1. Product and Company Identification

Product Name: Aliphatic ClearCoat (A-Side)

VersaFlex
686 South Adams Street
Kansas City, KS  66105

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

www.versaflex.com

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: Warning

GHS Ratings:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Code</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation Toxicity</td>
<td></td>
<td>Acute 4</td>
<td>Gases&gt;2500+&lt;5000ppm, Vapors&gt;10+&lt;20mg/l, Dusts&amp;mist&gt;1+&lt;5mg/l</td>
</tr>
<tr>
<td>Skin corrosive</td>
<td></td>
<td>2</td>
<td>Reversible adverse effects in dermal tissue, Draize score: &gt;= 2.3 &lt; 4.0 or persistent inflammation.</td>
</tr>
<tr>
<td>Skin sensitizer</td>
<td></td>
<td>1</td>
<td>Skin sensitizer</td>
</tr>
<tr>
<td>Organ toxin single exposure</td>
<td></td>
<td>3</td>
<td>Transient target organ effects- Narcotic effects- Respiratory tract irritation.</td>
</tr>
</tbody>
</table>

GHS Hazards

- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H332: Harmful if inhaled.
- H335: May cause respiratory irritation.

GHS Precautions

- P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264: Wash thoroughly after handling.
- P271: Use only outdoors or in a well-ventilated area.
- P272: Contaminated work clothing should not be allowed out of the workplace.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P362: Take off contaminated clothing and wash before reuse.
- P302+P352: IF ON SKIN: Wash with soap and water.
- P304+P340: IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
- P332+P313: If skin irritation occurs: Get medical advice/attention.
- P405: Store locked up.
Store in a well ventilated place. Keep container tightly closed.

Dispose of contents/container according to Section 13 of the SDS.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS number</th>
<th>Weight Concentration %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexamethylene Diisocyanate Homopolymer</td>
<td>28182-81-2</td>
<td></td>
</tr>
</tbody>
</table>

4. First Aid Measures

Inhalation: Remove to fresh air if effects occur. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Consult a physician or transport to a medical facility.

Eye Contact: Immediately flush eyes with large quantities of water for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

Skin Contact: Wash immediately and thoroughly with soap and lukewarm flowing water. Remove contaminated clothing while washing. Seek medical attention if irritation develops and persists. This compound is a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn.

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. Maintain adequate ventilation and oxygenation of the patient. May cause respiratory sensitization or asthma-like symptoms. Bronchodilators, expectorants and antitussives may be of help. Treat bronchospasm with inhaled beta2 agonist and oral or parenteral corticosteroids. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. If you are sensitized to diisocyanates, consult your physician regarding working with other respiratory irritants or sensitizers. Cholinesterase inhibition has been noted in human exposure but is not of benefit in determining exposure and is not correlated with signs of exposure. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Excessive exposure may aggravate preexisting asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive airways dysfunction syndrome).

5. Fire Fighting Measures

Flash Point: >160 C (>320 F)

Flammable Properties: Product is not considered a fire hazard, but will burn if ignited. NFPA Flammability Class: III B (Combustible liquid).

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.

Unusual Fire and Explosion Hazards: Product reacts with water. Reaction may produce heat and/or gases. This reaction may be violent. Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Dense smoke is produced when product burns.

Products of Combustion: Thermal decomposition in the presence of air may yield carbon monoxide, carbon dioxide, phenolics, ammonia, nitrogen oxides, isocyanates, hydrogen cyanide 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. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Move container from fire area if this is possible without hazard. 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

<table>
<thead>
<tr>
<th>Chemical Name / CAS No.</th>
<th>OSHA Exposure Limits</th>
<th>ACGIH Exposure Limits</th>
<th>Other Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexamethylene Diisocyanate Homopolymer 28182-81-2</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
</tbody>
</table>

**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 face shield.

**Skin Protection:** Use neoprene, nitrile/butadiene rubber 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.

**Respiratory Protection:** 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 and particulate pre-filters. If the respirator is the sole means of protection, use a full-face supplied air respirator. For situations where the atmospheric levels may exceed the level for which an air-purifying respirator is effective, use an approved positive-pressure air-supplying respirator (air line or self-contained breathing apparatus). 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Clear to pale yellow</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Mild</td>
</tr>
<tr>
<td><strong>Odor Threshold</strong></td>
<td>No data found</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>No data found</td>
</tr>
<tr>
<td><strong>Boiling Point</strong></td>
<td>213°C</td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>&gt;320°F, &gt;160°C</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>No data found</td>
</tr>
<tr>
<td><strong>Vapor Pressure</strong></td>
<td>Approx. 9mbar @ 20°C</td>
</tr>
<tr>
<td><strong>Physical State</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Melting/Freezing Point</strong></td>
<td>No data found</td>
</tr>
<tr>
<td><strong>Boiling Range</strong></td>
<td>No data found</td>
</tr>
<tr>
<td><strong>Evaporation Rate</strong></td>
<td>No data found</td>
</tr>
<tr>
<td><strong>LEL/UEL</strong></td>
<td>No data found</td>
</tr>
<tr>
<td><strong>Vapor Density</strong></td>
<td>No data found</td>
</tr>
</tbody>
</table>
10. Stability and Reactivity

Chemical Stability: Stable under recommended storage conditions (see Section 7).
Conditions to Avoid: Avoid temperatures above 450 deg F (230 deg C), potential violent decomposition may occur. Avoid contact with water, as material reacts with water, releasing carbon dioxide which can cause rapid pressure buildup and rupture of closed containers. Elevated temperatures accelerate this reaction.

Incompatible Materials: Strong acids, bases, or oxidizing agents. Avoid unintended contact with amines, alcohols, 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, isocyanates, hydrogen cyanide and other unidentified toxic and/or irritating compounds.

Hazardous polymerization will not occur.

11. Toxicological Information

Mixture Toxicity
- Dermal Toxicity LD50: 2,014mg/kg
- Inhalation Toxicity LC50: 0.3mg/L

Component Toxicity
- 28182-81-2 Hexamethylene Diisocyanate Homopolymer
  - Inhalation LC50: 0.3 mg/L (Rat)

Toxicological studies of the product: The test atmosphere generated in the animal study is not representative of workplace environments, how the substance is placed on the market, and how it can reasonably be expected to be used. Therefore, the test result cannot be directly applied for the purpose of assessing hazard. Based on expert judgement and the weight of the evidence, a modified classification for acute inhalation toxicity is justified.

Likely Routes of Exposure:
No data found

Target Organs
May cause damage to the following organs:
No data found

Effects of Overexposure

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Description</th>
<th>% Weight</th>
<th>Carcinogen Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
<td></td>
<td>No data found</td>
</tr>
</tbody>
</table>

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

Based on the Reportable Quantity (RQ) for Hexamethylene Diisocyanate of 100 pounds, for bulk shipments of over 70,000 pounds in a single container, the proper shipping information is:
Proper shipping name: Other regulated substances, liquid, n.o.s.(Hexamethylene Diisocyanate)
UN number: UN3082
Packing Group: III
Class: 9

For smaller containers (which contain less than the Product RQ), such as IBC’s (totes), drums and pails; this material is Not Regulated for shipping.

<table>
<thead>
<tr>
<th>Agency</th>
<th>Proper Shipping Name</th>
<th>UN Number</th>
<th>Packing Group</th>
<th>Hazard Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICAO/IATA</td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMDG</td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDG</td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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:
- None

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:
- 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:
- None

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:
- None

Pennsylvania Right to Know: To the best of our knowledge, this product contains the following chemicals at levels which require reporting under this statute:
- None

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 (SARA) 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

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

- 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)
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 Applicable
N.D.  Not Determined
N.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

SDS for: Aliphatic ClearCoat (A-Side)
Hazardous Material Information System (HMIS)  National Fire Protection Association (NFPA)

HMIS & NFPA Hazard Rating Legend
* = Chronic Health Hazard
0 = INSIGNIFICANT
1 = SLIGHT
2 = MODERATE
3 = HIGH

Flammability
Health
Instability
Special

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Date Prepared:  10/28/2019

Reviewer Revision