

MATERIAL SAFETY DATA SHEET

This safety data sheet has been prepared in accordance with the requirements of EC Directive 91/155/EEG (and other related directives), and provides information relating to the safe handling and use of the product.

1 PRODUCT AND COMPANY

IDENTIFICATION

Product code: SM-112-LC
Trade name: SmartBond LC
Manufacturer/Supplier: Gestenco International AB
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2 COMPOSITION / INFORMATION ON INGREDIENTS

Nature Cyanoacrylate adhesive

Hazardous components in product for EC

Component name	CAS no.	%	R Phrases	S Phrases	Classification
Ethyl Cyanoacrylate	7085-85-0	65-95	R36/37/38	S(2)-23-24/25-26	Xi

3 HAZARD IDENTIFICATION

Bonds skin and eyes in seconds. Highly reactive to water. Irritating to eyes, respiratory system and skin. (See Section 4 on first aid)

4 FIRST AID MEASURES

First Aid - Inhalation

Remove affected person to fresh air and if still feeling unwell seek medical attention.

First Aid - Skin

Do not pull bonded skin apart. It may be gently peeled apart using a blunt object such as a spoon, preferably after soaking in warm soapy water. Cyanoacrylates give off heat on solidification. In rare cases a large drop will generate enough heat to cause a burn. Burns

should be treated normally after the adhesive has been removed from the skin. If lips are accidentally stuck together, apply warm water to the lips and encourage maximum wetting

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4 FIRST AID MEASURES

(continued)

and pressure from saliva in the mouth. Peel or roll lips apart. Do not try to pull the lips apart with direct opposing action.

First Aid - Eyes

If the eye is bonded closed, release eyelashes with warm water by covering with wet pad. Cyanoacrylate will bond to eye protein and will cause periods of weeping which will help to debond the adhesive. Keep eye covered until debonding is complete, usually within 1-3 days. Do not force eye open. Medical advice should be sought in case solid particles of cyanoacrylate trapped behind the eyelid cause any abrasive damage.

First Aid - Ingestion

Ensure that breathing passages are not obstructed. The product will polymerise immediately in the mouth making it almost impossible to swallow.

Saliva will slowly separate the solidified product from the mouth (several hours)

5 FIRE FIGHTING MEASURES

Non flammable product (flash point is greater than 80°C (CC)).

If product is involved in fire extinguish with dry powder, foam or carbon dioxide.

Trace amounts of toxic fumes may be released on incineration and the use of breathing apparatus is recommended.

6 ACCIDENTAL RELEASE MEASURES

Ventilate area. Do not use cloths for mopping up. Polymerise with water and scrape off floor.

7 HANDLING AND STORAGE

Handling

Ventilation (low level) is recommended when using large volumes.

Use of dispensing equipment is recommended to minimise the risk of skin or eye contact.**Storage**

For optimum shelf life store in original containers under refrigerated conditions at 2 C to 8 C.

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8 EXPOSURE CONTROLS/PERSONAL

PROTECTION

Occupational exposure limits

Ethyl Cyanoacrylate

ACGIH: TLV 0.2ppm 8h TWA

HSA (1999) C.O.P.: OEL 2ppm (8mg/m³) 8h TWA

HSA (1999) C.O.P.: OEL 4ppm (16mg/m³) 15 min exposure limit.

The TLV for ethyl cyanoacrylate is 0.2ppm (ACGIH, TWA).

Polyethylene or polypropylene gloves are recommended when using large volumes.

Do not use PVC, rubber, cotton or nylon gloves. Eye protection should be used where there is any risk of splashing.

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Colour:	Pale, green
Odour:	Sharp, Characteristic
pH:	Not applicable
Boiling Range/Point (°C):	Boils above 100
Flash Point (CC) (°C):	Exceeds 80
Specific Gravity:	1.1 g/ccm at 20° C
Solubility in Water (kg/m ³):	Immiscible. Reacts with water.
Solubility in Acetone:	Soluble
Vapour Pressure (mmHg at 25° C):	Less than 2 mmHg
Explosion Limits (%):	Not determined

10 STABILITY AND REACTIVITY

Polymerisation will occur in the presence of moisture. Avoid exposure to direct sunlight.

Avoid direct contact with heat.

11 TOXICOLOGICAL INFORMATION

Inhalation

Irritating to respiratory system. In dry atmosphere with < 50% humidity, vapours may irritate the eyes and respiratory system. Prolonged exposure to high concentrations of vapours may lead to chronic effects in sensitive individuals.

Skin

This product is classified as a skin irritant. Bonds skin in seconds. Considered to be of low toxicity: acute dermal LD50 (rabbit) > 2000mg/kg. Due to polymerisation at the skin surface allergic reaction is not considered possible.

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11 TOXICOLOGICAL INFORMATION (continued)

Eyes

This product is an irritant to the eyes. Liquid product will bond eyelids. In a dry atmosphere (RH < 50%) vapours may cause irritation and lachrymatory effect.

Ingestion

Cyanoacrylates are considered to have relatively low toxicity. Acute oral LD50 is > 5000mg/kg (rat). It is almost impossible to swallow as it rapidly polymerises in the mouth.

12 ECOLOGICAL INFORMATION

Biodegradable product of low ecotoxicity. Does not contain and is not manufactured with any of the substances listed on the Montreal protocol.

13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with local and national regulations.

Polymerise by adding slowly to water (10:1). Dispose of as water insoluble non-toxic solid chemical in authorised landfill or incinerate under controlled conditions.

14 TRANSPORT INFORMATION

UN Number:	3334
AIR (IATA):	Aviation regulated liquids, n.o.s. (Cyanoacrylate Ester), Class 9, Packaging Group -
Sea (IMO):	Not classified
Road (ADR)/Rail (RID):	Not classified

15 REGULATORY INFORMATION

Contains:	Cyanoacrylate
	Danger
	Bonds skin and eyes in seconds
	Keep out of the reach of children
Labelling Information	Irritant
	R phrases: R36/37/38.
	Irritating to eyes, respiratory system and skin.
S phrases:	S23. Do not breathe vapour.
	S24/25. Avoid contact with skin and eyes..
	S26. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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16 OTHER INFORMATION

MSDS first issued June 3, 2004
MSDS data revised

Hazardous components in product for EC

Component name	R Phrases
Ethyl Cyanoacrylate	R36/37/38
R36/37/38	R36/37/38 Irritating to eyes, respiratory system and skin

Further information may be obtained from:

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