Material Safety Data Sheet
Revision: 01/24/2006

Hazard information is provided for compliance with both the UK Chemicals (Hazard Information and Packaging) (CHIP) Regulations and the US Hazard Communication Standard (HCS)

IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

PRODUCT NAME: PrepEase™ Quick MiniSpin Plasmid Kit
PRODUCT CODE: 78740 / 78741 / 78742
EEC NUMBER: None

SUPPLIER:
USB Corporation, 26111 Miles Road, Cleveland, Ohio 44128   Phone: (216) 765-5000
Chemtrec  (800) 424-9300
Outside USA & Canada 703 527 3887

Please visit our website at www.usbweb.com for contact information on USB product distributors within your area.

COMPOSITION/HAZARDOUS COMPONENTS

<table>
<thead>
<tr>
<th>HAZARDOUS COMPONENTS</th>
<th>HAZARD</th>
<th>CAS NO.</th>
<th>%WT</th>
<th>TLV</th>
<th>CHIP R &amp; S Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guanidine Hydrochloride</td>
<td>Harmful (Guanidine Hydrochloride and SDS); Irritant (SDS and Sodium Hydroxide)</td>
<td>50-01-1</td>
<td>~30%</td>
<td>—</td>
<td>R:22 Harmful if swallowed. R:36/38 Irritating to eyes and skin. S:23 Do not breathe vapour. See &quot;Regulatory Information&quot; Section</td>
</tr>
<tr>
<td>Sodium Dodecyl Sulfate (SDS)</td>
<td>Toxics (Guanidine Hydrochloride); Irritants (SDS and Sodium Hydroxide)</td>
<td>151-21-3</td>
<td>~1.0%</td>
<td>—</td>
<td>For A2 Buffer: R:22 Harmful if swallowed. R:36/37/38 Irritating to eyes, respiratory system and skin. S:24/25 Avoid contact with skin and eyes. S:26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>Harmful (Guanidine Hydrochloride and Sodium Dodecyl Sulfate); Irritant (Sodium Hydroxide)</td>
<td>1310-73-2</td>
<td>&lt;1%</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>

HAZARDS IDENTIFICATION

CHIP
Harmful (Guanidine Hydrochloride and SDS); Irritant (Sodium Hydroxide)

HCS
Toxic (Guanidine Hydrochloride); Irritant (SDS and Sodium Hydroxide)

FIRST-AID MEASURES

EYES: Flush with water for 15 minutes. Seek medical advice if irritation persists.
SKIN: Flush with water, then wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if irritation persists.
INHALATION: Remove the victim from exposure and move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Keep victim quiet and warm. Seek immediate medical attention.
INGESTION: Drink water and seek immediate medical attention. Avoid alcoholic beverages. Never give anything by mouth to an unconscious person.

FIRE-FIGHTING INFORMATION

Use media suitable to extinguish the supporting or surrounding fire. Wear NIOSH (or equivalent) approved self contained breathing apparatus. For small fires only: use carbon dioxide, dry powder or foam. Emits toxic fumes under fire conditions.
Flash Point = 212°F (Closed cup for SDS).

ACCIDENTAL RELEASE MEASURES

Eliminate all sources of ignition. Wear appropriate personal protective equipment and clothing including lab coat, safety goggles, gloves and NIOSH-approved respirator. Use non-sparking tools. Absorb with sand or vermiculite. Collect in a manner that does not create dust and place in a suitable waste container. Avoid contact of material with skin or eyes. Use adequate ventilation.

HANDLING AND STORAGE

Wear appropriate personal protective equipment and clothing including lab coat, safety goggles, gloves and NIOSH-approved respirator. Avoid contact of material with skin or eyes. Use adequate ventilation. Avoid heat, sparks and open flame. Store ambient away from incompatible materials.

PERSONAL PROTECTION

Wear appropriate personal protective equipment and clothing including lab coat, safety goggles, gloves and NIOSH-approved respirator. A qualified industrial hygienist should evaluate the need for respiratory protection. Use respiratory protection approved by NIOSH (or equivalent) and appropriate to the hazard. Avoid contact of material with skin or eyes. Mechanical ventilation or local exhaust as needed to control exposure to dust, vapors or mists. Access to a safety shower and eye-wash.

MSDS information may be continued on back of page.
PHYSICAL AND CHEMICAL PROPERTIES
Appearance: Kit containing vials of solution (SDS may precipitate)  Boiling Point: No data available
Vapor Pressure: No data available  Solubility (Water): Soluble  Specific Gravity: No data available
Percent Volatile: No data available  Evaporation Rate: No data available
Chemical Formula: Kit

STABILITY AND REACTIVITY
Product is stable. Avoid heat and acidic conditions. For A3 Buffer: Hazardous decomposition products include hydrogen chloride gas and oxides of nitrogen and carbon. Incompatible with strong oxidizing agents. Hazardous polymerization will not occur. For A2 Buffer: Hazardous decomposition products include sulfur, carbon and sodium oxides. Incompatible with strong oxidizing agents, metals, acids, aluminum, tin and zinc. Hazardous polymerization will not occur.

TOXICOLOGICAL INFORMATION
EFFECTS OF OVEREXPOSURE:
FOR A3 BUFFER (Guanidine Hydrochloride):
EYES: Vapors may cause irritation or burning upon contact.
SKIN: May be harmful if absorbed through the skin. Causes severe irritation to skin and hypersensitive individuals may experience an allergic reaction.
INHALATION: May be harmful if inhaled. May cause irritation to mucous membranes and upper respiratory tract.
INGESTION: Harmful if swallowed. Chronic ingestion or excessive dosage may cause gastrointestinal tract irritation with nausea, vomiting and diarrhea. May cause central nervous system disorders.
TARGET ORGAN(S): Bone Marrow and Nerves.
FOR A2 BUFFER (SDS and Sodium Hydroxide):
EYES: Contact may cause severe irritation.
SKIN: Contact may cause irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.
INHALATION: May be harmful if inhaled. May cause allergic respiratory reaction. May cause irritation to mucous membranes and upper respiratory tract.
INGESTION: Harmful if swallowed. Chronic ingestion or excessive dosage may cause irritation of the gastrointestinal tract with nausea, vomiting and diarrhea.
ADDITIONAL INFORMATION:
Only select RTECS information is provided here. Please see actual RTECS entries for complete information.
Irritation, mutation and toxicity data for Guanidine Hydrochloride listed in RTECS under MF4300000.
Irritation data: Skin Rabbit 500 mg/24H = Severe. Eye Rabbit 81400 ug = Moderate.
Toxicity data: Oral Rat LD50 = 475 mg/kg. Toxic effects may include altered sleep time (including change in righting reflex), excitement, hypermotility and diarrhea.
Reproductive effects, irritation, mutation and toxicity data for SDS listed in RTECS under WT1050000.
Irritation data: Skin Rabbit 50 mg/24H = Severe (1971). Eye Rabbit 100 mg/24H = Moderate (1972).
Toxicity data: Oral Rat LD50 = 1288 mg/kg (1967). Inhalation Rat LC50 = >3900 mg/m3/1H (1971).
Reproductive data: Effects on embryo or fetus included fetotoxicity (except death, e.g. stunted fetus).
Irritation, mutation and toxicity data for Sodium Hydroxide listed in RTECS under WB4900000.
Irritation data: Skin Rabbit 500 mg/24H = Severe (1972). Eye Rabbit 1 mg/24H = Severe (1964).
Toxicity data: Intraperitoneal Mouse LD50 = 40 mg/kg (1963).
Definition(s): RTECS = Registry of Toxic Effects of Chemical Substances.
OSHA = Occupational Safety and Health Administration.
ACGIH = American Conference of Governmental Industrial Hygienists.

ECOLOGICAL INFORMATION
No information available.

DISPOSAL CONSIDERATIONS
Dispose of material in accordance with applicable local, state, and federal regulations.

TRANSPORTATION INFORMATION
US DOT / IATA: No applicable information.

REGULATORY INFORMATION
RCRA - No applicable information.
SARA 302 - No applicable information.
SARA 313 - No applicable information.
SARA 311/312 - acute (Guanidine Hydrochloride).
EPA TSCA Section 8(b) - All listed components: Chemical Inventory.
Exposure Limits - For Sodium Hydroxide: ACGIH TLV-CL 2 mg/m3.
OSHA PEL (Gen Indu): 8H TWA 2 mg/m3.
California Proposition 65 - No applicable information.

This data sheet is based upon information believed to be reliable. The Company makes no statement or warranty as to the accuracy or completeness of the information contained herein which is offered for your consideration, investigation and verification. Any use of the information contained in this data sheet must be determined by the user to be in accordance with appropriate applicable regulations.