

### SECTION 1: Identification

#### 1.1. GHS Product identifier

Product form : Mixture  
Product name : VT-228 Fire Retardant Sealant  
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

Recommended use : Sealants

#### 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

Hazardous to the aquatic environment – Acute Hazard Not classified Calculation method

Hazardous to the aquatic environment – Chronic Hazard Not classified Calculation method

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects : To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice

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

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

No labelling applicable

#### 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
OXIRANE, 2-METHYL-, POLYMER WITH OXIRANE, MONO(2-ETHYLHEXYL) ETHER	CAS-No.: 64366-70-7	1 – 10	Eye Irrit. 2, H319

Full text of H-statements: see section 16

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### SECTION 4: First-aid measures

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

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

No additional information available

#### 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.
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#### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
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#### 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.
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##### 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".
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#### 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. Wear personal protective equipment.
Hygiene measures	: 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.
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### 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.  
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  
Appearance : Paste  
Colour : White.  
Odour : Barely perceptible odour.  
Odour threshold : Not available  
Melting point : Not applicable  
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 : Not applicable  
Decomposition temperature : Not available  
pH : No data available  
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 : ≈ 1.47  
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)

VOC content : ≈ 3.96 g/l

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### 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

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	: Not classified pH: No data available
Serious eye damage/irritation	: Not classified pH: No data available
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

### 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.
Classification procedure (Hazardous to the aquatic environment, short-term (acute))	: Calculation method
Hazardous to the aquatic environment, long-term (chronic)	: Not classified.
Classification procedure (Hazardous to the aquatic environment, long-term (chronic))	: Calculation method

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### 12.2. Persistence and degradability

#### VT-228 Fire Retardant Sealant

Persistence and degradability : Not rapidly degradable

#### OXIRANE, 2-METHYL-, POLYMER WITH OXIRANE, MONO(2-ETHYLHEXYL) ETHER (64366-70-7)

Persistence and degradability : Not rapidly degradable

### 12.3. Bioaccumulative potential

#### VT-228 Fire Retardant Sealant

Bioaccumulative potential : No additional information available

### 12.4. Mobility in soil

#### VT-228 Fire Retardant Sealant

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 regulated for transport		
<b>14.2. UN Proper Shipping Name</b>		
Not regulated	Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>		
Not regulated	Not regulated	Not regulated
<b>14.4. Packing group</b>		
Not regulated	Not regulated	Not regulated
<b>14.5. Environmental hazards</b>		
Not regulated	Not regulated	Not regulated
No supplementary information available		

### 14.6. Special precautions for user

**UN RTDG**  
Not regulated

**IMDG**  
Not regulated

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### IATA

Not regulated

### 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

Issue date : 8/17/2021  
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Supersedes : 3/18/2022

Abbreviations and acronyms : CAS-No. - Chemical Abstract Service number  
ATE - Acute Toxicity Estimate  
EC50 - Median effective concentration  
EC-No. - European Community number  
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:	
Aquatic Acute Not classified	Hazardous to the aquatic environment – Acute Hazard Not classified
Aquatic Chronic Not classified	Hazardous to the aquatic environment – Chronic Hazard Not classified
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H319	Causes serious eye 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.