

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name	OPTOLINQ™ LE-2161
Applications	Two-part transparent epoxy resin for the encapsulation of electronic components
Advised Against	No further relevant information available
Supplier Name	Caplinq Europe BV

CAPLINQ Europe BV
Industrieweg 15E
1566 JN Assendelft
The Netherlands
+31 20 893 2224

CAPLINQ Corporation
80 Sirocco Crescent
Ottawa, ON K2S 2C9
Canada
+1 (613) 416 8426

CAPLINQ Americas
36972 Schoolcraft Rd
Livonia, MI 48150
United States of America
+1 (618) 416 9739

CAPLINQ Malaysia
S-08-07 Setia Triangle
Penang, BL 11900
Malaysia
+60 (15) 460 00453

SECTION 2. HAZARDS IDENTIFICATION

HAZARD CLASS: Non-dangerous goods.

POTENTIAL HEALTH EFFECTS

Eye Contact: May cause mild eye irritation.

Ingestion: May be hazardous to the digestive system and cause vomiting and loss of appetite.

Inhalation: May cause respiratory tract irritation, vomiting, and loss of appetite.

Skin Contact: May cause mild skin irritation.

Toxicity: LD₅₀(oral) >5000 mg/kg.

SECTION 3. INGREDIENT COMPOSITION**Part A**

No.	Components	CAS Reg. No.	Proportion (%)
1	Bisphenol A Epoxy Resin	25068-38-6	70–90
2	Diluent	68609-97-2	0.01–9
3	Crosslinking additive	51852-81-4	0.1–10

Part B

No.	Components	CAS Reg. No.	Proportion (%)
1	Polyetheramine curing agent	9046-10-0	90–99
2	Catalyst	90-72-2	1–10

SECTION 4. FIRST AID MEASURES

EYE CONTACT

- Immediately flush with plenty of water for at least 15 min.

SKIN CONTACT

- Immediately flush with plenty of water and soap for at least 15 min.

INHALATION

- Move victim to fresh air.
- Administer oxygen if breathing is difficult.
- Get medical attention.

INGESTION

- Do not administer anything orally if the patient is on the verge of losing consciousness, already unconscious, or experiencing convulsions.
- Do not induce vomiting.
- Get medical attention immediately.

SECTION 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- Dry powder, carbon dioxide, 1211, or foam fire extinguisher.

SECTION 6. ACCIDENTAL RELEASE MEASURES

LEAK/SPILL

- Please use appropriate protective equipment and ensure that there is proper ventilation.
- In case of a leakage, use sand, earth, or inert materials to contain and control it.
- Report as per regulatory requirements.

SECTION 7. HANDLING AND STORAGE

HANDLING

- Ensure the availability of suitable protective and ventilation equipment.
- Minimize skin and eye exposure, and prevent inhalation of vapors. Do not stay in contact for an extended period.

STORAGE

- Store in a cool (air-condition room temperature) and dry place away from excessive heat, sunlight, and humidity. Ensure that the storage and usage area is strictly designated as a non-smoking zone.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE LIMITS

No.	Components	Standards*	Reference
1	Bisphenol-A epoxy	Not Established	OSHA ¹ , ACGIH ²
2	Diluent	Not Established	OSHA, ACGIH
3	Crosslinking additive	Not Established	OSHA, ACGIH

4	Polyetheramine curing agent	Not Established	OSHA, ACGIH
5	Catalyst	Not Established	OSHA, ACGIH

¹Occupational Safety and Health Administration (OSHA) 8-hour total weight average (TWA) permissible exposure limit (PEL)

²American Conference of Governmental Industrial Hygienists (ACGIH) 8-hour total weight average (TWA) threshold limit value (TLV)

VENTILATION

Use general or local exhaust ventilation to meet exposure limit requirements.

PERSONAL PROTECTION

- Respiratory Protection: Organic vapor canister or canister respiratory protector should be used when necessary.
- Eye/Skin Protection: Chemical safety splash goggles, eyewash equipment, and gloves (general rubber or lined) are recommended.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Light Purple transparent liquid (Part A) Colorless transparent liquid (Part B)
Odor	Not Applicable
pH	Not Applicable
Initial Boiling Point/Boiling Ranges	Not applicable
Specific Gravity	1.10–1.20 (Part A) 0.90–1.00 (Part B)
Vapor Pressure (mmHg at 25 °C)	Not applicable
Solubility	Not applicable
Vapor Density (Air = 1)	Not applicable
Evaporation Rate (Butyl Acetate = 1)	Not applicable

SECTION 10. STABILITY & REACTIVITY

Chemical Stability: Stable under ordinary conditions of use and storage.

Conditions To Avoid: Not applicable.

Decomposition Products: None.

Hazardous Polymerization: No hazard at room temperature.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity Data: Estimated oral exposure limit LD₅₀(oral) >5000 mg/kg.

Carcinogenicity: No information found

Reproductive Effect: No information found

Chronic Effects: No information found

Target Organs: No information found

Eye Contact: May cause mild eye irritation.

Ingestion: May be hazardous to the digestive system, cause vomiting and loss of appetite.

Inhalation: May cause respiratory tract irritation, vomiting, and loss of appetite.

Skin Contact: May cause mild skin inflammation.

SECTION 12. ECOLOGICAL INFORMATION

Mobility: No Information found
Bioaccumulation: No information found
Biodegradability: No information found
Aquatic Toxicity: No information found
Environmental Toxicity: No information found

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal of waste needs to be carried out at the city, state, or federally permitted disposal facility. Handle in accordance with applicable regulations and/or local authorities.

SECTION 14. TRANSPORT INFORMATION

Land transport ADR/RID (Cross-border) ADR, RID Class:	Not applicable
Maritime transport IMDG IMDG Class:	Not applicable
Air transport ICAO-TI and IATA-DGR ICAO/IATA Class:	Not applicable

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized safety officer. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15. REGULATORY INFORMATION

No information available

SECTION 16. OTHER INFORMATION

The information in this safety data sheet was obtained from reputable sources and to the best of our knowledge is accurate and current at the mentioned date. Neither CAPLINQ Corporation, nor CAPLINQ Europe BV accept any liability arising out of the use of the information provided here or the use, application or processing of the product described herein.

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgments of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.