



# VT-504 FRC Epoxy Adhesive Part B

## Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

Issue date: 10/5/2021 Revision date: 9/5/2022 Supersedes: 10/5/2021 Version: 1.1

### SECTION 1: Identification

#### 1.1. GHS Product identifier

Product form : Mixture  
Product name : VT-504 FRC Epoxy Adhesive Part B  
UN-No. (ADR) : 2735  
Product group : Trade product

#### 1.2. Other means of identification

No additional information available

#### 1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Adhesives

#### 1.4. Supplier's details

##### Manufacturer

Vital Technical Sdn. Bhd.  
No.93, Jalan Industri 3/3 Rawang Integrated Industrial Park,  
48000 Rawang, Selangor, Malaysia.  
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 mixture

##### Classification according to the United Nations GHS

Skin corrosion/irritation, Category 1	H314	Calculation method
Serious eye damage/eye irritation, Category 1	H318	Calculation method
Skin sensitisation, Category 1	H317	Calculation method
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412	Calculation method

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects : Causes severe skin burns and eye damage, May cause an allergic skin reaction, Causes serious eye damage, Harmful to aquatic life with long lasting effects.

#### 2.2. GHS Label elements, including precautionary statements

##### Labelling according to the United Nations GHS

Hazard pictograms (GHS UN) :



Signal word (GHS UN) : Danger

Hazardous ingredients : FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH TALL-OIL FATTY ACIDS AND TRIETHYLENETETRAMINE; N,N'-BIS(3-AMINOPROPYL)ETHYLENEDIAMINE; 4,4'-DIAMINODICYCLOHEXYLMETHANE; 3-N-ALKENYL PHENOL; FATTY ACIDS, C14-18 AND C16-18-UNSATD, 2-PHENOXYETHYL ESTERS, MALEATED; 3,6-diazaoctanethylenediamin; triethylenetetramine

Hazard statements (GHS UN) : H314 - Causes severe skin burns and eye damage  
H317 - May cause an allergic skin reaction  
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS UN) : P260 - Do not breathe vapours, spray, mist, gas, fume, dust.  
P261 - Avoid breathing dust, fume, gas, mist, spray, vapours.  
P264 - Wash hands, forearms and face thoroughly after handling.

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P264+P265 - Wash hands, forearms and face thoroughly after handling. Do not touch eyes.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

### 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
3-N-ALKENYL PHENOL	CAS-No.: 8007-24-7	1 – 10	Skin Sens. 1, H317
4,4'-DIAMINODICYCLOHEXYLMETAHNE	CAS-No.: 1761-71-3	1 – 10	Acute Tox. 4 (Oral), H302 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 2, H373
FATTY ACIDS, C18-UNSATD.,DIMERS,POLYMERS WITH TALL-OIL FATTY ACIDS AND TRIETHYLENETETRAMINE	CAS-No.: 68082-29-1	1 – 10	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411
N,N'-BIS(3-AMINOPROPYL)ETHYLENEDIAMINE	CAS-No.: 10563-26-5	0.1 – 1	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317
3,6-diazaoctanethylenediamin; triethylenetetramine	CAS-No.: 112-24-3	0.1 – 1	Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412

Full text of H-statements: see section 16

## SECTION 4: First-aid measures

### 4.1. Description of necessary first-aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.

### 4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after skin contact	: Burns. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

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### 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 chemical

Hazardous decomposition products in case of fire : 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.

## 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. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

#### 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.  
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 : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.  
Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. 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 locked up. Store in a well-ventilated place. Keep cool.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

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Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Protective gloves  
Eye protection : Safety glasses  
Skin and body protection : Wear suitable protective clothing  
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment  
Personal protective equipment symbol(s)



### 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 : Off-white.  
Odour : Pungent.  
Odour threshold : Not available  
Melting point : No data available  
Freezing point : Not available  
Boiling point : Not available  
Flammability : Non flammable.  
Lower explosion limit : Not available  
Upper explosion limit : Not available  
Flash point : Not available  
Auto-ignition temperature : No data available  
Decomposition temperature : Not available  
pH : Not applicable  
pH solution : Not available  
Viscosity, kinematic (calculated value) (40 °C) : Not available  
Partition coefficient n-octanol/water (Log Kow) : Not available  
Vapour pressure : Not available  
Vapour pressure at 50°C : Not available  
Density : Not available  
Relative density : 1.65  
Relative vapour density at 20°C : No data available  
Solubility : Not available  
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.

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### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 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 (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes severe skin burns. pH: Not applicable
Serious eye damage/irritation	: Causes serious eye damage. pH: Not applicable
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

#### 4,4'-DIAMINODICYCLOHEXYLMETAHNE (1761-71-3)

STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified

#### FATTY ACIDS, C18-UNSATD.,DIMERS,POLYMERS WITH TALL-OIL FATTY ACIDS AND TRIETHYLENETETRAMINE (68082-29-1)

Animal studies and expert judgment for classification	False
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#### N,N'-BIS(3-AMINOPROPYL)ETHYLENEDIAMINE (10563-26-5)

Animal studies and expert judgment for classification	False
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#### 4,4'-DIAMINODICYCLOHEXYLMETAHNE (1761-71-3)

Animal studies and expert judgment for classification	False
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#### 3-N-ALKENYL PHENOL (8007-24-7)

Animal studies and expert judgment for classification	False
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#### 3,6-diazaoctanethylenediamin; triethylenetetramine (112-24-3)

Animal studies and expert judgment for classification	False
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## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified

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Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

Classification procedure (Hazardous to the aquatic environment, long-term (chronic)) : Calculation method

### 12.2. Persistence and degradability

VT-504 FRC Epoxy Adhesive Part B	
Persistence and degradability	No additional information available

### 12.3. Bioaccumulative potential

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Bioaccumulative potential	No additional information available

### 12.4. Mobility in soil

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Mobility in soil	No additional information available

### 12.5. Other adverse effects

Ozone : Not classified  
Other adverse effects : No additional information available



## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

In accordance with UN RTDG / IMDG / IATA

UN RTDG	IMDG	IATA
<b>14.1. UN number</b>		
Not applicable	2735	2735
<b>14.2. UN Proper Shipping Name</b>		
Not applicable	AMINES, LIQUID, CORROSIVE, N.O.S.	Amines, liquid, corrosive, n.o.s.
<b>14.3. Transport hazard class(es)</b>		
Not applicable	8	8
Not applicable		
<b>14.4. Packing group</b>		
Not applicable	III	III

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UN RTDG	IMDG	IATA
<b>14.5. Environmental hazards</b>		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
No supplementary information available		

### 14.6. Special precautions for user

#### UN RTDG

No data available

#### IMDG

Special provisions (IMDG) : 223, 274  
Limited quantities (IMDG) : 5 L  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : P001, LP01  
IBC packing instructions (IMDG) : IBC03  
Tank instructions (IMDG) : T7  
Tank special provisions (IMDG) : TP1, TP28  
EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE  
EmS-No. (Spillage) : S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES  
Stowage category (IMDG) : A  
Segregation (IMDG) : SGG18, SG35  
Properties and observations (IMDG) : Colourless to yellowish liquids or solutions with a pungent odour. Miscible with or soluble in water. When involved in a fire, evolve toxic gases. Corrosive to most metals, especially to copper and its alloys. Reacts violently with acids. Cause burns to skin, eyes and mucous membranes.

#### IATA

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y841  
PCA limited quantity max net quantity (IATA) : 1L  
PCA packing instructions (IATA) : 852  
PCA max net quantity (IATA) : 5L  
CAO packing instructions (IATA) : 856  
CAO max net quantity (IATA) : 60L  
Special provisions (IATA) : A3, A803  
ERG code (IATA) : 8L

### 14.7. Transport in bulk according to IMO instruments

Not applicable

## 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

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Abbreviations and acronyms : CAS-No. - Chemical Abstract Service number  
ATE - Acute Toxicity Estimate  
EC50 - Median effective concentration  
EC-No. - European Community number

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IATA - International Air Transport Association  
IMDG - International Maritime Dangerous Goods  
LC50 - Median lethal concentration  
LD50 - Median lethal dose  
LOAEL - Lowest Observed Adverse Effect Level  
N.O.S. - Not Otherwise Specified  
NOAEC - No-Observed Adverse Effect Concentration  
NOAEL - No-Observed Adverse Effect Level  
NOEC - No-Observed Effect Concentration  
OEL - Occupational Exposure Limit  
SDS - Safety Data Sheet

Full text of H-statements:	
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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.