

SAFETY DATA SHEET

Revision: 2.0 Date: 28.10.2015

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH),
1272/2008 (CLP) & 2015/830

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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1	Product identifier	
	Product Name	M-Bond 200 Adhesive
	Chemical Name	Mixture
	CAS No.	Mixture
	EINECS No.	Mixture
	REACH Registration No.	None assigned.
1.2	Relevant identified uses of the substance or mixture and uses advised against	
	Identified Use(s)	Adhesives.
	Uses Advised Against	None known.
1.3	Details of the supplier of the safety data sheet	
	Company Identification	VISHAY MEASUREMENTS GROUP UK LTD Stroudley Road Basingstoke Hampshire United Kingdom RG24 8FW
	Telephone	+44 (0) 1256 462131
	Fax	+44 (0) 1256 471441
	E-Mail (competent person)	mm.uk@vishaypg.com
1.4	Emergency telephone number	(00-1) 703-527-3887 CHEMTREC

SECTION 2: HAZARDS IDENTIFICATION

2.1	Classification of the substance or mixture	
2.1.1	Regulation (EC) No. 1272/2008 (CLP)	Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335
2.2	Label elements	According to Regulation (EC) No. 1272/2008 (CLP)
	Product Name	M-Bond 200 Adhesive
	Hazard Pictogram(s)	
	Signal Word(s)	Warning
	Contains:	Ethyl cyanoacrylate
	Hazard Statement(s)	H315: Causes skin irritation. H319: Causes serious eye irritation. H335: May cause respiratory irritation.
	Precautionary Statement(s)	P261: Avoid breathing vapours. P280: Wear protective gloves/protective clothing/eye protection/face protection. P302+P352: IF ON SKIN: Wash with plenty of water. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313: IF exposed or concerned: Get medical advice/attention.

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Additional Information

EUH202: Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.

2.3 Other hazards

None.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Not applicable.

3.2 Mixtures

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

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard classification
Ethyl cyanoacrylate	80 – 100	7085-85-0	230-391-5	None assigned	Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 (SCL: C ≥ 10%)
2-Propenoic acid, 2-methyl-, methyl ester, homopolymer	10 - 20	9011-14-7	618-466-4	None assigned	Not classified

For full text of H/P Statements see section 16.

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

Skin Contact

IF ON SKIN: Wash with plenty of water. Take off contaminated clothing. If skin irritation occurs, get medical advice/attention. Heat of Polymerization: Molten material can cause severe burns. Do NOT try to peel molten polymer from the skin. Cool rapidly with water.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

Unlikely route of exposure. If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Get medical advice/attention if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children. May cause respiratory irritation. Causes serious eye irritation. Causes skin irritation. May cause burns.

4.3 Indication of any immediate medical attention and special treatment needed

Remove excess adhesive. Soak in warm, soapy water or in a warm 1% solution of sodium bicarbonate. The adhesive will come loose from the skin in several hours. Dried adhesive does not present a health hazard even when bonded to the skin. If in eyes, wash thoroughly with warm water and apply a gauze patch. The eye will open without further action, typically in 1 - 4 days. There will be no residual damage. Do not try to open the eyes by manipulation.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media

Extinguish with carbon dioxide, dry chemical, foam or waterspray.

Unsuitable extinguishing media

Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Combustion or thermal decomposition will evolve toxic and irritant vapours. Carbon monoxide, Carbon dioxide, cyanide and Oxides of nitrogen. Vapours

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5.3 Advice for fire-fighters

may ignite.

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid breathing vapours. Avoid all contact. In case of inadequate ventilation wear respiratory protection. Use personal protective equipment as required. See Section: 8.

6.2 Environmental precautions

Avoid release to the environment. Do not allow to enter drains, sewers or watercourses.

6.3 Methods and material for containment and cleaning up

Ensure suitable personal protection during removal of spillages. Do not use cloths for mopping up. Flood with water to complete polymerisation and scrape off the floor. Cured material can be disposed of as non-hazardous waste.

6.4 Reference to other sections

See Section: 8, 13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure adequate ventilation. Avoid breathing vapours. Avoid all contact. In case of inadequate ventilation wear respiratory protection. Use personal protective equipment as required. See Section: 8. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Protect from moisture.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature

Storage life

Incompatible materials

Store in a cool/low-temperature, well-ventilated (dry) place. Keep container closed.

Ambient. < 24°C.

Stable under normal conditions.

Keep away from: Water, Alcohols, Acids, Alkalis, Peroxides.

7.3 Specific end use(s)

Adhesives.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Ethyl cyanoacrylate	7085-85-0	-	-	0.3	1.5	WEL

Note: WEL: Workplace Exposure Limit (UK HSE EH40)

8.1.2 Biological limit value

Not established.

8.1.3 PNECs and DNELs

Not established.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure adequate ventilation. Atmospheric levels should be controlled in compliance with the occupational exposure limit.

8.2.2 Individual protection measures, such as personal protective equipment (PPE)

General hygiene measures for the handling of chemicals are applicable. Avoid all contact. Avoid breathing vapours. Wash hands before breaks and after work. Keep work clothes separately. Do not eat, drink or smoke at the work place.

Eye/ face protection



Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166).

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Skin protection



Hand protection: Wear impervious gloves (EN374). Breakthrough time of the glove material: refer to the information provided by the gloves' producer.
Recommended: PVC / Nitrile rubber.

Body protection: For large quantities - Wear apron or other light protective clothing. Recommended: Polyethylene.

Respiratory protection



Use only in well-ventilated areas. In case of inadequate ventilation wear respiratory protection. For large quantities - Wear suitable respiratory protective equipment.

Thermal hazards

Heat of Polymerization: Molten material can cause severe burns. Do NOT try to peel molten polymer from the skin. Cool rapidly with water.

8.2.3 Environmental Exposure Controls

Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Clear Liquid
Odour	Pungent Odour
Odour threshold	Not available.
pH	Not established.
Melting point/freezing point	-31°C (EU Method A.1)
Initial boiling point and boiling range	214°C (EU Method A.2)
Flash point	82.5°C [Closed cup] (EU Method A.9)
Evaporation rate	Not established.
Flammability (solid, gas)	Not applicable - Liquid
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	<21 Pa @ 20°C
Vapour density	>1 (Air = 1)
Relative density	1.043 EU Method A.3
Solubility(ies)	24 µg/L in Water (EU Method A.6)
Partition coefficient: n-octanol/water	0.776 (log Pow).
Auto-ignition temperature	480°C (EU Method A.15)
Decomposition Temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not oxidising.

9.2 Other information

Volatile Organic Compound Content (%): 1000 g/l

SECTION 10: STABILITY AND REACTIVITY

10.1	Reactivity	Stable under normal conditions.
10.2	Chemical stability	Stable under normal conditions.
10.3	Possibility of hazardous reactions	May polymerise on exposure to moisture.
10.4	Conditions to avoid	Store at temperatures not exceeding (°C): 24°C. Protect from moisture.
10.5	Incompatible materials	Keep away from: Water, Alcohols, Acids, Alkalis, Peroxides.
10.6	Hazardous decomposition product(s)	May decompose in a fire giving off toxic fumes. Carbon monoxide, Carbon dioxide, cyanide and Oxides of nitrogen.

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SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on toxicological effects (Substances in preparations / mixtures)	
	Acute toxicity	
	Ingestion	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg bw/day.
	Inhalation	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 20 mg/l.
	Skin Contact	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg bw/day.
	Skin corrosion/irritation	Skin Irrit. 2: Causes skin irritation.
	Serious eye damage/irritation	Eye Irrit. 2: Causes serious eye irritation.
	Respiratory or skin sensitization	Based upon the available data, the classification criteria are not met.
	Germ cell mutagenicity	Based upon the available data, the classification criteria are not met.
	Carcinogenicity	Based upon the available data, the classification criteria are not met.
	Reproductive toxicity	Based upon the available data, the classification criteria are not met.
	STOT - single exposure	STOT SE 3: May cause respiratory irritation.
	STOT - repeated exposure	Based upon the available data, the classification criteria are not met.
	Aspiration hazard	Based upon the available data, the classification criteria are not met.
11.2	Other information	None.

SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Based upon the available data, the classification criteria are not met. Estimated Mixture LC50 >100 mg/l (Fish)
12.2	Persistence and degradability	No data; Technically not possible.
12.3	Bioaccumulative potential	The product has no potential for bioaccumulation.
12.4	Mobility in soil	The product is predicted to have low mobility in soil (Insoluble in water).
12.5	Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
12.6	Other adverse effects	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	This material and its container must be disposed of as hazardous waste. Dispose of wastes in an approved waste disposal facility.
13.2	Additional Information	Dispose of contents in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION

	Not classified as dangerous for transport. Except for Air transport	
		IATA
14.1	UN number	UN 3334
14.2	UN proper shipping name	Aviation regulated liquid, n.o.s. (Cyanoacrylate ester)
14.3	Transport hazard class(es)	9
14.4	Packing group	III
14.5	Environmental hazards	Not classified as a Marine Pollutant. / Environmentally hazardous substance
14.6	Special precautions for user	See Section: 2
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
14.8	Additional Information	Primary packs containing less than 500ml are unregulated by this mode of transport and may be shipped unrestricted. Packaging instructions (passenger): 906 Packaging instructions (cargo): 906

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SECTION 15: REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.1.1 EU regulations**
Substance(s) of Very High Concern (SVHCs) None.
Authorisations and/or Restrictions On Use None.
- 15.1.2 National regulations**
Wassergefährdungsklasse (Germany) Water hazard class: Not classified
- 15.2 Chemical Safety Assessment** Not available.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

References: Existing Safety Data Sheet (SDS) and Existing ECHA registration(s) for Ethyl cyanoacrylate (CAS# 7085-85-0) and the Classification and Labelling Inventory for 2-Propenoic acid, 2-methyl-, methyl ester, homopolymer (CAS# 9011-14-7).

EU Classification: This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830.

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP)	Classification Procedure
Skin Irrit. 2; H315	Threshold Calculation
Eye Irrit. 2; H319	Threshold Calculation
STOT SE 3; H335	Threshold Calculation

LEGEND

LTEL: Long Term Exposure Limit
STEL: Short Term Exposure Limit
DNEL: Derived No Effect Level

PNEC: Predicted No Effect Concentration
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

Hazard Statement(s)

H315: Causes skin irritation.
H319: Causes serious eye irritation.

H335: May cause respiratory irritation.
SCL: Specific Concentration Limit

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

Disclaimers

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Annex to the extended Safety Data Sheet (eSDS)

No information available.