1. **Identification of the substance/preparation and of the company**

   - Identification of the substance or preparation:
     
     **Gel Solubilization Buffer (L1)**
     
     SKU: NP100012, NP100013, NP100014
     
     Order Numbers: 11456-019, 11456-027, 11457-017
     
   - Company Identification:
     
     OriGene Technologies, Inc
     
     9620 Medical Center Drive, Suite 200 Rockville, MD 20850
     
     Tel: (301)-340-3188, Fax: (301)-340-9254
     
   - Emergency Address:
     
     OriGene Technologies, Inc
     
     9620 Medical Center Drive, Suite 200 Rockville, MD 20850
     
     Tel: (301)-340-3188, Fax: (301)-340-9254

2. **Composition/information on ingredients**

   2 - 8 M sodium perchlorate (CAS # 7791-07-3)

3. **Hazards identification**

   May be harmful by inhalation, ingestion, or skin absorption. Vapor or mist is irritating to eyes, mucous membranes, and upper respiratory tract. Blood and thyroid gland can be affected. Avoid contact or inhalation.

   LD$_{50}$ (sodium perchlorate): 2100 mg/kg (rat, oral)

4. **First aid measures**

   In case of contact with eyes, rinse immediately with plenty of water and seek medical advise. After contact with skin, wash immediately with plenty of water and soap. If swallowed rinse mouth with plenty of water and seek medical advise. Wash contaminated clothing before next use.

5. **Fire-fighting measures**

   Oxidizing agent; explosive when mixed with combustible material. Emits irritating and toxic decomposition products under fire conditions. Choose CO$_2$ water, dry chemicals or polymer foam as extinguishing media. Wear self contained breathing apparatus, approved gas mask and protective clothing to avoid contact with eyes and skin.

6. **Accidental release measures**

   - personal precautions such as: Wear rubber or latex gloves, safety goggles and suitable protective clothing.
   
   - methods for cleaning up such as: Wipe up liquid and dispose in accordance with state or local laws. Avoid aerosols. Clean and ventilate the concerning area after complete removal of the liquid.

7. **Handling and storage**

   see section 8 below

8. **Exposure controls/personal protection**

   - respiratory protection: Use NIOSH/MSHA approved respirator if generating aerosols.
   
   - hand protection: Rubber or latex gloves.
   
   - eye protection: Safety goggles.
   
   - skin protection: Suitable protective clothing.

9. **Physical and chemical properties**

   - appearance: clear liquid
   
   - pH: 4.9
   
   - boiling point: N. I.
   
   - melting point: N. I.
   
   - specific gravity: N. I.
   
   - vapor pressure: N. I.
Identification of the substance or preparation:

**Gel Solubilization Buffer (L1)**

10. **Stability and reactivity**
- conditions to avoid: combustibles
- hazardous decomposition products: toxic fumes of carbon monoxide, carbon dioxide and nitrogen oxides.

11. **Toxicological information**

LD$_{50}$ (sodium perchlorate): 2100 mg/kg (rat, oral)
LD$_{50}$ (sodium perchlorate): 551 mg/kg (mouse, IPR)
For more information see RTECS.

12. **Ecological information**
On regular use no prejudice is to be expected.

13. **Disposal considerations**
The component should be disposed in accordance with state or local laws.

14. **Transport information**
None.

15. **Regulatory information**
The product has been classified and marked in accordance with EU Directives/Ordinance on Hazardous Materials.
Attention: This preparation has not yet been thoroughly tested.
R: 9
Explosive when mixed with combustible material.
R: 22
Injurious to health when swallowed.
S: 13
Keep away from food and drinks.
S: 22
Do not breathe dust.
S: 27
Wear suitable protective clothing. Take off contaminated clothing immediately.

16. **Other information**
The above-mentioned data correspond to our present state of knowledge and experience. Although utmost care has been taken in the composition of this text, the publisher cannot be held responsible for any damage resulting from any eventual error in this publication.