

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identification:

Product name : B-711

1.2 Relevant identified uses of the substance and used advised against:

Identified uses : Adhesive for strain gauges.

1.3 Details of the supplier of the safety data sheet:

Company : Zhonghang Electric Measuring Instruments Co, Ltd.
Adress : No. 66, Zhongyuan Road, Puzhen Town, Hantai District, Hanzhong City,
Shaanxi Province
Telephone : +86-0916-2038188
Email : admin@zemic.com.cn
Website : www.zemic.com.cn

1.4 Details of the European supplier:

Company : Zemic Europe B.V.
Adress : Leerlooierstraat 8, 4871EN Etten-Leur.
Telephone : (+31) 765039480
Email : info@zemic.nl
Website : www.zemiceurope.com

Section 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification according to CPL and GHS regulations.

Acute toxicity (category 4) H302.
Skin irritation (category 2) H315.
May cause an allergic skin reaction (category 1) H317.
Serious eye damage (category 1) H318.
Eye irritation (category 2) H319.
May cause respiratory irritation (category 3) H335.
Causes damage to organs (category 1) H370.
Aquatic hazard (category 1) H400.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Pictograms:



Signal word: Danger

Hazard statement(s)

Ethyl 2-cyanoacrylate

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

This substance contains no components considered to be either persistent, bio accumulative and toxic, or very persistent and very bio accumulative of 0.1% or higher.

Poly (methyl methacrylate)

This substance contains no components considered to be either persistent, bio accumulative and toxic, or very persistent and very bio accumulative of 0.1% or higher.

Hydroquinone

H302: Harmful if swallowed.

H317: may cause an allergic skin reaction.

H318: Causes serious eye damage.

H370: Causes damage to organs.

H400: Very toxic to aquatic life.

This substance contains no components considered to be either persistent, bio accumulative and toxic, or very persistent and very bio accumulative of 0.1% or higher.

Precautionary statement(s)

Ethyl 2-cyanoacrylate

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.

P264: Wash skin thoroughly after handling

P271: Use only outdoors or in a well-ventilated area.

P280: Wear Protective gloves/eye protection/face protection.

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.

Hydroquinone

P273: Avoid release to the environment

P280: Wear protective gloves/ protective clothing/eye protection/face protection.

P301 + P312: If swallowed: call a poison center/doctor if you feel unwell.

P305 + P351 + P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses.

P308 + P313: If exposed or concerned: get medical advice/attention.

Section 3: Composition/Information on Ingredients

Component	Formula	Concentration	CAS No.	EC-no.	Classification
Ethyl 2-cyanoacrylate	C ₆ H ₇ NO ₂	90%-100%	7085-85-0	230-391-5	H315, H319, H335
Poly (methyl methacrylate)	C ₅ H ₈ O ₂	1%-10%	9011-14-7	618-466-4	-
Hydroquinone	C ₆ H ₆ O ₂	0.1%-0.5%	123-31-9	204-617-8	H302, H317, H318, H370, H400

Section 4: First Aid Measures

4.1 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:

When inhaled, move the patient into fresh air. Keep the airways clear. Seek medical attention.

In case of skin contact:

After contact with skin, immediately remove all contaminated clothing and rinse skin with water and call a doctor.

In case of eye contact:

After eye contact, rinse out with plenty of water and call a doctor. Remove contact lenses.

If swallowed:

If swallowed: give water to drink (two glasses at most) and call a doctor immediately.

4.2 Most important systems and effects, both acute and delayed:

The most important known symptoms of and effects are described in the pictograms (section 2.1) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed:

No data available.

Section 5: Firefighting Measures

5.1 Extinguishing media

Suitable extinguishing media:

Carbon dioxide (CO₂), foam, dry powder.

Unsuitable extinguishing media:

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance/mixture:

Carbon oxides and vapors are heavier than air and may spread along floors. Development of hazardous gases or vapors possible in the event of fire.

5.3 Advice for firefighters:

Stay in a dangerous area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information:

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures:

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evaluate the danger area, observe emergency procedures, consult an expert. For personal protection, see section 8.

6.2 Environmental precautions:

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up:

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material, collect the material in appropriate containers and clean up the affected area.

Section 7: Handling and Storage

7.1 Precautions for safe handling.

Advice for safe handling:

Work under hood. Do not inhale substance/mixture and keep away from open flames.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

7.2 Conditions for safe storage, including any incompatibilities:

Keep away from direct sunlight. Keep only in original container. Store in a well-ventilated place and keep container tightly closed. Recommended storage temperature see product datasheet.

Section 8: Exposure Controls/ Personal Protection

8.1 Control parameters

Ingredients with workplace control parameters.

8.2 Exposure controls

Eye/face protection:

Wear well-fitting safety glasses.

Skin protection:

Wear appropriate protective clothing and use acid and alkali proof gloves.

Suitable material: nitrile rubber

Respiratory Protection:

In case of inadequate ventilation wear respiratory protection like a suitable mask. Recommended filter type: Filter A (acc. to EN141 or EN405) for vapors of organic compounds.

Control of environmental exposure:

Avoid release to the environment.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties.

a) Physical state	liquid
b) Color	colorless
c) Odor	Pungent
d) Melting/Freezing point	no data available
e) Initial boiling point and range	>200°C
f) Flammability	no data available
g) Upper/lower flammability limits	no data available
h) Flash point	87°C
i) Autoignition Temperature	no data available
j) Decomposition Temperature	no data available
k) pH	no data available
l) Viscosity	dynamic: 6-20 mPas at 20°C
m) Water solubility	Insoluble in water
n) Partition coefficient	no data available
o) Vapor pressure	no data available
p) Density	1.05-1.08 g/cm ³ at 20°C
q) Relative vapor density	no data available
r) Particle characteristics	no data available
s) Explosive properties	no data available
t) Oxidizing properties	no data available

Section 10: Stability and Reactivity

10.1 Reactivity:

Stable under normal conditions. Forms explosive mixtures with air on intense heating.

10.2 Chemical stability:

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions:

Exothermic reactions with strong bases and oxidizing agents.

10.4 Conditions to avoid:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

10.5 Incompatible materials:

Strong alkalis.

10.6 Hazardous decomposition product(s):

May decompose in carbon oxides.

Section 11: Toxicological Information

11.1 Information on toxicological information

Component	CAS No.	LD50 – Oral – Rat – male and female	LD50 – Dermal – Rat - male and female
Ethyl 2-cyanoacrylate	7085-85-0	5.000 mg/kg	2.000 mg/kg

Skin irritation

H315: Causes skin irritation.

Eye irritation

H318: Causes serious eye damage (hydroquinone), H319: Causes serious eye irritation (ethyl 2-cyanoacrylate).

Respiratory or skin sensitization

H315: Causes skin irritation (ethyl 2-cyanoacrylate), H317: may cause an allergic skin reaction (hydroquinone).

Carcinogenicity

No data available.

Reproductive toxicity – single exposure

No data available.

Specific target organ toxicity – single exposure

H370: Causes damage to organs (hydroquinone).

Specific target organ toxicity – repeated exposure

No data available.

Aspiration hazards

No data available.

Section 12: Ecological Information

12.1 Eco-toxicity

No data available.

12.2 Biodegradability

No data available.

12.3 Non-biological degradability

No data available.

12.4 Bioconcentration or bioaccumulation

No data available.

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties.

Section 13: Disposal Considerations

13.1 Waste treatment methods

This product must not be disposed of together with household waste and must not come into contact with the sewage system. Collect the material and process the material in appropriate containers. Refer to relevant national and local waste disposal regulations.

Section 14: Transport Information

14.1 UN number

Land transport (UN RTDG/ADR/RID)

UN number: not available

Shipping name: not dangerous goods

Marine transport (UN RTDG/IMDG)

UN number: not available

Shipping name: not dangerous goods

Air transport (UN RTDG/ICAO/IATA)

UN number: 3334.

Remarks: Primary packages containing less than 500ml are unregulated by this mode of transport and may be shipped unrestricted.

14.2 UN Proper Shipping Name

Aviation regulated liquid.

14.3 Transport Hazard Class(es)

9.

14.4 Packaging group

Class III.

14.5 Environmental hazards

Yes.

14.6 Transportation precautions

No.

Section 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

This material safety data sheet complies with the requirements of regulation no. 1907/2006.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment has not been carried out.

Section 16: Other Information

Hazard classification/ Classification codes

H302: Harmful if swallowed.

H315: Causes skin irritation

H317: May cause an allergic reaction.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H335: Causes skin irritation.

H370: Causes damage to organs

H400: Very toxic to aquatic life

Further information

The information is believed to be correct but is not exhaustive and used only as a guideline, based on current knowledge of the chemical substance or mixture and applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product.