

1. Product and Company Identification

Product Name: VF 20 (B-side)

VersaFlex 686 South Adams Street Kansas City, KS 66105

www.versaflex.com

Company Phone: (913) 321-9000 Company Toll Free: (800) 321-0906

CHEMTREC 24 hour Emergency USA: (800) 424-9300 CHEMTREC 24 hour International: (703) 527-3887

Product Use: Primer / Sealer / Coating / Lining Not recommended for: Non Professional Use

2. Hazards Identification

Signal Word:

GHS Ratings:

GHS Hazards

GHS Precautions

There are no GHS ratings that apply to this product at this time.

3. Composition / Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
Trade Secret		90 - 100%
Titanium Dioxide	13463-67-7	< 10%
Carbon Black	1333-86-4	< 1%

4. First Aid Measures

Inhalation: Remove to fresh air if effects occur. Consult a physician.

Eye Contact: Flush with large quantities of water for at least 15 minutes. Consult a physician.

Skin Contact: Wash thoroughly with soap and flowing water.

Ingestion: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

Notes to Physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

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5. Fire Fighting Measures

Flash Point: >232 C (>450 F)

Flammable Properties: Product is not considered a fire hazard, but will burn if ignited.

NFPA Flammability Class: Class III A liquids are combustible liquids that have a flash point \geq 140 deg F (60 deg C), but < 200 deg F (93 deg C). Class III B liquids are combustible liquids that have a flash point \geq 200 deg F.

Suitable Extinguishing Media: Carbon dioxide, dry chemical, water fog or fine spray. Alcohol resistant foams are preferred, general purpose synthetic foams or protein foams may function, but will not be as effective.

Unsuitable Extinguishing Media: Do not use direct water stream, as it may spread fire.

Products of Combustion: Thermal decomposition in the presence of air may yield carbon monoxide, carbon dioxide, phenolics, ammonia, nitrogen oxides and other unidentified toxic and/or irritating compounds.

Fire Fighting: Stay upwind and keep people away. Isolate fire and deny unnecessary entry. Keep out of low areas where gases (fumes) can accumulate. Water is not recommended, but may be applied in large quantities as a fine spray when other extinguishing agents are not available. Use water spray to cool fire-exposed containers and fire-affected zone until fire is out. Contain fire water run-off if possible, as it may cause environmental damage. Review section 6 and section 12 of this SDS.

Protection of Firefighters: Wear positive pressure self-contained breathing apparatus (SCBA) and approved protective clothing (helmet, coat, trousers, boots and gloves). If contact is likely, use full chemical resistant fire fighting clothing with SCBA.

6. Accidental Release Measures

Personal Precautions: Put on appropriate personal protective equipment (see section 8).

Environmental Precautions: Prevent spilled material from contact with soil. drains and sewers.

Methods for Containment: Contain by diking with sand, earth or other suitable material.

Methods for Clean-up: Absorb spill with an inert material, use non-sparking tools to place into labeled waste container for disposal.

7. Handling and Storage

Handling: Wear appropriate personal protective equipment (see section 8). Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Do not ingest. Avoid prolonged or repeated contact with skin. May cause allergic skin reaction, persons with a history of skin sensitization should not be employed in any process in which this product is used. Wash thoroughly with soap and water after handling. Do not handle or store near flame, heat or strong oxidants. Keep away from sources of ignition and hot metal surfaces.

Storage: Store original unopened containers in a sheltered area between 60°F and 80°F (15°C and 27°C) at atmospheric pressure. Do not store in direct sunlight. Keep containers closed when not in use.

8. Exposure Controls / Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits	
Trade Secret	Not Established	Not Established	Not Established	
Titanium Dioxide 13463-67-7	15 mg/m3 TWA (total dust)	10 mg/m3 TWA	Not Established	
Carbon Black 1333-86-4	3.5 mg/m3 TWA	3 mg/m3 TWA (inhalable fraction)	NIOSH: 3.5 mg/m3 TWA; 0.1 mg/m3 TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons, as PAH)	

Engineering Controls: General mechanical ventilation is sufficient for most conditions. Control airborne levels below the exposure guidelines, if established.

Local exhaust ventilation may be necessary for some operations.

General Hygiene Considerations: Wash thoroughly after handling and before eating, drinking or smoking.

Eye/face Protection: Use chemical safety glasses, splash-proof eye goggles or goggles with full faceshield.

Skin Protection: Use nitrile or other impermeable chemical resistant gloves to prevent skin irritation. If potential for skin contact is present, wear impervious, long-sleeved, body covering clothing and rubber boots.

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Respiratory Protection: Respiratory protection should not be needed. If exposure may or does exceed occupational exposure limits, respiratory irritation is experienced, or during spray application, use a properly fitted MSHA/NIOSH approved respirator fitted with organic vapor cartridges. In addition, spray application may require the use of paint pre-filters. If the respirator is the sole means of protection, use a full-face supplied air respirator. If sanding or grinding on cured material, use above respirator fitted with HEPA filters or a dust mask.

Contaminated Gear: Remove contaminated clothing and shoes while washing. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.

9. Physical and Chemical Properties

Appearance Product color varies

Odor Threshold No data found

pH No data found

Boiling Point 313°C

Flash Point 450°F,232°C

Flammability (solid, gas) No data found

Vapor Pressure No data found

Specific Gravity 1.0 - 1.2

Partition Coefficient No data found (n-octanol/water)

Decomposition Temperature No data found

Lbs VOC/Gallon Less Water 0.0

Odor Mild

Physical State Liquid

Melting/Freezing Point No data found

Boiling Range No data found

Evaporation Rate No data found

LEL/UEL No data found

Vapor Density No data found

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Solubility in Water No data found

Autoignition Temperature No data found

Viscosity No data found

10. Stability and Reactivity

Chemical Stability: Stable under recommended storage conditions (see Section 7).

Conditions to Avoid: Elevated temperatures may cause product to decompose.

Incompatible Materials: Strong acids, bases, or oxidizing agents. Avoid unintended contact with isocyanates, water, moist air and metals such as aluminum, brass, copper, tin, zinc and galvanized metals.

Products of Combustion: Thermal decomposition in the presence of air may yield carbon monoxide, carbon dioxide, phenolics, ammonia, nitrogen oxides and other unidentified toxic and/or irritating compounds.

Hazardous polymerization will not occur.

11. Toxicological Information

Mixture Toxicity

Component Toxicity

Likely Routes of Exposure:

No data found

Target Organs

May cause damage to the following organs:

Eyes Respiratory System

Effects of Overexposure

Carcinogenicity: Titanium dioxide has been characterized by IARC as possibly carcinogenic to humans (Group 2b) through inhalation (not ingestion), based on lifetime inhalation studies of rats. The IARC's findings were consistent with the massive accumulation of fine dust particles in the rat's lung (which overwhelm the natural lung clearance mechanisms, causing lung overloading) and consequential pulmonary overload and inflammation that causes lung cancer. In further studies, these tumors were found to occur only under particle overload conditions in a uniquely sensitive species, the rat, and have little or no relevance for humans. Epidemiology studies on more than 20,000 workers do not suggest an increased risk of cancer in humans from occupational exposure to titanium dioxide. If present in this product, the titanium dioxide is in a "wet out" form and does not pose an inhalation hazard.

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Carcinogenicity: This product may contain carbon black, a substance that has been listed by OSHA as a carcinogen to humans when inhaled. If present in this product, it is pre-dispersed in a liquid and not available as a dust. Under normal use conditions it would not be considered a hazard. IARC characterized carbon black as a possible human carcinogen (Group 2B) and concluded that there is sufficient evidence in experimental animals for the carcinogenicity of inhaled carbon black dust and inadequate evidence of carcinogenicity in humans. The IARC's findings were consistent with the massive accumulation of fine dust particles in the lung which overwhelm the natural lung clearance mechanisms, known as "lung overload" phenomenon, rather than from a specific chemical effect from the carbon black in the lung. NIOSH recommends that only carbon blacks with a PAH level greater than 0.1% be considered potential occupational carcinogens.

CAS Number	<u>Description</u>	% Weight	Carcinogen Rating
1333-86-4	Carbon Black	< 1%	Carbon Black: NIOSH: potential occupational carcinogen IARC: Possible human carcinogen OSHA: listed
13463-67-7	Titanium Dioxide	< 10%	Titanium Dioxide: NIOSH: potential occupational carcinogen IARC: Possible human carcinogen OSHA: listed

12. Ecological Information

Component Ecotoxicity

13. Disposal Considerations

Waste Disposal Methods: Dispose of in accordance with federal, state and local regulations. The preferred method for disposal of uncontaminated product is by recycling, reclaiming, incineration or other thermal destruction device using a licensed and permitted waste disposal contractor.

14. Transport Information

<u>Agency</u>	Proper Shipping Name	UN Number	Packing Group	Hazard Class
DOT	Not Regulated			
ICAO/IATA	Not Regulated			
IMDG	Not Regulated			
TDG	Not Regulated			

15. Regulatory Information

USA Federal: This SDS has been prepared in compliance with the Occupational Safety and Health Act (OSHA) Hazard Communication Standard (29 CFR 1910.1200). This product is considered to be a hazardous chemical under that standard. The specific chemical identity and/or exact percentage of any proprietary ingredient(s) may be withheld as a trade secret, pursuant to the standard.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): To the best of our knowledge, this product contains the following chemicals which are known to the State of California to cause cancer, developmental or reproductive toxicity at levels which require warning under this statute:

1333-86-4 Carbon Black < 1 % Carcinogen 13463-67-7 Titanium Dioxide < 10 % Carcinogen

USA Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) - section 103 Hazardous Substances Reportable Quantities (RQs): To the best of our knowledge, this product contains the following chemicals which are listed in 40 CFR 302.4:

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- None

Massachusetts Right to Know: To the best of our knowledge, this product contains the following chemicals at levels which require reporting under this statute:

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1333-86-4 Carbon Black < 1 % 
13463-67-7 Titanium Dioxide < 10 %
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New Jersey Right to Know: To the best of our knowledge, this product contains the following chemicals at levels which require reporting under this statute:

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1333-86-4 Carbon Black < 1 % 
13463-67-7 Titanium Dioxide < 10 %
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Pennsylvania Right to Know: To the best of our knowledge, this product contains the following chemicals at levels which require reporting under this statute:

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1333-86-4 Carbon Black < 1 % 13463-67-7 Titanium Dioxide < 10 %
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USA Resource Conservation and Recovery Act (40 CFR 261): To the best of our knowledge, this product contains the following chemicals at levels which require reporting under this statute:

- None

USA Superfund Amendments and Reauthorization Act (SARA) of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) - section 313 Toxic Release Inventory (TRI) Form R: To the best of our knowledge, this product contains the following chemicals which are listed in 40 CFR 372.65:

- None

USA Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) - section 302 Extremely Hazardous Substances Threshold Planning Quantities (TPQs): To the best of our knowledge, this product contains the following chemicals at levels which require reporting under this statute:

- None

USA Toxic Substances Control Act (TSCA) - section 12(b): To the best of our knowledge, this product contains the following chemicals above the de minimus concentration(s) which requires notification to the Environmental Protection Agency (EPA) per 40 CFR 707, subpart D, if any person intends to export:

- None

Country	Regulation	All Components Listed
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Canada Domestic Substance List	Yes
Canada	Canada Non-Domestic Substances List (NDSL)	No
China	China Inventory of Existing Chemical Substances	Yes
EU	EU REACH List of Registered Intermediates	No
EU	EU REACH List of Pre-Registered Substances	Yes
EU	EU REACH List of Registered Substances	No
Japan	Japanese Existing and New Chemical Substances List	No
South Korea	South Korea Existing Chemicals Inventory	Yes
Philippines	Philippines Inventory of Chemicals and Chemical	Yes
USA	USA TSCA Inventory list section 8(b)	Yes

- None

16. Other Information

Legend

ACGIH American Conference of Governmental Industrial Hygienists, Inc.

ADR/RID European Agreement for transport of dangerous goods by road (ADR) and by rail (RID)

CAS No. Chemical Abstract Service Registry Number

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act, AKA "Superfund"

DOT Department of Transportation (USA)

HCS OSHA Hazard Communication Standard (29 CFR 1910.1200)

IARC International Agency for Research on Cancer
IATA International Air Transport Association
ICAO International Civil Aviation Organization
IMO International Maritime Organization
IMDG International Maritime Dangerous Goods
MSHA Mine Safety and Health Administration

N.A. Not ApplicableN.D. Not DeterminedN.E. Not Established

NFPA National Fire Protection Association

NIOSH National Institute for Occupational Safety and Health

NTP National Toxicology Program

OSHA Occupational Safety and Health Administration (USA)

PEL Permissible Exposure Limit

SARA Superfund Amendments and Reauthorization Act of 1986 (40 CFR)
STEL Short Term Exposure Limit (15 minute Time Weighted Average)

TDG Canada Transport of Dangerous Goods regulations

TLV Threshold Limit Value TWA Time Weighted Average

WHMIS Canada Workplace Hazardous Materials Information System

Hazardous Material Information System (HMIS)

National Fire Protection Association (NFPA)



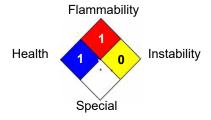
HMIS & NFPA Hazard Rating Legend * = Chronic Health Hazard

0 = INSIGNIFICANT

0 = INSIGNIFICANT 1 = SLIGHT

2 = MODERATE

3 = HIGH



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