Material Safety Data Sheet

Issue Date: 2010/03/16
Document Number: 01-216-521
Material/Trade Name: E1460

1 – Identification of the Preparation and Company *

Material/Trade Name	: E1460
Material Type	: Ethyl Cyanoacrylate adhesives
Company	: ELITE (HK) CO.,LTD
Address	: Unit 04 7/F,Bright Way Tower,No.33 Mong Kok Road, Kowloon, Hong Kong
Factory Add	: Unit015/f,NO.1mengchongpart,gangxiroad,dashistreet,panyudistrict,Guangzhou, China
Telephone	: 020- 34788001
Fax	: 020- 34783204
Emergency Telephone	: 020- 34788001

2 – Composition/Information on Ingredients*

Substance		% Wt.	CAS No.	EC No.
2-Methoxyethyl-2-cyanoacrylate	--	90 - 99.5	27816-23-5	248-670-5

3 - Hazards Identification *

Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN
Do not breathe fumes/vapour.
Avoid contact with skin and eyes.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear suitable gloves.

4 - First-aid Measures *

Inhalation: Remove to fresh air and rest. If recovery is not rapid call for prompt medical attention

Eyes: Cyanoacrylates bond eyelids in seconds. Irrigate thoroughly with water for at least 15 minutes. Take care not to wash chemical from one eye to another. If the eyelid is bonded closed, do not force open. Cover with wet pad soaked in warm water. Get prompt medical attention, in case solid particles of cured cyanoacrylate trapped behind the eye cause any abrasive damage. Keep eye covered with wet pad until debonding is complete, usually 1-3 days. (Cyanoacrylate will bond to eye protein, causing a lachrymatory effect that aids debonding).

Skin: Do not pull bonded skin apart. Remove contaminated clothing. Wash with soap/ cleanser and rinse with plenty of water. Any bonded skin should be gently peeled apart with the aid of a blunt object, preferably after soaking in warm, soapy water. If irritation persists, obtain medical attention. In the case of large spills on skin, superficial burns may occur – treat accordingly.

Ingestion: Ensure that breathing passages are not obstructed. The product will polymerise immediately in the mouth, making it almost impossible to swallow, but beware of possible choking hazard. Saliva will separate the solidified product from the mouth over a period of hours. Seek medical attention.

5 - Fire-fighting Measures

Suitable Extinguishers:	Alcohol resistant foam. Dry powder. Carbon dioxide. Water spray/fog.
Unsuitable Extinguishers:	Direct water jets
Hazardous Decomposition:	Polymerisation is highly exothermic and may produce sufficient heat to cause thermal decomposition and/or rupture of the container. Toxic and irritant fumes are produced in fire (CO, CO_2, nitrogen oxides).
Special Procedures:	Keep container cool by spraying with water if exposed to fire. Do not breathe decomposition products and fumes Use approved self-contained breathing apparatus Wear fire retardant clothing. Wear eye protection Prevent runoff from fire control from entering waterways Large fires should only be dealt with by trained personnel

6 - Accidental Release Measures

Exposure Controls:	Refer to Section 8 – Personal Protection. Ventilate area. Evacuate personnel. Use approved self-contained breathing apparatus. Use barriers to prevent unauthorised entry into contaminated areas. Do not allow spill to enter drains and watercourses
Personal Protection:	Wear suitable respiratory protection for large spillages and in confined spaces, e.g. EN405 FFA2 or EN140 A2. Wear polythene, polypropylene or viton gloves. Use eye protection such as glasses to BS EN 166 Chemical Grade. Wear suitable protective clothing.
Disposal Considerations:	Absorb in inert material such as sand or absorbent granules (do not use cloths) or polymerise slowly with water (~10:1, adhesive : water) and then scrape up. Dispose in accordance with local regulations.

7 - Handling and Storage

Handling:	Avoid skin and eye contact. Although the odour is barely perceptible, it is advised to avoid excessive inhalation of vapour, so ensure adequate general ventilation. Wear polythene, polypropylene or viton gloves. Latex (natural rubber), nylon or PVC gloves only provide protection for a few seconds. Wear safety glasses. If handling large quantities, wear suitable protective clothing. Ambient Relative Humidity should be >35% to minimise discomfort.
Storage:	Store in tightly closed, labelled containers. Store in a cool, dry, well-ventilated area out of direct sunlight. Refrigerated storage (2 – 8 ℃) is recommended to achieve optimum shelf-life. Keep away from high temperatures and sources of ignition. Keep away from oxidising agents and from strong acids/alkalis. Can be stored in opaque polyethylene.

8 - Exposure Controls/Personal Protection

Occupational Exposure Limit: No OES is specified for this cyanoacrylate ester.
Wear polythene, polypropylene or viton gloves. Latex (natural rubber), nylon or PVC gloves only provide protection for a few seconds.
Wear suitable eye protection, such as glasses rated to BS EN 166.
If handling large quantities, wear suitable protective clothing. Remove contaminated clothing and shoes immediately. Do not wear contaminated clothing.
Use in well ventilated areas.
Ambient Relative Humidity should be >35% to minimise any possible discomfort.

9 - Physical and Chemical Properties

Appearance	: Clear, almost colourless liquid
Odour	: Virtually odourless
pH	: ~6-7
Boiling point/range	: >150℃ (~55℃at 0.045mmHg)
Melting point/range	: ~ -30℃
Flash point	: >85℃(C.C.)
Flammability	: Non-Flammable
Explosive properties	: None
Oxidising properties	: None
Vapour pressure	: ~0.04mmHg at 25℃
Relative density	: Various – from 1.06 – 1.08 depending on grade
Solubility in water	: Insoluble. Polymerises rapidly with water
Solubility in solvents	: Miscible in some organic solvents, e.g. acetone, MEK
Vapour density	: Not established
Partition coefficient, log Pow	: Not established
Viscosity	: 5-3000cps
Evaporation rate (Bu Ac = 1)	: Not established

10 - Stability and Reactivity

	Stable at normal temperatures.
Conditions to avoid:	High temperatures, moisture and direct sunlight. Hazardous exothermic polymerisation can occur if exposed to moisture.
Materials to avoid:	Strong oxidising agents, water, alkalis, amines, alcohols, free-radical initiators. Will polymerise rapidly in contact with these agents.
Hazardous decomposition products:	Combustion/exothermic polymerisation will generate oxides of carbon, acrid smoke and irritating fumes.

11 - Toxicological Information

Acute toxicity: Oral – Expected to be very low - LD50(rat) likely to be >3,000mg/kg. Product is almost impossible to swallow, due to polymerisation in the mouth
Inhalation – Expected to be low – see section 8 for OES info.
Skin – Expected to be low due to rapid polymerisation in contact with skin – LD50 (rabbit) estimated to be >3,000mg/kg.

Corrosivity/irritation: Eyes – May cause irritation. Conjunctival irritation and temporary corneal injury possible. Profuse eye watering and redness.
Skin – Possible mild irritation and redness at site of contact. Prolonged or repeated contact may lead to itching, soreness, dermatitis, etc.
Respiratory Tract – Possible mild irritation – also of mucous membranes, nose and throat.

Sensitisation: Not classified as sensitising. Prolonged or repeated over-exposure to high concentrations of vapours may possibly lead to sensitising effects in sensitive individuals.

Repeated-dose toxicity: Not expected at recommended OES levels (an NOAEL of ~2ppm is likely).

Mutagenicity: No adverse results reported.

Carcinogenicity: No adverse results reported.

Reproductive Toxicity: No adverse results reported.

12 - Ecological Information

Not classified as Dangerous for the Environment by the Conventional Method as detailed in Schedule 3, Parts I and III of CHIP3 Regulations.
Ecotoxicity: Considered to be very low due to rapid polymerisation with water.
Bioaccumulative potential: Expected to be very low.
Persistence: Not considered to be inherently biodegradable.
Mobility: Considered to be virtually zero due to rapid polymerisation with water.

13 - Disposal Considerations

Do not discharge into drains or watercourses.
Polymerise adhesive by adding slowly to water (~10:1, adhesive : water).Hardened product can be disposed of in land-fill sites by licensed contractors.
Add water to contaminated packaging and then dispose of.
Dispose of product through properly licensed contractors under national and local legislation.

14 -Transport Information

UN No: None
IMDG:-
IATA/ICAO:-
ADR/RID:-
Transport Name (Road):

Packing Group: -
Packing Group: -
Item: -Flash Point: -
None – not hazardous for transport.

15 - Regulatory Information

Symbol(s) & Indication(s) of Danger — None assigned

Label Phrases — Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.

Risk & Safety Phrases
No Risk Phrases assigned

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.

Other Relevant Regulations and Publications

Health & Safety at Work etc. Act 1974Control of Substances Hazardous to Health Regulations 1994
COSHH EssentialsEH40/ series – Occupational Exposure Limits
Environmental Protection Act 1990Special Waste Regulations 1996
EH72/13 Cyanoacrylate Risk Assessment Document

16 - Other Information

The * symbol in a section denotes that there has been a change in information from the previous version of this safety data sheet.

Risk phrases referred to in section 2:-

This Safety Data Sheet is compiled with reference to The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP3), which implement the Council Directives 67/548/EC (The Dangerous Substances Directive) and 99/45/EC (The Dangerous Preparations Directive), and subsequent amending regulations, up to and including 2001/59/EC , which implements the 28thATP of 67 /548 /EEC; and 2001 /60 /EC, which implements the 1stATP of 99/45/EC ; and also the Safety Data Sheet Directive 91/155/EC, as amended for the 2nd time by 2001/58/EC.

The information contained in this safety data sheet was obtained from a variety of sources and is believed to be accurate and current at the stated issue date. ELITE(HK)CO.,LTD. and/or its agents cannot accept any liability for the use of information contained in this data sheet or for the use, application or processing of the product described in this data sheet. Users should note the possibility of hazards occurring due to improper use of the product.