Section 1: Product and Company Identification

Product Name: ADDOLINK 30/10 TECH 220D
Article Number: 1567652
Product Code: 220111
Chemical Name: 2,2’-[1,4-phenylenebis(oxy)]bis-ethanol
Synonyms: Hydroquinone dioxyethyl ether (HQEE)
CAS Number: 104-38-1

Section 2: Composition/Information on Ingredients

HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS Number</td>
<td></td>
</tr>
<tr>
<td>Exposure Limits</td>
<td>Min.</td>
</tr>
</tbody>
</table>

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

Section 3: Hazards Identification

EMERGENCY OVERVIEW

Non-regulated. **Color:** White to off white. **Form:** Solid Flakes **Odor:** Odorless
Product poses little or no hazard if spilled and no unusual hazard if involved in a fire.
Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.
Irritating gases/fumes are given off during burning or thermal decomposition.

POTENTIAL HEALTH EFFECTS

Route(s) of Entry: Inhalation, Skin Contact, Eye Contact

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE
**General Effects of Exposure**

**Acute Effects of Exposure:** This product, as a whole, under these conditions, has not been associated with any adverse acute health effects.

**Chronic Effects of Exposure:** None reported for this product as a whole.

**Carcinogenic Components:**
- **NTP:** None
- **IARC:** None
- **OSHA:** None

**Medical Conditions Aggravated by Exposure:** None reported for this product as a whole.

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**Section 4: First Aid Measures**

**First Aid for Eye:** In case of contact, flush eyes with large quantities of water for at least 15 minutes. Get medical attention if irritation develops or persists.

**First Aid for Skin:** In case of skin contact, wash affected areas with soap and water. Immediately remove contaminated clothing and shoes. Wash clothing and clean shoes before reuse. Get medical attention if irritation develops or persists.

**First Aid for Inhalation:** If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician. If inhaled, remove to fresh air.

**First Aid for Ingestion:** Get medical attention.

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**Section 5: Fire Fighting Measures**

**Flash Point:** 440 °F (227 °C) DIN 51584

**Flammable Limits:**
- **Upper Explosion Limit (UEL %):** Not Applicable
- **Lower Explosion Limit (LEL %):** Not Applicable

**Auto-ignition Temperature:** Not Established

**Extinguishing Media:**
- **Suitable:** All extinguishing media are suitable.

**Special Fire Fighting Procedures:** Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by firefighters.

**Unusual Fire/Explosion Hazards:** None known.
Section 6: Accidental Release Measures

Spill or Leak Procedures: Remove mechanically by method which minimizes generation of airborne dust, and place in appropriately marked containers for disposal. Contain and collect spill for approved disposal. Spill area can be washed with water. Do not allow spilled or released material to enter ground water, waste water or soil.

Section 7: Handling and Storage

Storage Temperature: Not Established - Ambient Recommended

Shelf Life: Not Established

Special Sensitivity: None known.

Handling/Storage Precautions: Store in a dry place away from excessive heat. Do not store with incompatible materials. Keep away from heat, sparks and flames. Keep container tightly closed when not in use. Avoid breathing dusts, vapors or mists. Handle in accordance with good industrial hygiene and safety practices. Minimize dust generation and accumulation, especially on elevated surfaces (roof beams and trusses, ventilation ducts, wall sills).

Section 8: Exposure Controls/Personal Protection

Personal Protection Equipment
Eye Protection Requirements: Contact lenses should not be worn. Chemical safety goggles, full-face shield, Safety glasses with side shields or goggles are recommended.

Skin Protection Requirements: Permeation resistant gloves (neoprene, nitrile, or PVC) and impervious clothing (long sleeve shirts) are recommended.

Ventilation Requirements: Use local exhaust ventilation if dusting or misting is a problem, to maintain air levels below the recommended exposure limit.

Additional Protective Measures: Safety showers and eyewash stations should be accessible to the work area. Employees working with this product should not eat, drink, or use tobacco products in the work area.

Section 9: Physical and Chemical Properties

Physical Form: Solid
Appearance: Flakes
Color: White to off white.
Odor: Odorless
Molecular Weight: 198
pH: 4 - 7
Boiling Point: Not Applicable
Melting/Freezing Point: 219 °F (104 °C)
Viscosity: 7 - 10 mPa.s @ 257 °F (125 °C)
Solubility in Water: Miscible
Specific Gravity: Not Established
Vapor Pressure: < 7.5 mmHg @ 122 °F (50 °C)

Section 10: Stability and Reactivity

Stability: Stable
Hazardous Polymerization: Will not occur
Substances to Avoid: Oxidizing agents.
Conditions to Avoid: None reported.
Decomposition Products: Thermal decomposition may produce toxic oxides and fumes of the components of this product and other potentially toxic fumes.

Section 11: Toxicological Information

Toxicity Data for ADDOLINK 30/10 TECH 220D
Toxicity Note: No data available for this product.

Section 12: Ecological Information

Ecological Data for ADDOLINK 30/10 TECH 220D
Biological Oxygen Demand (BOD): 50 %  Source: Supplier Material Safety Data Sheet (MSDS)
Inhibition Bacteria: EC50: > 10,000 mg/L, Activated sludge microorganisms  Source: Supplier Material Safety Data Sheet (MSDS)

Section 13: Disposal Considerations

Waste Disposal Method: Disposal must be in compliance with federal, state and local environmental control regulations.
Empty Container Precautions: Empty container retains product residue and can be hazardous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat, flame, sparks, static electricity, or other sources of ignition. Recondition or dispose of empty container in accordance with regulations.
Section 14: Transportation Information

Technical shipping name: Dialcohol

Freight Class
Bulk: Chemicals, N.O.I. (NMFC 60000)
Package: Chemicals, N.O.I. (NMFC 60000)

Product Label: Product Label Established

Domestic Surface Transportation (DOT)
Hazard Class or Division: Non-Regulated

Marine Transportation (IMO / IMDG)
Hazard Class Division: Non-Regulated
Number:

Air Transportation (ICAO / IATA)
Hazard Class Division: Non-Regulated
Number:

Section 15: Regulatory Information

United States Federal Regulations

OSHA Hazcom Standard Rating:
Non-Hazardous

TSCA Inventory List:
On TSCA Inventory

CERCLA Hazardous Substance:
Component(s) Reportable Quantity
None

SARA Title III
SARA Section 302 Extremely Hazardous Substances:
Component(s)/ Concentration
CAS Number Min. Max.
None

SARA Section 311/312 Hazard Categories:
Non-hazardous under Section 311/312

SARA Section 313 Toxic Chemicals:
Component(s)/ Reporting Concentration
CAS Number Threshold Min. Max.
None
RCRA Status: If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

**State Right-to-Know Information**

<table>
<thead>
<tr>
<th>Component(s)</th>
<th>CAS Number</th>
<th>State Code</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,2'-(1,4-phenylenebis(oxy))bis-ethanol</td>
<td>PA-N, NJ-N</td>
<td>Min. 0% Max. 100%</td>
</tr>
</tbody>
</table>

State Code Translation Table

PA-N = Pennsylvania Non-hazardous  
NJ-N = New Jersey Other - includes predominant ingredients

**Section 16: Other Information**

**HMIS Rating**

<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

0=Minimal  1=Slight  2=Moderate  3=Serious  4=Severe  
*=Chronic Health Hazard

RHEIN CHEMIE CORPORATION’s method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by RHEIN CHEMIE CORPORATION as a customer service.

Contact:  HES Dept.  
Phone: (440) 285-3547  
MSDS Number: 00000000471  
Version Date: 04/15/2008  
MSDS Version: 1.8

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Indicates Relevant Change Made.