Material Safety Data Sheet

1 Product and Company Identification:

- Product name: PD-8650 Negative Developer
- Manufacturer:
  CYANTEK CORPORATION
  3055 Osgood Court
  Fremont, CA 94538
  (510) 651-3341
- 24 Hour Emergency Telephone Number:
  CHEMTREC: (800) 424-9300 (North America): (703) 527-3887 (Int’l.)

2 Composition/Information on Ingredients:

- Chemical formula: KOH + C6H6O2 + Na2SO3 + KBr + C9H10N2O + H2O
- Hazardous components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percent by wt.</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Hydroxide</td>
<td>1%</td>
<td>1310-58-3</td>
</tr>
<tr>
<td>Sodium Sulfite</td>
<td>4%</td>
<td>7757-83-7</td>
</tr>
<tr>
<td>Hydroquinone</td>
<td>1%</td>
<td>123-31-9</td>
</tr>
<tr>
<td>Potassium Bromide</td>
<td>&lt;1%</td>
<td>7758-02-3</td>
</tr>
<tr>
<td>Phenidone</td>
<td>&lt;1%</td>
<td>92-43-3</td>
</tr>
<tr>
<td>Water</td>
<td>93%</td>
<td>7732-18-5</td>
</tr>
</tbody>
</table>

3 Hazards identification

- Hazard description: Irritant
- Irritating to eyes, skin and respiratory system.
- Classification system
  The classification was made from the hazardous components’ MSDS’s.

4 First aid measures

- Inhalation: Supply fresh air; consult doctor in case of complaint.
- Skin contact: Flush affected areas with plenty of water, remove contaminated clothing, get medical attention if irritation persists.
- Eye contact: Rinse opened eye for several minutes under running water. If irritation persists, consult a doctor.
- Ingestion: Give large amounts of water. Consult a doctor immediately.

5 Fire fighting measures

- Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Protective equipment Wear goggles, rubber gloves and boots, self contained breathing apparatus, and caustic resistant protective clothing.
6 Accidental release measures

- **Personal precautions:** Wear goggles, rubber boots and gloves, and caustic resistant protective clothing.
- **Environmental precautions:** Do not allow substance to enter sewage system, surface or ground water.
- **Methods for cleaning up:** Contain the spill by diking/absorbing with liquid-binding material (sand, diatomite, caustic binders, universal binders). Ensure adequate ventilation.

7 Handling and storage

**Handling**
- **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.

**Storage**
- Store between 50 and 77 Degrees F.
- Keep containers tightly sealed (solution oxidizes upon contact with air)
- Store away from strong acids

8 Exposure controls and personal protection

- **Engineering controls:**
  No further data; see section 7.

**Exposure limits (threshold limit values):**

Potassium Hydroxide: 2.0 mg/m3 (ceiling)
Sodium Sulfite: None established
Hydroquinone: 2.0 mg/m3 (TWA)
Potassium Bromide: None established
Phenidone: None established

- **General protective and hygienic measures:**
  Keep away from foodstuffs and beverages. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

- **Breathing equipment:**
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **Protection of hands:** Caustic resistant gloves.
- **Eye protection:** Tightly sealed goggles.
- **Body protection:** Caustic resistant protective work clothing.
9 Physical and chemical properties:

- **Physical state:** Liquid
- **Color:** Clear, light yellow
- **Odor:** Odorless
- **Boiling point:** Unknown
- **Flash point:** Not applicable
- **Self ignition temperature:** Not applicable
- **Danger of explosion:** Product does not present an explosion hazard.
- **Vapor pressure at (20 °C):** Unknown
- **Density at (20 °C):** 1.04
- **Solubility in water:** Fully soluble

10 Stability and reactivity

- **Thermal decomposition avoided:** No decomposition
- **Dangerous reactions:** Incompatible with strong acids and oxidizers.
- **Dangerous products of decomposition:** Releases toxic gases if heated to complete evaporation.
- **Avoid boiling of product**

11 Toxicological information

- **Acute toxicity:** Irritant to skin and eyes.
- **Primary irritant effect on the skin and eye:** Irritant
- **Sensitization:** Ingestion or exposure to skin may cause an allergic reaction.

12 Ecological information:

- **General notes:**
  Do not allow product to reach ground water, water course or sewage system.
  Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

- Do not allow product to reach sewage system.
- Dispose of product (including packagings) in accordance with applicable regulations.
14 Transportation information

- Land (CFR 49), Maritime (IMDG), Air (ICAO)
  - Class: Not regulated
  - UN Number: N/A
  - Proper Shipping Name: N/A
  - Packing Group: N/A

15 Regulations

- CERCLA Hazardous Substances (with reportable quantity): Potassium Hydroxide (1000#), Hydroquinone (100#)
- Extremely Hazardous Substances (with threshold quantity): Hydroquinone (100#)
- Toxic Chemicals (Section 313): Hydroquinone
- TSCA Inventory: All ingredients on TSCA inventory
- Proposition 65 List: None
- Clean Water Act Hazardous Substance List (with reportable quantity): Potassium Hydroxide (1000#)
- Clean Air Act Synthetic Organic Chemical (CAA SOCMI): Hydroquinone
- Clean Air Act Accidental Release Prevention Substance, section 112 r (with threshold quantity): None
- PSM Highly Hazardous Chemical List (with threshold quantity): None
- Clean Air Act (CAA) Hazardous Air Pollutants: Hydroquinone (HAP code XOV)

Safety phrases:

- Do not breathe fumes.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Wear suitable protective clothing.
- In case of accident seek medical advice immediately.

16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.