

VFI-544 B side

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Date of issue: 09/22/2014

Revision date: 09/22/2017

Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : VFI-544 B side
Product code : Not available

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Polyurea Hybrid Spray Coating

1.3. Details of the supplier of the safety data sheet

Volatile Free, Inc.
19500 Janacek Ct
Brookfield, WI 53045 - USA
T (800) 307-9218

1.4. Emergency telephone number

Emergency Telephone: (outside the U.S.): : 1-703-527-3887 / (U.S. and Canada) 1-800-424-9300
Association/Organization: CHEMTREC

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute Toxicity 4 (Oral)
Eye Irritation 2A
Carcinogenicity 2
Reproductive Toxicity 1B
Single Target Organ Toxicity - Repeated Exposure 2

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : Harmful if swallowed. Causes serious eye irritation. Contains materials suspected of causing cancer (bound in liquid/paint, not airborne dust). Contains materials that may damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

Precautionary statements (GHS-US) : Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. If exposed or concerned: Get medical advice/attention. If swallowed: Immediately call a poison center/doctor. Rinse mouth. If in eyes: 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. Store locked up. Dispose of contents/container in accordance with local/regional/ national/international regulations.

2.3. Other hazards

No additional information available.

2.4. Unknown acute toxicity (GHS-US)

75% of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable.

3.2. Mixture

VFI-544 B side

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Name	Product identifier	%	GHS-US classification
Diethyltoluenediamine	(CAS No) 68479-98-1	10 - 30	Acute Tox. 4 (Oral) Eye Irrit. 2A STOT RE 2
Titanium dioxide ** ***	(CAS No) 13463-67-7	0.1 - 5	Carc. 2***
Zeolite	(CAS No) 1318-02-1	1 - 5	Not classified
Carbon black***	(CAS No) 1333-86-4	0.1 - 1.5	Carc. 2***
1-Methyl-2-pyrrolidone	(CAS No) 872-50-4	0.1 - 1	Skin Irrit. 2 Eye Irrit. 2A Repr. 1B STOT SE 3
Stannane, dimethylbis[(1-oxoneodecyl)oxy]-	(CAS No) 68928-76-7	0.1— 1	Acute Tox. 4 (Oral) Repr. 2 STOT RE 1

* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

** Titanium dioxide is present in all colours except for black.

*** These materials are bound in liquid/paint and are not airborne or in dust form.

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Call a physician if irritation develops and persists.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth. Get immediate medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory tract irritation.
- Symptoms/injuries after skin contact : May cause skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Repeated exposure to this material can result in absorption through skin causing significant health hazard.
- Symptoms/injuries after eye contact : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Symptoms/injuries after ingestion : Harmful if swallowed. May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Treat for surrounding material.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.

5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Methods and material for containment and cleaning up

- For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Scoop up material and place in a disposal container. Provide ventilation.

6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

VFI-544 B side

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/ spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Use only in a well-ventilated area.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep out of the reach of children. Keep container tightly closed and in a well-ventilated place. Store locked up.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Diethyltoluenediamine (68479-98-1)		
USA ACGIH	ACGIH TWA (mg/m ³)	Not available.
USA OSHA	OSHA PEL (TWA) (mg/m ³)	Not available.
Titanium dioxide (13463-67-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³
Zeolite (1318-02-1)		
USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³
Carbon black (1333-86-4)		
USA ACGIH	ACGIH TWA (mg/m ³)	3 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	3.5 mg/m ³
1-Methyl-2-pyrrolidone (872-50-4)		
USA ACGIH	ACGIH TWA (mg/m ³)	Not available.
USA OSHA	OSHA PEL (TWA) (mg/m ³)	Not available.
Stannane, dimethylbis[(1-oxonodecyl)oxy]- (68928-76-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	Not available.
USA OSHA	OSHA PEL (TWA) (mg/m ³)	Not available.

8.2. Exposure controls

- Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Wear chemically resistant protective gloves.
- Eye protection : Wear eye protection.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Environmental exposure controls : Maintain levels below Community environmental protection thresholds.
- Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

VFI-544 B side

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid.
Appearance	: Viscous liquid.
Color	: Various.
Odor	: Slightly sweet.
Odor threshold	: No data available.
pH	: No data available.
Relative evaporation rate (butylacetate=1)	: No data available.
Melting point	: No data available.
Freezing point	: No data available.
Boiling point	: No data available.
Flash point	: > 93 °C (> 200 °F)
Auto-ignition temperature	: No data available.
Decomposition temperature	: No data available.
Flammability (solid, gas)	: Not flammable.
Vapor pressure	: No data available.
Relative vapor density at 20 °C	: No data available.
Relative density	: 0.98
Solubility	: No data available.
Log Pow	: No data available.
Log Kow	: No data available.
Viscosity, kinematic	: No data available.
Viscosity, dynamic	: 600 - 1000 cP
Explosive properties	: No data available.
Oxidising properties	: No data available.
Explosive limits	: No data available.

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Heat. Incompatible materials.

10.5. Incompatible materials

Oxidizers.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed.

VFI-544 B side	
LD50 oral rat	>300 but ≤2000 mg/kg
LD50 dermal rabbit	>2000 mg/kg
LC50 inhalation rat	No data available.

VFI-544 B side

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Diethyltoluenediamine (68479-98-1)	
LD50 oral rat	485 mg/kg
LD50 dermal rabbit	>2000 mg/kg

Titanium dioxide (13463-67-7)	
LD50 oral rat	> 10000 mg/kg
LD50 dermal rabbit	>10000 mg/kg

Zeolite (1318-02-1)	
LD50 oral rat	5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Carbon black (1333-86-4)	
LD50 oral rat	> 15400 mg/kg
LD50 dermal rabbit	> 3 g/kg

1-Methyl-2-pyrrolidone (872-50-4)	
LD50 oral rat	3598 mg/kg
LD50 dermal rabbit	8 g/kg

Skin corrosion/irritation	: Based on available data, the classification criteria are not met.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Suspected of causing cancer.

Titanium dioxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans

Zeolite (1318-02-1)	
IARC group	3 - Not classifiable

Carbon black (1333-86-4)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity	: May damage fertility or the unborn child.
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Repeated exposure to this material can result in absorption through skin causing significant health hazard.
Symptoms/injuries after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/injuries after ingestion	: Harmful if swallowed. May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: May cause long-term adverse effects in the aquatic environment.
-------------------	---

12.2. Persistence and degradability

VFI-544 B side	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

VFI-544 B side	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available.

VFI-544 B side

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

12.5. Other adverse effects

- Effect on ozone layer : No additional information available.
Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

SECTION 14: Transport information

In accordance with DOT

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Not applicable.

14.3. Additional information

- Other information : No supplementary information available.
Special transport precautions : Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

Zeolite	CAS No 1318-02-1
Diethyltoluenediamine (68479-98-1)	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
1-Methyl-2-pyrrolidone (872-50-4)	
Listed on United States SARA Section 313	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 313 - Emission Reporting	1.0 %

15.2. US State regulations

VFI-544 B side	
State or local regulations	This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16: Other information

- Indication of changes : None.
Date of issue : 09/22/2017
Other information : None.

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

VOLATILE FREE, INC.:

THIS INFORMATION AND TECHNICAL ADVICE PROVIDED HEREIN ARE BELIEVED TO BE RELIABLE AND ACCURATE TO THE BEST KNOWLEDGE OF VOLATILE FREE, INC., AS BASED ON TESTS AND SHOULD SERVE ONLY AS A RECOMMENDATION. AS THE MANUFACTURER, VOLATILE FREE, INC MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, EXPRESSED, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR USE OR A PARTICULAR PURPOSE FOR THE PRODUCT. VOLATILE FREE, INC MAKES NO REPRESENTATIONS OR WARRANTIES AS TO THE RESULTS OF THE USE OF THE PRODUCT AND ASSUMES NO OBLIGATION OR LIABILITY IN CONNECTION THEREWITH. VOLATILE FREE, INC. IS NOT LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY SORT FROM USE OF THIS PRODUCT. THE INFORMATION PROVIDED HEREIN IS SUBJECT TO CHANGE AT ANY TIME WITHOUT NOTICE. INFORMATION CHANGES MAY INCLUDE, BUT ARE NOT LIMITED TO, COMMERCIAL AND TECHNICAL CHANGES, CHANGES IN PRICING, PHYSICAL CHARACTERISTICS AND PACKAGING.