on this label)
- P332+P313 - If skin irritation occurs: Get medical advice/attention
- P362 - Take off contaminated clothing and wash before reuse

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>polybrene</td>
<td>(CAS No) 28728-55-4</td>
<td>&lt; 10</td>
<td>Skin Irrit. 2, H315</td>
</tr>
</tbody>
</table>

STOT SE 3, H335

Full text of H-phrases: see section 16

#### 3.2. Mixture

Not applicable
## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<table>
<thead>
<tr>
<th>First-aid measures general</th>
<th>Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-aid measures after inhalation</td>
<td>Assure fresh air breathing. Allow the victim to rest.</td>
</tr>
<tr>
<td>First-aid measures after skin contact</td>
<td>Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Consult a doctor/medical service. Get medical advice/attention. Specific treatment (see Consult a doctor/medical service on this label).</td>
</tr>
<tr>
<td>First-aid measures after eye contact</td>
<td>Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.</td>
</tr>
<tr>
<td>First-aid measures after ingestion</td>
<td>Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.</td>
</tr>
</tbody>
</table>

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

| Symptoms/injuries after skin contact | Causes skin irritation. |

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

No additional information available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

| Unsuitable extinguishing media | Do not use a heavy water stream. |

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

No additional information available

### 5.3 Advice for firefighters

| Firefighting instructions | Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment. |
| Protection during firefighting | Do not enter fire area without proper protective equipment, including respiratory protection. |

## SECTION 6: Accidental release measures

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

#### 6.1.1 For non-emergency personnel

| Emergency procedures | Evacuate unnecessary personnel. |

#### 6.1.2 For emergency responders

| Protective equipment | Equip cleanup crew with proper protection. |
| Emergency procedures | Ventilate area. |

### 6.2 Environmental precautions

| Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. |

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

| Methods for cleaning up | Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. |

### 6.4 Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

| Precautions for safe handling | Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor. |
| Hygiene measures | Wash hands, forearms, face thoroughly after handling. |

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

| Storage conditions | Keep only in the original container in a cool, well ventilated place away from : Direct sunlight. Keep container closed when not in use. |
| Incompatible products | Strong bases. strong acids. |
| Incompatible materials | Sources of ignition. Direct sunlight. |

### 7.3 Specific end use(s)

No additional information available
SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No additional information available

8.2. Exposure controls
Personal protective equipment : Avoid all unnecessary exposure.
Hand protection : Wear protective gloves.
Eye protection : Chemical goggles or safety glasses.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : Wear approved mask.
Other information : When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>characteristic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Self ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Not established.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials
Strong acids. Strong bases.
10.6. **Hazardous decomposition products**


SECTION 11: Toxicological information

11.1. **Information on toxicological effects**

- **Acute toxicity**: Not classified
- **Skin corrosion/irritation**: Causes skin irritation.
- **Serious eye damage/irritation**: Not classified
- **Respiratory or skin sensitization**: Not classified
- **Germ cell mutagenicity**: Not classified
- **Carcinogenicity**: Not classified
- **Reproductive toxicity**: Not classified
- **Specific target organ toxicity (single exposure)**: Not classified
- **Specific target organ toxicity (repeated exposure)**: Not classified
- **Aspiration hazard**: Not classified

**Potential Adverse human health effects and symptoms**

- **Symptoms/injuries after skin contact**: Causes skin irritation.

SECTION 12: Ecological information

12.1. **Toxicity**

No additional information available

12.2. **Persistence and degradability**

**POLYBRENE, 10MG/ML AQUEOUS SOLUTION**

- **Persistence and degradability**: Not established.

**polybrene (28728-55-4)**

- **Persistence and degradability**: Biodegradability in water: no data available.

12.3. **Bioaccumulative potential**

**POLYBRENE, 10MG/ML AQUEOUS SOLUTION**

- **Bioaccumulative potential**: Not established.

**polybrene (28728-55-4)**

- **Bioaccumulative potential**: No bioaccumulation data available.

12.4. **Mobility in soil**

No additional information available

12.5. **Other adverse effects**

- **Other information**: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. **Waste treatment methods**

- **Waste disposal recommendations**: Dispose in a safe manner in accordance with local/national regulations.
- **Ecology - waste materials**: Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

No dangerous good in sense of transport regulations

**Additional information**

- **Other information**: No supplementary information available.
POLYBRENE, 10MG/ML AQUEOUS SOLUTION
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ADR
Transport document description : UN N/A
Packing group (ADR) : N/A
Hazard identification number (Kemler No.) : N/A
Classification code (ADR) : N/A

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations
polybrene (28728-55-4)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations
CANADA
No additional information available

EU-Regulations
No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC
Not classified

15.2.2. National regulations
No additional information available

15.3. US State regulations
No additional information available

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

<table>
<thead>
<tr>
<th>H-Phrase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation Category 2</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity (single exposure) Category 3</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom 2012)

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