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**SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

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<b>Trade Name</b>	OPTOLINQ™ LE-2161 Part A
<b>Applications</b>	Liquid epoxy resin
<b>Advised Against</b>	No further relevant information available
<b>Supplier Name</b>	Caplinq Europe BV

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**SECTION 2. HAZARDS IDENTIFICATION**

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**GHS HAZARD CATEGORY**

Serious eye damage or irritation Category 2A  
Skin corrosion or irritation Category 2  
Skin sensitization Category 1

**HAZARD PICTOGRAM****SIGNAL WORD**

Warning

**HAZARD STATEMENTS**

H315 Causes skin irritation  
H317 May cause an allergic skin reaction  
H319 Causes serious eye irritation

**PRECAUTIONARY STATEMENTS**

P261 Avoid inhaling dust, fumes, gasses, mists, vapors, or sprays.  
P264 Wash skin thoroughly after handling  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

**RESPONSE PRECAUTIONARY STATEMENTS**

P362 Take off contaminated clothing.  
P363 Wash contaminated clothing before reuse.  
P332+P313 If skin irritation occurs, seek medical attention.  
P333+P313 If skin irritation or rash occurs, seek medical attention.  
P337+P313 If eye irritation persists, seek medical attention.  
P305+P351+P338 If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P302+P352 If on skin, wash with plenty of water.

**DISPOSAL**

P501 Dispose of contents or container to approved waste disposal.

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**SECTION 3. INGREDIENT COMPOSITION**

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No.	Components	CAS Reg. No.	Proportion (%)
1	Bisphenol-A epoxy resin	25068-38-6	70-99
2	Alkyl glycidyl ether	68609-97-2	0.01-9
3	Polyurethane	51852-81-4	0.1-10

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**SECTION 4. FIRST AID MEASURES**

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**EYE CONTACT**

- Rinse the contaminated eye with water for 20 minutes or until the contamination is completely removed. Ensure that water does not enter unaffected eyes during the rinsing process.
- Seek immediate medical attention.

**SKIN CONTACT**

- Rinse the affected area gently with warm water for 5 minutes or until the contamination is completely removed.

**INHALATION**

- Move victim to fresh air.
- If the victim experiences any discomfort, seek immediate medical attention.

**INGESTION:**

- If swallowed, seek immediate medical help and follow the doctor's advice on whether to induce vomiting.

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**SECTION 5. FIRE FIGHTING MEASURES**

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**EXTINGUISHING MEDIA**

- Chemical dry powder, fire sand, carbon dioxide, or foam fire extinguisher.

**COMBUSTION PRODUCTS**

Carbon dioxide, carbon monoxide, and other toxic gasses

**PARTICULAR HAZARDS**

Contact with amine substances can initiate polymerization reactions, which generate heat and cause temperature increase.

**FIRE EXTINGUISHING PRECAUTIONS**

Evacuate and isolate the fire area. Unauthorized personnel must not enter the site. Wear specialized protective gear during fire rescue operations. Transfer the product to a secure location. Maintain a safe distance when extinguishing fire. Using water mist may not effectively extinguish the fire. After extinguishing the fire and confirming no risk of reignition, use water spray to cool both the fire scene and the product container.

**FIRE FIGHTING PROTECTIVE EQUIPMENT**

Firefighters should wear firefighting attire, protective gloves, safety goggles, protective footwear, and self-contained respiratory gear.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**LEAK/SPILL**

- In case of a leakage, avoid contamination of waterways, drinking water sources, surface water, and soil.
- Contain any leaked chemicals. For small spills, use sand to isolate and surround them. Absorb and dispose of with sand, cloth, or other absorbent materials. Use labeled cleanup methods and disposal materials for collection. For large spills, contact the fire brigade, emergency response units, and suppliers for assistance.
- 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 away from direct sunlight, heat, power sources, fire, and other heat-emitting devices. Keep in a dry, cool, well-ventilated area, and ensure the container remains tightly sealed.

**SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**EXPOSURE LIMITS**

No.	Components	Standards*	Reference
1	Bisphenol-A epoxy resin	Not Established	OSHA <sup>1</sup> , ACGIH <sup>2</sup>
2	Alkyl glycidyl ether	Not Established	OSHA, ACGIH
3	Polyurethane	Not Established	OSHA, ACGIH

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

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

**PERSONAL PROTECTION**

- Respiratory Protection: No special protection needed.
- Eye/Skin Protection: Chemical safety splash goggles, eyewash equipment, and protective, impermeable gloves (general rubber or lined) are recommended. Wear protective clothing and closed shoes when handling the product. Ensure access to eye wash stations and emergency showers.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	Light purple viscous liquid
Odor	Not Applicable
pH	Not Applicable
Melting Point	30–50 °C
Boiling Point	>200 °C
Flash Point	252 °C

Vapor Pressure at 20 °C	<0.01 Pa
Vapor Density	Not Available
Density at 20 °C	1.1–1.2 g/cm <sup>3</sup>
Solubility	Not soluble in water
Auto-ignition Temperature	>300 °C
n-octanol/water Partition Coefficient	3.242

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## SECTION 10. STABILITY & REACTIVITY

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

**Conditions to Avoid:** Prolonged exposure to heat.

**Incompatible Materials:** Acids, alkalis, amines.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, and aromatic compounds.

**Hazardous Polymerization:** Product does not react spontaneously. However, when it contacts amines, it triggers a polymerization reaction, generating significant heat and causing a rise in temperature.

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## SECTION 11. TOXICOLOGICAL INFORMATION

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### Acute Toxicity

Component	Lethal Dose, 50% (LD <sub>50</sub> )	Lethal Concentration, 50% (LC <sub>50</sub> )
Bisphenol-A epoxy resin	>10000 mg/kg (Rat, swallowed)	1.75 mg/L (96 hours, fish)

**Eye Contact:** May cause eye irritation.

**Skin Contact:** May cause skin irritation.

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## SECTION 12. ECOLOGICAL INFORMATION

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**Environmental Toxicity:** May cause long-term adverse effects to aquatic environments.

**Biodegradability:** Epoxy resins are not easily biodegradable but can degrade over time under appropriate environmental conditions.

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## SECTION 13. DISPOSAL CONSIDERATIONS

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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. Do not pour into sewers or surface water, and avoid random disposal. Dispose of all containers or absorbents containing resin as hazardous waste.

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## SECTION 14. TRANSPORT INFORMATION

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Following guidelines from the United Nations Model Recommendations on the Transport of Dangerous Goods (TDG) and the International Maritime Dangerous Goods Code, this product is not classified as dangerous goods.

### TRANSPORTATION PRECAUTIONS

- Ensure the container is leak-proof.
- During transport, prevent falling, tipping, collisions, and exposure to direct sunlight.
- Pack and transport in a sealed container.
- Transportation must adhere to applicable national and international regulations.

*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.*

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### **SECTION 15. REGULATORY INFORMATION**

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Regulations on the Safety Management of Hazardous Chemicals

Catalog of hazardous chemicals: Not included.

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### **SECTION 16. OTHER INFORMATION**

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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.

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