



VT-219 Fire Rated Silicone Sealant

Safety Data Sheet

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

Issue date: 10/29/2021 Revision date: 7/13/2022 Supersedes: 2/22/2022 Version: 1.2

SECTION 1: Identification

1.1. GHS Product identifier

Product form : Mixture
Product name : VT-219 Fire Rated Silicone 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

Use of the substance/mixture : Sealants
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

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 : 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 : N-(3-(TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE, BUTAN-2-ONE O,O',O"-
(VINYL)SILYLIDYNE)TRIOXIME, BUTAN-2-ONE O,O',O"-
(METHYLSILYLIDYNE)TRIOXIME

Hazard statements (GHS UN) : H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS UN) : P261 - Avoid breathing dust, fume, gas, mist, spray, vapours.

P264+P265 - Wash hands and ... 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.

P280 - Wear eye protection, face protection, hearing protection, protective clothing,

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protective gloves.
P302+P352 - IF ON SKIN: Wash with plenty of water.

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
BUTAN-2-ONE O,O',O"- (VINYL-SILYLIDYNE)TRIOXIME	CAS-No.: 2224-33-1	1 – 10	Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 2, H373
BUTAN-2-ONE O,O',O"- (METHYL-SILYLIDYNE)TRIOXIME	CAS-No.: 22984-54-9	1 – 10	Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT RE 2, H373
N-(3- (TRIMETHOXY-SILYL)PROPYL)ETHYLENEDIAMINE	CAS-No.: 1760-24-3	0.1 – 1	Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335

Full text of H-statements: see section 16

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. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
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 : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

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

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.

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.

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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. Avoid contact with skin and eyes. Avoid breathing 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 : Mechanically recover the product.
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. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.
Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. 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.

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

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SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Solid
Appearance	: Paste
Colour	: Various colours.
Odour	: Characteristic odour.
Odour threshold	: Not available
Melting point	: Not applicable.
Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: Non flammable.
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: No data available
Decomposition temperature	: Not available
pH	: Not applicable
pH solution	: Not available
Viscosity, kinematic (calculated value) (40 °C)	: Not applicable
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	: ≈ 1.30
Relative vapour density at 20 °C	: No data available
Solubility	: Not available
Particle size	: Not available

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

Explosive limits	: Not applicable
VOC content	: ≈ 43.83 g/l

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.

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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

N-(3-(TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE (1760-24-3)

LD50 oral rat 2295 mg/kg

LD50 dermal 2000 mg/kg

BUTAN-2-ONE O,O',O''-(VINYLILIDYNE)TRIOXIME (2224-33-1)

LD50 oral rat > 2000 mg/kg

LD50 dermal rat ≈ 2009 mg/kg

BUTAN-2-ONE O,O',O''-(METHYLSILYLIDYNE)TRIOXIME (22984-54-9)

LD50 oral rat ≈ 2453 mg/kg

LD50 dermal rat > 2000 mg/kg

Skin corrosion/irritation : Not classified
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

N-(3-(TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE (1760-24-3)

STOT-single exposure May cause respiratory irritation.

STOT-repeated exposure : Not classified

BUTAN-2-ONE O,O',O''-(VINYLILIDYNE)TRIOXIME (2224-33-1)

STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.

BUTAN-2-ONE O,O',O''-(METHYLSILYLIDYNE)TRIOXIME (22984-54-9)

STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

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Viscosity, kinematic Not applicable

N-(3-(TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE (1760-24-3)

Animal studies and expert judgment for classification False

BUTAN-2-ONE O,O',O''-(VINYLILIDYNE)TRIOXIME (2224-33-1)

Animal studies and expert judgment for classification False

BUTAN-2-ONE O,O',O''-(METHYLSILYLIDYNE)TRIOXIME (22984-54-9)

Animal studies and expert judgment for classification False

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

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Hazardous to the aquatic environment, short-term (acute) : Not classified

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

BUTAN-2-ONE O,O',O''-(VINYL-SILYLIDYNE)TRIOXIME (2224-33-1)

LC50 fish 1 1011 mg/l

EC50 other aquatic organisms 1 201 mg/l

BUTAN-2-ONE O,O',O''-(METHYL-SILYLIDYNE)TRIOXIME (22984-54-9)

LC50 fish 1 972.34 mg/l

EC50 other aquatic organisms 1 231.84 mg/l

12.2. Persistence and degradability

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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
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

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UN RTDG	IMDG	IATA
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		

14.6. Special precautions for user

UN RTDG

No data available

IMDG

No data available

IATA

No data available

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 : 29/10/2021
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Supersedes : 22/02/2022

Full text of H-statements:	
H225	Highly flammable liquid and vapour
H301	Toxic if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H341	Suspected of causing genetic defects
H350	May cause cancer

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Full text of H-statements:	
H361	Suspected of damaging fertility or the unborn child
H370	Causes damage to organs
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very 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.