

# Accelerated Analysis

PMB Q-310  
80 N Cabrillo Highway  
Half Moon Bay, CA 94019  
Phone: (650) 867-8443  
<http://AcceleratedAnalysis.com>

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## Safety Data Sheet

Version 2  
Revision Date 09/05/2015

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### 1. Product and Company Identification

**Trade Name:** LC29E Liquid Crystal  
**Previous Name:** K18E

**Manufacturer:**  
**Accelerated Analysis**  
PMB Q-310  
80 N Cabrillo Highway  
Half Moon Bay, CA 94019

**Emergency Phone Number:** (650) 867-8443

**Relevant identified Use:**  
This product is intended only for hot spot localization within a semiconductor chip.

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### 2. Hazards Identification

**GHS Classification of the Mixture (In accordance with 29 CFR 1910 (OSHA HCS))**  
Flammable liquid

**GHS Label elements, including precautionary statements**

Pictogram



Signal word    Danger

Hazard statement(s)  
H225                      Highly flammable liquid and vapor.

## Precautionary statement(s)

P210	Keep away from heat /sparks / open flames / hot surfaces.
P233	Keep container tightly closed.
P243	Take precautionary measures against static discharge.
P280	Wear protective gloves / protective clothing / eye protection / face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Rinse skin with water / shower.
P370 + P378	In case of fire: Use dry sand, dry chemical, or alcohol resistant foam for extinction.
P403 + P235	Store in a well-ventilated place. Keep cool.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

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### 3. Composition / Information on Ingredients

Hexylcyanobiphenyl	CAS No. 41122-70-7	10%
Ethyl Alcohol	CAS No. 64-17-5	90%

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### 4. First Aid Measures

**Eyes:** Flush with water for 15 minutes. Get immediate medical attention.

**Skin:** Flush with water for 15 minutes.

**Ingestion:** If swallowed, drink water or milk. Get medical help.

**Inhalation:** Remove to fresh air.

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### 5. Fire Fighting Measures

**Flash Point:** 57°C

**Auto ignition:** 685.4°F (363°C)

**Extinguishing Media:** dry chemical, carbon dioxide, alcohol or polymer foam

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### 6. Accidental Release

Absorb spill with paper towel or other inert absorbent material.

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### 7. Handling and Storage

Keep away from heat. Keep away from sources of ignition. Use with adequate ventilation.

Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

Store tightly closed container in a cool, dry, well ventilated area.

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### 8. Exposure Controls

Provide general or local exhaust ventilation.

Wear safety glasses and protective gloves.

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### 9. Physical and Chemical Properties

**Appearance:** colorless liquid

**Odor:** ethereal odor

**Odor Threshold:** 180 ppm

**Vapor Density:** 1.59 (Air=1)

**Taste:** pungent, burning

**Boiling Point:** 173°F

**Melting Point:** -173°F

**Evaporation Rate:** 2.7 (BuAc=1)

**NFPA Ratings for Ethanol:** Health 2, Flammability 3, Reactivity 0

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## 10. Stability and Reactivity

**Chemical Stability:** stable Product is viable indefinitely if properly stored.

**Conditions to avoid:** high temperature, sources of ignition, strong oxidizers, acids, alkalis

**Hazardous Decomposition:** CO and/or CO<sub>2</sub>

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## 11. Toxicological Information

Lowest Published Dose/Conc: LDL Human Oral Dose: 1400 mg/kg

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## 12. Ecological Information

The product itself and its products of degradation are not toxic.

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## 13. Disposal Considerations

Waste must be disposed of in accordance with federal, state, and local environmental control regulations.

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## 14. Transport Information

**UN Number:** UN1170

**Shipping Name:** Ethanol solution

**Hazard Class:** 3 (Flammable liquid)

**Packing Group:** II

**For inner package volumes of 30 mL or less (Not to exceed outer package volume of 1 L):**

**FedEx and/or International Shipments:** ship as "Excepted Quantity"  
and attach appropriate "Excepted Quantity" label

**UPS and/or Domestic Shipments:** ship per 49 CFR 173.4 "small quantity exception"  
and attach label "this package conforms to 49CFR..."

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## 15. Regulatory Information

None of the chemicals in this product are under a Chemical Test Rule.

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**NOTE:** Hazardous properties listed in this document are those of the major component, Ethanol.