



# MATERIAL SAFETY DATA SHEET




## CS-1

### Section 1 – Identification of substance

Product Details : Activator  
 Trade Name : CS-1  
 Article Number : N  
 Application Of The Substance / The Preparation : Accelerator for alkyl cyanoacrylate adhesive  
 Manufacturer / Supplier : ULTRA ENERGY ADHESIVE TRADING CO. LTD.  
 Address : Room 9, 10/F, International Plaza,  
 20 Sheung Yuet Road, Kowloon Bay, Kowloon, H.K.  
 Tel : 852-2751 8880 Fax : 852-2795 1625

### Section 2 – Composition / Data on components

#### Dangerous Component :

Ingredients	CAS No.	Wt %
Proprietary additive	Proprietary	3 – 5
Heptane  F,  Xn,  N	142-82-5	95 - 97

### Section 3 – Hazards Identification

#### Hazard Description :



F Highly flammable  
 Xn Harmful  
 N Dangerous for the environment

#### Emergency Overview :

Extremely flammable. Irritating to skin and eye. Harmful if swallowed or inhaled.

#### Potential Health Effects :

Eye contact : Liquid or high vapor concentration can cause pain and irritation with slight corneal injury possible.  
 Skin contact : Prolonged or repeated skin contact can cause irritation and dermatitis through defatting of skin. Prolonged contact can result in skin absorption.  
 Ingestion : May cause lung damage and irritation to mucous membranes.  
 Inhalation : Inhalation of high concentrations may cause central nervous system effects. May cause headache, dizziness and coma.



## MATERIAL SAFETY DATA SHEET

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### Section 4 – First aid measures

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Eye contact	: Immediately flush eye with copious amount of water for at least 15 minutes. Get medical assistance.
Skin contact	: Immediately flush skin with plenty of water and soap while removing contaminated clothing and shoes. Wash clothing before re-use and discard shoes. Get emergency medical assistance.
Ingestion	: Call local poison control center for assistance. Contact physician immediately. If victim is conscious and alert, give 2 – 4 cupfuls of milk or water. Obtain medical attention.
Inhalation	: Remove from exposure and move to fresh air immediately. Get medical assistance immediately.

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### Section 5 – Fire Fighting Measures

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#### General Information :

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Material is extremely flammable and will ignite at room temperature.

#### Extinguishing Media :

Use water spray to cool fire-exposed containers. Don't use water spray on fire directly. Use dry chemical, carbon dioxide, or chemical foam.

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### Section 6 – Accidental Release Measures

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#### Spill/Leak Release Procedures :

Wear protective clothing and use approved respirator equipments. Absorb spilled material in an absorbent recommended for solvent equipment and remove to safe location for disposal by approved methods. If released to the environment, comply with all regulatory notification requirements.

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### Section 7 – Handling and storage

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#### Handling :

Use only in well ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation.

#### Storage :

Keep away from ignition sources. Keep container tightly closed and store in a cool, dry, well-ventilated and secure toxic storage room.

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### Section 8 – Exposure Controls & Personal Protection

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#### Engineering Control :

Use exhaust ventilation is recommended to keep airborne concentrations low.

#### Eyes Protection :

Safety glasses are considered minimum protection. Goggles or face shield may be necessary depending on quantity of material and conditions of use.



## MATERIAL SAFETY DATA SHEET

### Skin Protection :

Protective gloves and clothing are recommended. The choice of material must be based on chemical resistance and other user requirements. Generally, polyethylene, polypropylene or neoprene offer acceptable chemical resistance. Individuals who are acutely and specifically sensitive to n-Heptane may require additional protective equipment.

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### Section 9 – Physical and Chemical Properties

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Physical State	: Clear liquid
Appearance	: Yellowish
Odor	: Not available
pH	: Not available
Vapor Pressure	: 45 mmHg@20°C
Viscosity	: 0.4 mPas@20°C
Boiling Point	: 98°C at 760mmHg
Freezing / Melting Point	: -91°C
Flash Point	: -4°C
Solubility In Water	: Immiscible
Specific Gravity	: 0.688 g/cm <sup>3</sup>
Evaporation Rate	: 2.7 (Ether=1)
Explosion Limits, Lower	: 1.10 vol%
Explosion Limits, Upper	: 7.00 vol%
VOC content	: 99.99%; 680 grams/liter

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### Section 10 – Stability & Reactivity Data

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Chemical Stability	: Stable under normal temperatures and pressures.
Conditions To Avoid	: Heat, sparks, open flame and containers, poor ventilation and moisture.
Hazardous Polymerization	: Not expected to occur.
Hazardous Decomposition Products	: Carbon dioxide, carbon monoxide.
Incompatibilities With Other Materials	: Acids, oxidizing agents.

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### Section 11 – Toxicological Information

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#### Toxicity :

n-Heptane may exert its effects through inhalation, skin absorption and ingestion. Vapor is irritating to the eyes and mucous membranes.

Inhalation	LC50	103000 mg/m <sup>3</sup> (Rat)
Intravenous	LC50	222 mg/kg (Mouse)

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### Section 12 – Ecological Information

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**Ecological Information** : No data available.



## MATERIAL SAFETY DATA SHEET

### Section 13 – Disposal Considerations

**Waste Disposal Methods :**

Dispose of n-Heptane as an EPA hazardous waste. Contact state environmental agency for listing of licensed hazardous waste disposal facilities and applicable.

### Section 14 – Transport Information

	IATA	IMO	RID / ADR
Shipping Name	Heptanes solution	Heptanes solution	Heptanes solution
Hazard Class	3	3	3
UN Number	1206	1206	1206
Packing Group	II	II	II

### Section 15 – Regulatory Information

**European / International Regulations**

**Hazard Symbols :** Xn F N

Risk Phrases	R11	Highly flammable
	R18	Irritating to skin
	R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
	R65	Harmful : may cause lung damage if swallowed
	R67	Vapours may cause drowsiness and dizziness
Safety Phrases	S9	Keep container in a well-ventilated place
	S16	Keep away from sources of ignition – No smoking
	S29	Do not empty into drains
	S33	Take precautionary measures against static discharges
	S60	This material and its container must be disposed of as hazardous waste
	S61	Avoid release to the environment. Refer to special instructions / safety data sheets
	S62	If swallowed, do not induce vomiting : seek medical advice immediately and show this container or label

### Section 16 – Other Information

All the information of MSDS is provided on the basis in the good faith, and is believed to be trustworthy but is for reference only. UEA cannot accept any liability for the results whatsoever arising from the use of UEA's products due that the utilization of these products is simply out of UEA's control. The users are responsible for selecting the suitability of the products and methods of use.