

### Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021) Issue date: 12/2/2021 Revision date: 5/5/2023 Supersedes: 12/2/2021 Version: 1.1

SECTION 1. Identification		
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1.1. GHS Product identifier		
Product form Product name	: Mixture : VT-110 / VT-111 / VT-113 / VT-117 VitalFix Super Glue	
Product group	: Trade product	
1.2. Other means of identification		
No additional information available		
1.3. Recommended use of the chemical an	d restrictions on use	
Use of the substance/mixture	: Adhesives	
Recommended use	: Adhesives	
1.4. Supplier's details		
Manufacturer		
Vital Technical Sdn. Bhd.	ial Park	
No.93, Jalan Industri 3/3 Rawang Integrated Industr 48000 Rawang, Selangor, Malaysia.	αι Γαικ,	
T +603 60942088 - F +603 60992930		
1.5. Emergency phone number		
No additional information available		
SECTION 2: Hazard identification		
2.1. Classification of the substance or mixt	ure	
Classification according to the United Nations G	HS	
Flammable liquids, Category 4	H227	On basis of test
Skin corrosion/irritation, Category 2	H315	data Calculation method
Serious eye damage/eye irritation, Category 2	H315 H319	Calculation method
Specific target organ toxicity – Single exposure, Cat		Calculation method
Respiratory tract irritation		Calculation motilou
Full text of H-statements: see section 16		
Adverse physicochemical, human health and	: May cause respiratory irritation,Causes skin irritation,Caus	es serious eye irritation.
environmental effects		
2.2. GHS Label elements, including precau	tionary statements	
Labelling according to the United Nations GHS		
Hazard pictograms (GHS UN)		
	\ <b>i</b> /	
Signal word (GHS UN)	: Warning	
Hazardous ingredients Hazard statements (GHS UN)	: ethyl 2-cyanoacrylate : H227 - Combustible liquid	
	H315 - Causes skin irritation	
	H319 - Causes serious eye irritation	
	H335 - May cause respiratory irritation	
Precautionary statements (GHS UN)	: P101 - If medical advice is needed, have product contained	r or label at hand.
	P102 - Keep out of reach of children.	

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P103 - Read carefully and follow all instructions.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

### 2.3. Other hazards which do not result in classification

No additional information available

### SECTION 3: Composition/information on ingredients

### 3.1. Substances

### Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
ethyl 2-cyanoacrylate	CAS-No.: 7085-85-0	≥ 90	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

SECTION 4: First-aid measures	
4.1. Description of necessary first-aid	I measures
First-aid measures general First-aid measures after inhalation	<ul> <li>Call a poison center or a doctor if you feel unwell.</li> <li>Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.</li> </ul>
First-aid measures after skin contact	<ul> <li>Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.</li> </ul>
First-aid measures after eye contact	: 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.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms/effects	s, acute and delayed
Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact	<ul> <li>May cause respiratory irritation.</li> <li>Irritation.</li> <li>Eye irritation.</li> </ul>

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures	
5.1. Suitable extinguishing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Specific hazards arising from the chem	nical
Fire hazard Hazardous decomposition products in case of fire	: Combustible liquid. : Toxic fumes may be released.
5.3. Special protective actions for fire-fighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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SECTION 6: Accidental release measures	
6.1. Personal precautions, protective equipment and emergency procedures	
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and materials for containment and cleaning up	
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or

 Methods for cleaning up
 : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

 Other information
 : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.

### SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

ethyl 2-cyanoacrylate (7085-85-0)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Ethyl cyanoacrylate	
ACGIH TWA (ppm)	0.2 ppm	
ACGIH STEL (ppm)	1 ppm	
Remark (ACGIH)	TLV® Basis: Eye & URT irr; asthma. Notations: DSEN; RSEN	
Regulatory reference	ACGIH 2021	
8.2. Appropriate engineering controls		
	Ensure good ventilation of the work station. Avoid release to the environment.	
8.3. Individual protection measures, such as personal protective equipment (PPE)		
Eye protection:Skin and body protection:	Protective gloves Safety glasses Wear suitable protective clothing In case of insufficient ventilation, wear suitable respiratory equipment	

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8.4. Exposure limit values for the other components

No additional information available

### **SECTION 9: Physical and chemical properties**

### 9.1. Basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: Pungent.
Odour threshold	: Not available
Melting point	: ≈-31 °C
Freezing point	Not available
Boiling point	. ≈ 214 °C
Flammability	Non flammable
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: ≈ 82.5 °C
Auto-ignition temperature	: ≈ 480 °C
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic (calculated value) (40 °C)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: ≈ 0.776
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: ≤0.21 hPa
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: ≈ 1.043
Relative vapour density at 20°C	: ≈4.32
Solubility	: Water: ≤ 0.024 g/l
Viscosity, dynamic	: 90 – 130 mPa·s
Particle size	: Not applicable

### 9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

### **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

**10.2. Chemical stability** 

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### **10.4. Conditions to avoid**

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

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### 10.5. Incompatible materials

### No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information	
11.1. Information on toxicological effects	
Acute toxicity (dermal)	Not classified Not classified Not classified
ethyl 2-cyanoacrylate (7085-85-0)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
Skin corrosion/irritation :	Causes skin irritation.
Serious eye damage/irritation :	Causes serious eye irritation.
Respiratory or skin sensitisation :	Not classified
Germ cell mutagenicity :	Not classified
Carcinogenicity :	Not classified
Reproductive toxicity :	Not classified
STOT-single exposure :	May cause respiratory irritation.
ethyl 2-cyanoacrylate (7085-85-0)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure :	Not classified
Aspiration hazard :	Not classified
ethyl 2-cyanoacrylate (7085-85-0)	
Animal studies and expert judgment for classification	False

### **SECTION 12: Ecological information**

# 12.1. Toxicity Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Hazardous to the aquatic environment, short-term (acute) : Not classified Hazardous to the aquatic environment, long-term (chronic) : Not classified 12.2. Persistence and degradability

VT-110 / VT-111 / VT-113 / VT-117 VitalFix Super Glue	
Persistence and degradability	No additional information available
12.3. Bioaccumulative potential	
VT-110 / VT-111 / VT-113 / VT-117 VitalFix Super Glue	
Partition coefficient n-octanol/water (Log Kow)	≈ 0.776
Bioaccumulative potential	No additional information available

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ethyl 2-cyanoacrylate (7085-85-0)		
Partition coefficient n-octanol/water (Log Kow)	≈ 0.776	
12.4. Mobility in soil		
VT-110 / VT-111 / VT-113 / VT-117 VitalFix Super Glue		
Mobility in soil	No additional information available	
12.5. Other adverse effects		
	Not classified No additional information available	

SECTION 13: Disposal considerati	ons
13.1. Disposal methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.

<b>SECTION 14:</b>	Transport information
	ranoport intornation

In accordance with UN RTDG / IMDG / IATA	

UN RTDG	IMDG	ΙΑΤΑ
14.1. UN number		
Not regulated for transport		
14.2. UN Proper Shipping Name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
No supplementary information available		1

14.6. Special precautions for user

### UN RTDG

No data available

### IMDG

No data available

### ΙΑΤΑ

No data available

14.7. Transport in bulk according to IMO instruments

### Not applicable

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### **SECTION 15: Regulatory information**

### 15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

SECTION 16: Other information	
Issue date Revision date Supersedes	: 12/2/2021 : 5/5/2023 : 12/2/2021
Abbreviations and acronyms	<ul> <li>ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways</li> <li>ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road</li> <li>ATE - Acute Toxicity Estimate</li> <li>BLV - Biological limit value</li> <li>CAS-No Chemical Abstract Service number</li> <li>CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008</li> <li>DMEL - Derived Minimal Effect level</li> <li>DNEL - Derived-No Effect Level</li> <li>EC50 - Median effective concentration</li> <li>EC-No European Community number</li> <li>EN - European Standard</li> <li>IATA - International Air Transport Association</li> <li>IMDG - International Air Transport Association</li> <li>IMDG - International Air Transport Association</li> <li>IMDG - International Averse Effect Level</li> <li>NOAEL - No-Observed Adverse Effect Level</li> <li>NOAEL - No-Observed Adverse Effect Level</li> <li>NOAEC - No-Observed Adverse Effect Level</li> <li>NOAEC - No-Observed Adverse Effect Level</li> <li>NOAEC - No-Observed Effect Concentration</li> <li>OAEL - Occupational Exposure Limit</li> <li>PBT - Persistent Bioaccumulative Toxic</li> <li>PNEC - Predicted No-Effect Concentration</li> <li>REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation</li> <li>(EC) No 1907/2006</li> <li>RID - Regulations concerning the International Carriage of Dangerous Goods by Rail</li> <li>SDS - Safety Data Sheet</li> <li>vPvB - Very Persistent and Very Bioaccumulative</li> <li>WGK - Water Hazard Class</li> </ul>

Full text of H-statements:	
H227	Combustible liquid
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

Safety Data Sheet (SDS), UN

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.