
	<b>VITAL TECHNICAL SDN. BHD.</b>		<b>Issue No.:</b> 2
	<b>Safety Data Sheet</b>		<b>Issued Date:</b> 31/03/08
	<b>VT-157 / VT-161 Vital Black RTV</b>		<b>Revision No.:</b> 0
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## 1. Identification of the substance/preparation and of the company/undertaking

**Product name:** VT-157 / VT-161 Vital Black RTV

**Use:** Sealant

## 2. Hazards identification



Xi Irritant, Xn Harmful

- **Signal words:** Warning.
- **Hazard description:** Not hazardous.
- **Safety description:** Avoid contact with skin and eyes. Use only in well-ventilated areas.

## 3. Composition/information on ingredients

Chemical Name	CAS No.	EINECS:	% (w/w)	Symbols & Health Risk Phrases
Hydrotreated middle petroleum distillates	64742-46-7	265-148-2	<10	Xn Harmful. R65 Harmful: May cause lung damage if swallowed.
Methyltriacetoxysilane	4253-34-3	224-221-9	<10	Xn Harmful. C Corrosive. R14 Reacts violently with water. R22 Harmful if swallowed. R34 Cause burns.
Ethyltriacetoxysilane	17689-77-9	241-677-4	<10	Xn Harmful. C Corrosive. R14 Reacts violently with water. R22 Harmful if swallowed. R34 Cause burns.

Further information:

This sheet only contains safety relevant data. For specific data, see Technical Data Sheet.

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#### 4. First-aid measures

- **Inhalation:** No first aid should be needed.
- **After skin contact:** Remove from skin and wash thoroughly with soap and water or waterless cleanser. Get medical attention if irritation or other ill effects develop or persist.
- **After eye contact:** Flush with water immediately for 15 minutes, seek medical advice if necessary.
- **After ingestion:** Seek medical advice immediately.
- **Comments:** Treat according to person's condition and specifics of exposure.
- **Note to physicians:** Treat symptomatically.

#### 5. Fire-fighting measures



- **Suitable extinguishing media:** On large fires use dry chemical, foam or water spray. On small fires use CO<sub>2</sub>, dry chemical or water spray. Water can be used to cool fire exposed containers.
- **Unsuitable extinguishing media:** None established.
- **Unusual fire hazards:** None.
- **Special firefighting procedures:** Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.
- **Other recommendations:** None.
- **Hazardous combustion products:** Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde.

#### 6. Accidental release measure

- **Personal precautions:** Avoid skin and eye contact. Do not take internally.
- **Environmental precautions:** Do not allow large quantities to enter drains or surface waters.
- **Methods for cleaning up:** Observe all personal protective equipment recommendations described in this MSDS. If diked material can be pumped, store recovered material in appropriate container. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which laws and regulations are applicable.

#### 7. Handling and storage

- **Handling precautions:** Use with adequate ventilation. Product evolves acetic acid (HOAc) when exposed to water or humid air. Provide ventilation during use to control HOAc exposures within exposure guidelines or use respiratory protection. Avoid skin and eye contact. Do not take internally. Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.
- **Storage conditions:** Use reasonable care and store away from oxidizing materials. Keep container closed and store away from water or moisture.
- **Unsuitable packaging materials:** None established.

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## 8. Exposure control/personal protection

- Exposure limits

Ingredients	CAS No.	EINECS:	Exposure Limits
Hydrotreated middle petroleum distillates	64742-46-7	265-148-2	Observe oil mist limits. OSHA PEL (final rule) and ACGIH TLV: TWA 5mg/m <sup>3</sup> ; ACGIH STEL 10mg/m <sup>3</sup>
Methyltriacetoxysilane	4253-34-3	224-221-9	See acetic acid comments
Ethyltriacetoxysilane	17689-77-9	241-677-4	See acetic acid comments



Acetic acid is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 10 ppm and ACGIH TLV: TWA 10 ppm, STEL 15 ppm.

- Engineering controls**
  - **Local ventilation:** None should be needed.
  - **General ventilation:** Recommended.
- Personal protective equipment for routine handling**
  - **Respiratory protection:** No respiratory protection should be needed.
  - **Suitable respirator:** None should be needed.
  - **Eye:** Use chemical worker's goggles.
  - **Hand:** Chemical protective gloves should be worn.
  - **Skin:** Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.
  - **Personal hygiene:** Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.
- Personal protective equipment for spills**
  - **Respiratory protection:** No respiratory protection should be needed.
  - **Eye protection:** Use chemical worker's goggles.
  - **Skin protection:** Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.
  - **Precautionary measures:** Avoid skin and eye contact. Do not take internally. Use reasonable care.
  - **Comments:** Product evolves acetic acid (HOAc) when exposed to water or humid air. Provide ventilation during use to control HOAc exposures within exposure guidelines or use respiratory protection.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

## 9. Physical and chemical properties

- Form: Paste
- Colour: Black
- Odour: Vinegar Smell
- Specific Gravity: 1.01
- VOC Content: <4%w/w

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## 10. Stability and reactivity

- **Stability:** Stable.
- **Conditions to avoid:** None.
- **Materials to avoid:** Can react with strong oxidising agents. Water, moisture or humid air can cause hazardous vapors to form.
- **Hazardous decomposition products:** Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde.
- **Hazardous polymerization:** Hazardous polymerization will not occur.

## 11. Toxicological information

- **Possible health effects**
  - **Acute**

**Skin:** May cause moderate irritation.

**Eye:** Direct contact may cause moderate irritation.

**Inhalation:** Irritates respiratory passages very slightly.

**Ingestion:** Low ingestion hazard in normal use.
  - **Chronic**

**Skin:** Repeated or prolonged contact may cause defatting and drying of skin which may result in skin irritation and dermatitis.

**Inhalation:** No known applicable information.

**Ingestion:** Repeated ingestion or swallowing large amounts may injure internally.

**Other health hazard information:** No known applicable information.
- **LD50 (Oral):** Not determined.
- **LD50 (Dermal):** Not determined.
- **LC50 (Inhalation):** Not determined.



The above listed potential effects of overexposure are based on actual data, the results of studies performed upon similar compositions, component data, and/or expert review of the products.

## 12. Ecological information

- **Environmental fate and distribution:** Solid material, insoluble in water. No adverse effects are predicted.
- **Environmental effects:** No adverse effects on aquatic organisms are predicted.
  - **Bioaccumulation:** No bioaccumulation potential.
- **Fate and effects in waste water treatment plants:** No adverse effects on bacteria are predicted.

## 13. Disposal considerations

- **Product disposal:** Dispose of in accordance with local regulations.
- **Packaging disposal:** Dispose of in accordance with local regulations.

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#### 14. Transport information

- **Road and rail transport:** Not applicable.
- **Sea transport (IMDG):** Not subject to IMDG code.
- **Air transport (IATA-DGR):** Not subject to IATA regulations.

#### 15. Regulatory information

- **Classification and Labelling**
  - **Proposed classification:** Not hazardous.
  - **Risk phrases:** Not hazardous.
  - **Safety phrases:** S24/25 Avoid contact with skin and eyes.  
S51 Use only in well-ventilated areas.
- **Applicable laws:** Occupational Safety and Health (Classification, Packaging and Labelling of Hazardous Chemicals) Regulations 1997
- **Chemical inventories:**
  - **TSCA:** All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.
  - **AICS:** All ingredients listed or exempt.
  - **IECSC:** All ingredients listed or exempt.
  - **KECL:** All ingredients listed, exempt or notified.
  - **PICCS:** All ingredients listed or exempt.
  - **EINECS:** Not determined.
  - **MITI:** Not determined.
  - **DSL:** Not determined.

#### 16. Other information

The details contained herein are based on our present state of knowledge and experiences are characterized our product with regard to any possible safety requirement. We do, however, pass them on without any warranty or property assurances.