

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name LINQBOND™ NCA-9121
Applications: Die Attach Epoxy
Advised Against No further relevant information is available
Supplier Name Caplinq Europe BV

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SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE/MIXTURE

Classification according to Regulation (EC) No 1272/2008

HAZARD CLASS

Reproductive toxicity
 Skin corrosion/irritation
 Serious eye damage/eye irritation
 Specific target organ toxicity - single exposure, Blood
 Specific target organ toxicity - repeated exposure,
 Blood, Spleen, Liver
 Long-term (chronic) aquatic hazard

HAZARD CATEGORY

Category 1B
 Category 2
 Category 2A
 Category 2
 Category 2
 Category 2

LABEL ELEMENTS

Labeling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard Pictogram



Signal Word

Danger

HAZARD STATEMENT:

H315 Causes skin irritation
 H319 Causes serious eye irritation
 H360F May damage fertility
 H371 May cause damage to organs.
 H373 May cause damage to organs through prolonged or repeated exposure
 H411 Toxic to aquatic life with long lasting effects.

Prevention Precautionary Statements

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P264 Wash hands thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.

Response Precautionary Statements

P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

Storage Precautionary Statements

P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Disposal Precautionary Statements

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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OTHER HAZARDS

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3. INGREDIENT COMPOSITION

No.	Components	CAS No.	Proportion (%)
1	Epoxy resin	29690-82-2	10~15.0
2	4,4'-Diaminodiphenyl Sulfone	80-08-0	10.0
3	Aluminium oxide	1344-28-1	30.0~85.0
4	Diethylene glycol monobutyl ether acetate	124-17-4	1.0~10.0
5	Treated Silica	67762-90-7	0.2~10.0
6	Carbon black	1333-86-4	0.1~5.0

SECTION 4. FIRST AID MEASURES

DESCRIPTION OF FIRST-AID MEASURES

General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled

Move to fresh air. If symptoms persist, seek medical advice immediately.

In case of skin contact

In case of skin contact, take off immediately all contaminated clothing. Rinse the affected skin with water and soap until the contaminant is removed. Consult a physician.

In case of eye contact

After eye contact, hold the eyelid open and rinse with plenty of water for 15 minutes or until the contaminant is removed. Immediately call in an ophthalmologist.

If swallowed

If swallowed, seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious) and consult a doctor as quickly as possible.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

- The most important known symptoms and effects are described in the labeling (see section 2) and/or in section 11

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

- No data available

SECTION 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA**Suitable**

Water, Carbon dioxide foam, dry chemical powder

Unsuitable

No information available

SPECIAL HAZARDS ARISING FROM SUBSTANCE OR MIXTURE**Fire hazard**

When comes into contact with amine substances, an exothermic polymerization reaction will occur causing a significant increase in temperature of the material.

Hazardous decomposition

Carbon monoxide, carbon dioxide and other toxic gases.

ADVICE FOR FIREFIGHTERS**Precautions during firefighting**

Evacuate personnel and isolate the fire area. Keep unauthorized individuals away from the fire area. Move the product to a safe location if possible and ensure the safety of personnel. When extinguishing the fire, maintain a safe position or distance. Water spray may not be effective in putting out the fire. After the fire is fully extinguished and there is no risk of re-ignition, use water spray to cool the fire area and the container holding the product.

Protection during firefighting

Firefighting and rescue teams must wear appropriate protective equipment including gloves, glasses, and shoes. Stay in the danger area only with self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Do not attempt to take any action without wearing the proper protective clothing and equipment. Follow emergency procedures and consult an expert. Only trained personnel should handle the cleanup of the spillage. For personal protection information, refer to Section 8.

ENVIRONMENTAL PRECAUTIONS

Do not let products enter drains, drinking water sources, surface water, and soil.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

In case of a small spill, use sand to contain the material and allow it to be absorbed. You can also use cloth, paper towel, or other absorbent materials. Collect the absorbed material and store it in a labeled container.

For a large spill, absorb onto inert absorbent material and place in sealed container for disposal. Handle the spill with care and dispose of it properly in accordance with local and national regulations.

REFERENCE TO OTHER SECTIONS

For disposal, see Section 13.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Advice on safe handling	Ensure sufficient ventilation at the workstation. Avoid contact with skin and eyes. Avoid material leakage.
Hygiene measures	Contaminated work clothing should not be worn outside workplace premises. Work clothing should be washed before reuse. Wash hands and face after handling the product. For precautions, see Section 2.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage conditions	Store in a tightly closed, dry container. Ensure the storage area is cool, dry, and well-ventilated. Keep frozen. Keep it away from direct sunlight, heat sources, and power outlets. Keep the product locked up or in a secured location accessible only to qualified or authorized personnel.
Storage class	No available data

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

CONTROL PARAMETERS	No available data
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EXPOSURE CONTROLS

Eye and face protection	Use appropriate eye protective gear, with standard glasses as the minimum requirement.
Hand protection	Wear chemical-resistant protective gloves while working with the product.
Body protection	Suitable protective clothing
Hygiene measure	Adopt appropriate procedures for industrial hygiene. Particularly before eating, drinking, or smoking, wash after handling.
Respiratory protection	Not required under normal conditions of use. Use proper respiratory protective equipment in case of insufficient ventilation and or when aerosol or mist is formed.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Black liquid
Odor	Slight
pH	No data available
Melting point	No data available
Boiling point	No data available
Flash point	Not tested
Flammability	No data available
Vapor pressure	No data available
Explosive limit	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Solubility	Not soluble in water
Viscosity	31,000 mPa · s at 25 °C
Density at 20°C	~2.3 g/cm ³
Partition coefficient (n-octanol/water)	No data available

OTHER INFORMATION

Information with regard to physical hazard classes

No additional information available

Other safety characteristics

No additional information available

SECTION 10. STABILITY & REACTIVITY

Chemical Stability and Reactivity

Stable and non-reactive under recommended conditions of use and storage.

Materials and Conditions to Avoid

Acids, bases and amine compounds. Avoid prolonged heat exposure. See Section 7 for recommended storage and handling conditions.

Hazardous Polymerization

Product does not react spontaneously. However, when it is in contact alcohols and amines, it triggers a polymerization reaction, generating significant heat and causing a rise in temperature.

Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON HAZARD CLASSES AS DEFINED (EC) No 1272/2008

Acute Toxicity (Oral)

Not classified, based on available data

Acute Toxicity (Dermal)

Not classified, based on available data

Acute Toxicity (Inhalation)

Not classified, based on available data

Skin corrosion/irritation

May cause skin irritation

Serious eye damage/irritation

May cause eye irritation

Respiratory or skin sensitisation

Not classified, based on available data

Germ cell mutagenicity

Not classified, based on available data

Carcinogenicity

Not classified, based on available data

Reproductive Toxicity

May damage fertility

**Specific Target Organ Toxicity
(Single and Repeated Exposure)**

May cause damage to organs. - Blood
May cause damage to organs through prolonged or repeated exposure. - Blood, spleen, Liver

Aspiration hazard

Not classified, based on available data

INFORMATION ON OTHER HAZARDS**Endocrine disrupting properties**

Adverse health effects caused by endocrine disrupting properties

The product is not included in the list established in accordance with Article 57(f) of REACH for having endocrine disrupting properties, or is not identified as having endocrine-disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential adverse human health effects and symptoms

No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecological Toxicity

Prevent from spreading or entering into drains, surface water, groundwater and rivers. The product is considered toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

Hazardous to the aquatic environment, short term (acute)

Not available data

Hazardous to the aquatic environment, long-term (chronic)

Classified based on available data

Mobility in soil

No available data

Bioaccumulation

No significant bioaccumulation potential

Persistence and biodegradability

Epoxy die attach pastes are generally designed for persistence (long-term reliability) rather than biodegradability.

PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE NATURE

Hazardous waste

WASTE TREATMENT METHODS

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.

WASTE TREATMENT PRECAUTIONS

Warning: Generated waste is hazardous. Do not dump it into sewers, or surface water, or dispose of it improperly. All containers or absorbers containing resin must be treated as hazardous waste.

SECTION 14. TRANSPORT INFORMATION

UN NUMBER OR ID NUMBER

ADR/RID/ADN, IMDG, IATA

UN3082

PROPER SHIPPING NAME

ADR/RID/ADN

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dapsone)

IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dapsone)

IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dapsone)

TRANSPORT HAZARD CLASS

Hazard Class

9 Miscellaneous Dangerous Goods and Articles

Label

9

PACKING GROUP

ADR/RID/ADN, IMDG, IATA

III

ENVIRONMENTAL HAZARDS

Marine pollutant

Yes

Special marking (ADR/RID/ADN)

Not applicable

Special marking (IATA)

Not applicable

SPECIAL PRECAUTIONS FOR USER

Not applicable

Hazard identification number (Kemler code)

Not applicable

EMS Number

Not applicable

Stowage Category

Not applicable

MARITIME TRANSPORT IN BULK ACCORDING TO IMO INSTRUMENTS Not applicable

Transport/Additional information

ADR/RID/ADN

Limited quantities (LQ)	Not applicable
Excepted quantities (EQ)	Not applicable
Transport category	Not applicable
Tunnel restriction code	Not applicable
UN "Model Regulation"	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dapsone), 9, III

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.

SECTION 15. REGULATORY INFORMATION

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

Regulation (EC) No. 1907/2006 (REACH) – Annex XVII:

This substance/mixture does not contain any substances subject to restrictions under Annex XVII.

Regulation (EC) No. 1907/2006 (REACH) – Candidate List of Substances of Very High Concern (SVHC):

None of the ingredients are listed as SVHCs.

Regulation (EC) No. 1272/2008 (CLP):

Classification, labeling, and packaging of substances and mixtures comply with CLP requirements.

Directive 2012/18/EU (Seveso III Directive) – Annex I:

This substance/mixture is not classified as a named dangerous substance under the Seveso III Directive.

Directive 2011/65/EU (RoHS Directive) – Annex II:

The substance is not listed as a restricted material under the RoHS Directive.

NATIONAL REGULATIONS

This substance/mixture is not included in the catalog of hazardous chemicals.

The toxicological and ecological information presented in this section is derived from a reliable SDS of the 100% pure substance that leads to the classification of the mixture and no tests were conducted. The data has been evaluated in accordance with the principles of the Regulation (EC) No 1272/2008 (CLP) for classification of mixtures. Classification and hazard identification for this product have been determined based on the known concentrations of the hazardous components, applying the relevant concentration limits, bridging principles, and available toxicological data where appropriate.

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.

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