



Safety Data Sheet

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

- Product Name** • VersaTRANS™ 701 Solvent
- Synonyms** • C2H2Cl2; Trans; Trans-acetylene Dichloride; Trans-dichloroethylene

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

- Relevant identified use(s)** • Solvent
- Use(s) advised against** • Do not use for products which come into contact with foodstuffs. Reason: Toxic if swallowed

1.3 Details of the supplier of the safety data sheet

- Manufacturer** • Axiall, LLC
1000 Abernathy Rd. NE, Suite 1200
Atlanta, GA 30328
United States
www.axiall.com
msdsinfo@axiall.com

Telephone (General) • +1 225-685-1240

- Responsible Party - EU** • Intertek France
12 Rue Alfred Kastler
71530 Fragnes
France
christian.gimenez@intertek.com

Telephone (General) • 33 (0) 385 99 1274

Telephone (General) • 33 385 99 1288

1.4 Emergency telephone number

- Manufacturer** • +1 304-455-6882

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]
According to: EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

- CLP**
- Flammable Liquids 2 - H225
 - Acute Toxicity Oral 4 - H302
 - Aspiration 1 - H304
 - Acute Toxicity Inhalation 4 - H332
 - Hazardous to the aquatic environment Chronic 3 - H412
- DSD/DPD**
- Highly Flammable (F)

Harmful (Xn)
R11, R20, R52, R53

2.2 Label Elements

CLP

DANGER



- Hazard statements** • H225 - Highly flammable liquid and vapour
 H302 - Harmful if swallowed
 H304 - May be fatal if swallowed and enters airways
 H332 - Harmful if inhaled
 H412 - Harmful to aquatic life with long lasting effects

Precautionary statements

- Prevention** • P210 - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
 P233 - Keep container tightly closed.
 P240 - Ground and/or bond container and receiving equipment.
 P241 - Use explosion-proof electrical/ventilating/lighting/equipment.
 P242 - Use only non-sparking tools.
 P243 - Take precautionary measures against static discharge.
 P261 - Avoid breathing mist/vapours/spray.
 P264 - Wash thoroughly after handling.
 P270 - Do not eat, drink or smoke when using this product.
 P273 - Avoid release to the environment.
 P271 - Use only outdoors or in a well-ventilated area.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- Response** • P370+P378 - In case of fire: Use appropriate media for extinction.
 P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
 P301+P312 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.
 P330 - Rinse mouth.
 P331 - Do NOT induce vomiting.
- Storage/Disposal** • P403+P235 - Store in a well-ventilated place. Keep cool.
 P405 - Store locked up.
 P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

DSD/DPD



- Risk phrases** • R11 - Highly flammable.
 R20 - Harmful by inhalation.
 R52 - Harmful to aquatic organisms.
 R53 - May cause long-term adverse effects in the aquatic environment.
- Safety phrases** • S9 - Keep container in a well ventilated place
 S16 - Keep away from sources of ignition - No Smoking.

2.3 Other Hazards

CLP

- According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

DSD/DPD

- According to European Directive 1999/45/EC this material is considered dangerous.

UN GHS

According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

2.1 Classification of the substance or mixture

UN GHS

- Flammable Liquids 2
- Acute Toxicity Oral 4
- Aspiration 1
- Skin Irritation 2
- Eye Irritation 2
- Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects

2.2 Label elements

UN GHS

DANGER



- Hazard statements**
- Highly flammable liquid and vapour
 - Harmful if swallowed
 - May be fatal if swallowed and enters airways
 - Causes skin irritation
 - Causes serious eye irritation
 - May cause drowsiness or dizziness

Precautionary statements

- Prevention**
- Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
 - Keep container tightly closed.
 - Ground and/or bond container and receiving equipment.
 - Use explosion-proof electrical/ventilating/lighting/equipment.
 - Use only non-sparking tools.
 - Take precautionary measures against static discharge.
 - Avoid breathing mist/vapours/spray.
 - Wash thoroughly after handling.
 - Do not eat, drink or smoke when using this product.
 - Use only outdoors or in a well-ventilated area.
 - Wear protective gloves/protective clothing/eye protection/face protection.
- Response**
- In case of fire: Use appropriate media for extinction.
 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 - Wash contaminated clothing before reuse.
 - If skin irritation occurs: Get medical advice/attention.
 - Specific treatment, see supplemental first aid information.
 - 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.
 - Call a POISON CENTER or doctor/physician if you feel unwell.
 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 - Rinse mouth.
 - Do NOT induce vomiting.
- Storage/Disposal**
- Store in a well-ventilated place. Keep container tightly closed.
 - Keep cool.
 - Store locked up.
 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

UN GHS

- According to the Globally Harmonized System for Classification and Labeling (GHS)

this product is considered hazardous.

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

- OSHA HCS 2012
- Flammable Liquids 2
 - Acute Toxicity Oral 4
 - Aspiration 1
 - Skin Irritation 2
 - Eye Irritation 2
 - Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects

2.2 Label elements

OSHA HCS 2012

DANGER



- Hazard statements**
- Highly flammable liquid and vapour
 - Harmful if swallowed
 - May be fatal if swallowed and enters airways
 - Causes skin irritation
 - Causes serious eye irritation
 - May cause drowsiness or dizziness

Precautionary statements

- Prevention**
- Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
 - Keep container tightly closed.
 - Ground and/or bond container and receiving equipment.
 - Use explosion-proof electrical/ventilating/lighting/equipment.
 - Use only non-sparking tools.
 - Take precautionary measures against static discharge.
 - Avoid breathing mist/vapours/spray.
 - Wash thoroughly after handling.
 - Do not eat, drink or smoke when using this product.
 - Use only outdoors or in a well-ventilated area.
 - Wear protective gloves/protective clothing/eye protection/face protection.
- Response**
- In case of fire: Use appropriate media for extinction.
 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 - Wash contaminated clothing before reuse.
 - If skin irritation occurs: Get medical advice/attention.
 - Specific treatment, see supplemental first aid information.
 - 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.
 - Call a POISON CENTER or doctor/physician if you feel unwell.
 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 - Rinse mouth.
 - Do NOT induce vomiting.
- Storage/Disposal**
- Store in a well-ventilated place. Keep container tightly closed.
 - Keep cool.
 - Store locked up.
 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

OSHA HCS 2012

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to: WHMIS

2.1 Classification of the substance or mixture

WHMIS

- Flammable Liquids - B2
- Other Toxic Effects - D2B

2.2 Label elements

WHMIS



- Flammable Liquids - B2
- Other Toxic Effects - D2B

2.3 Other hazards

WHMIS

- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

3.1 Substances

Composition				
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive
trans-1,2-Dichloroethylene	CAS:156-60-5 EC Number:205-860-2 EU Index:602-026-00-3	> 99%	Ingestion/Oral-Rat LD50 • 1235 mg/kg Inhalation-Rat LC50 • 24100 ppm Skin-Rabbit LD50 • >5 g/kg	UN GHS: Flam. Liq. 2; Eye Irrit. 2; Skin Irrit. 2; Acute Tox. 4 (oral); Asp. Tox. 1; STOT SE 3: Narc. EU DSD/DPD: Annex VI, Table 3.2: F, R11; Xn, R20; R52, R53 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Acute Tox. 4, H332; Aquatic Chronic 3, H412 OSHA HCS 2012: Flam. Liq. 2; Skin Irrit. 2, Eye Irrit. 2; Acute Tox. 4 (oral); Asp. Tox. 1; STOT SE 3: Narc.
cis-1,2-Dichloroethylene	CAS:156-59-2 EC Number:205-859-7 EU Index:602-026-00-3	0% TO 0.3%	Inhalation-Rat LC50 • 13700 ppm	UN GHS: Flam. Liq. 2; Asp. Tox. 1 EU DSD/DPD: Annex VI, Table 3.2: F, R11; Xn, R20; R52, R53 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Acute Tox. 4, H332; Aquatic Chronic 3, H412 OSHA HCS 2012: Flam. Liq. 2; Asp. Tox. 1

3.2 Mixtures

- Material does not meet the criteria of a mixture in accordance with Regulation (EC) No 1272/2008.

Section 4 - First Aid Measures

4.1 Description of first aid measures

- Inhalation**
- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention immediately.
- Skin**
- For minor skin contact, avoid spreading material on unaffected skin. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing. If irritation develops and persists, get medical attention.
- Eye**
- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation develops and persists, get medical attention.
- Ingestion**
- If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Do not use mouth-to-mouth method if victim ingested the substance. Obtain medical attention immediately if ingested.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

- In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Increased sensitivity of the heart to adrenaline may be caused by overexposure to this product. Only administer adrenaline after careful consideration following overexposure.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media • Use dry chemical, carbon dioxide, water spray (fog) or foam.

Unsuitable Extinguishing Media • Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

- Containers may explode when heated.
- Vapor explosion hazard indoors, outdoors or in sewers.
- HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- Many liquids are lighter than water.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Runoff to sewer may create fire or explosion hazard.
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.

Hazardous Combustion Products

- Depending on conditions, decomposition products may include the following materials: carbon oxides, hydrogen chloride (HCl), and phosgene gas.

5.3 Advice for firefighters

- Structural firefighters' protective clothing will only provide limited protection. Wear positive pressure self-contained breathing apparatus (SCBA). Move containers from fire area if you can do it without risk.
- LARGE FIRES: Cool containers with flooding quantities of water until well after fire is out.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Ventilate enclosed areas. Do not walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear

appropriate personal protective equipment, avoid direct contact. Avoid contact with skin, eyes, and clothing. Avoid breathing mist, vapors, spray.

Emergency Procedures

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. LARGE SPILL: Consider initial downwind evacuation for at least 300 meters (1000 feet). Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.

6.2 Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Stop leak if you can do it without risk. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. A vapor suppressing foam may be used to reduce vapors. All equipment used when handling the product must be grounded. LARGE SPILLS: Dike far ahead of liquid spill for later disposal. LARGE SPILLS: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

- Handle and open container with care. Use only with adequate ventilation. Avoid contact with heat and ignition sources. All equipment used when handling the product must be grounded. Use only non-sparking tools. Take precautionary measures against static charges. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing mist, vapors, spray. Avoid contact with skin, eyes, and clothing. Do not ingest. Avoid contamination of water supplies. Handling, storage and use procedures must be carefully monitored to avoid spills or leaks. Any spill or leak has the potential to cause underground water contamination which may, if sufficiently severe, render a drinking water source unfit for human consumption. Contamination that does occur cannot be easily corrected. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Ventilate enclosed areas. Keep only in the original container. Keep container tightly closed. Avoid contact with heat and ignition sources and oxidizers. Separate from oxidizing materials. Store in a cool, dry, well-ventilated place. Empty containers retain product residue and can be hazardous. Do not cut, weld, puncture or incinerate container.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines				
	Result	ACGIH	Canada British Columbia	Canada Ontario
cis-1,2-				

Dichloroethylene (156-59-2)	TWAs	200 ppm TWA	200 ppm TWA	200 ppm TWA
trans-1,2-Dichloroethylene (156-60-5)	TWAs	200 ppm TWA	200 ppm TWA	200 ppm TWA

8.2 Exposure controls

Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory

- If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.

Eye/Face

- Wear chemical splash goggles and face shield.

Skin/Body

- Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. **HANDS:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Clear, colorless liquid with a pleasant odor.
Color	Colorless	Odor	Pleasant
Odor Threshold	No data available		
General Properties			
Boiling Point	48 °C(118.4 °F)	Melting Point/Freezing Point	-49 °C(-56.2 °F)
Decomposition Temperature	No data available	pH	6.5 to 7.2
Specific Gravity/Relative Density	= 1.27 Water=1	Density	10.6 lbs/gal
Water Solubility	Negligible < 0.1 %	Viscosity	0.41 Centipoise (cPs, cP) or mPas @ 20 °C(68 °F)
Explosive Properties	No data available	Oxidizing Properties:	No data available
Volatility			
Vapor Pressure	336 mmHg (torr) @ 25 °C(77 °F)	Vapor Density	3.34 Air=1

Evaporation Rate	0.63 Ether = 1	Volatiles (Wt.)	100 %
Volatiles (Vol.)	100 %		
Flammability			
Flash Point	2.2 °C(35.96 °F) CC (Closed Cup)	UEL	18 %
LEL	6.7 %	Autoignition	No data available
Flammability (solid, gas)	Not relevant.		
Environmental			
Octanol/Water Partition coefficient	2.09 Kow		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under recommended storage and handling conditions.

10.3 Possibility of hazardous reactions

- Under normal conditions of storage and use, hazardous polymerization will not occur.

10.4 Conditions to avoid

- Keep away from heat, sparks, and flame. When exposed to high temperatures may produce hazardous decomposition products.

10.5 Incompatible materials

- Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, and strong acids. Avoid contamination with caustic soda, caustic potash or oxidizing materials, shock sensitive compounds may be formed.

10.6 Hazardous decomposition products

- Depending on conditions, decomposition products may include the following materials: carbon oxides, hydrogen chloride (HCl), and phosgene gas.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components		
trans-1,2-Dichloroethylene (> 99%)	156-60-5	Acute Toxicity: Ingestion/Oral-Rat LD50 • 1235 mg/kg; Inhalation-Rat LC50 • 24100 ppm; Behavioral:Somnolence (general depressed activity); Skin-Rabbit LD50 • >5 g/kg; <i>Skin and Appendages:After systemic exposure:Dermatitis, irritative; Nutritional and Gross Metabolic:Gross Metabolite Changes:Weight loss or decreased weight gain;</i> Irritation: Eye-Rabbit • 10 mg • Moderate irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Moderate irritation; Reproductive: Inhalation-Rat TClO • 12000 ppm 6 Hour(s)(7-16D preg); <i>Reproductive Effects:Effects on Fertility:Post-implantation mortality; Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus)</i>
Impurities, Stabilizers, etc...		
cis-1,2-Dichloroethylene (0% TO 0.3%)	156-59-2	Acute Toxicity: Inhalation-Rat LC50 • 13700 ppm; Behavioral:Somnolence (general depressed activity); Liver:Fatty liver degeneration; Inhalation-Cat LCLo • 20 g/m ³ 6 Hour(s); Behavioral:General anesthetic; <i>Behavioral:Convulsions or effect on seizure threshold; Nutritional and Gross Metabolic:Changes in Chemistry or Temperature:Body temperature decrease;</i> Inhalation-Mouse LCLo • 65 g/m ³ 2 Hour(s); Behavioral:General anesthetic; Behavioral:Convulsions or effect on seizure threshold;

Behavioral: Changes in motor activity (specific assay)

GHS Properties	Classification
Acute toxicity	EU/CLP • Acute Toxicity - Inhalation 4; Acute Toxicity - Oral 4 UN GHS • Acute Toxicity - Oral 4 OSHA HCS 2012 • Acute Toxicity - Oral 4
Skin corrosion/Irritation	EU/CLP • No data available UN GHS • Skin Irritation 2 OSHA HCS 2012 • Skin Irritation 2
Serious eye damage/Irritation	EU/CLP • No data available UN GHS • Eye Irritation 2 OSHA HCS 2012 • Eye Irritation 2
Skin sensitization	EU/CLP • No data available UN GHS • No data available OSHA HCS 2012 • No data available
Respiratory sensitization	EU/CLP • No data available UN GHS • No data available OSHA HCS 2012 • No data available
Aspiration Hazard	EU/CLP • Aspiration 1 UN GHS • Aspiration 1 OSHA HCS 2012 • Aspiration 1
Carcinogenicity	EU/CLP • No data available UN GHS • No data available OSHA HCS 2012 • No data available
Germ Cell Mutagenicity	EU/CLP • No data available UN GHS • No data available OSHA HCS 2012 • No data available
Toxicity for Reproduction	EU/CLP • No data available UN GHS • No data available OSHA HCS 2012 • No data available
STOT-SE	EU/CLP • No data available UN GHS • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
STOT-RE	EU/CLP • No data available UN GHS • No data available OSHA HCS 2012 • No data available

Potential Health Effects**Inhalation****Acute (Immediate)**

- Harmful if inhaled. May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.

Chronic (Delayed)

- No data available

Skin**Acute (Immediate)**

- Causes skin irritation.

Chronic (Delayed)

- No data available

Eye**Acute (Immediate)**

- Causes serious eye irritation.

- Chronic (Delayed)**
- No data available
- Ingestion**
- Acute (Immediate)**
- Harmful if swallowed. Material may be aspirated into lungs during ingestion and/or subsequent vomiting. Aspiration of this material will cause severe lung injury, chemical pneumonitis, pulmonary edema or death.
- Chronic (Delayed)**
- No data available

Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

Section 12 - Ecological Information**12.1 Toxicity**

	CAS	
VersaTRANS™-701 Solvent	NDA	Aquatic Toxicity-Crustacea: 48 Hour(s) LC50 <i>Water flea - Daphnia magna</i> 220000-290000 µg/L [Fresh water] Comments: trans-1,2-Dichloroethylene 48 Hour(s) NOEC <i>Water flea - Daphnia magna</i> <110000 µg/L [Fresh water] Comments: trans-1,2-Dichloroethylene

- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2 Persistence and degradability

- Not readily biodegradable.

12.3 Bioaccumulative potential

- This product shows a low bioaccumulation potential.

12.4 Mobility in Soil

- No data available

12.5 Results of PBT and vPvB assessment

- No data available

12.6 Other adverse effects

- No studies have been found.

Section 13 - Disposal Considerations**13.1 Waste treatment methods**

- Product waste**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
- Packaging waste**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN1150	1,2-Dichloroethylene	3	II	NDA

TDG	UN1150	1,2-DICHLOROETHYLENE	3	II	NDA
IMO/IMDG	UN1150	1,2-DICHLOROETHYLENE	3	II	NDA
IATA/ICAO	UN1150	1,2-Dichloroethylene	3	II	NDA

14.6 Special precautions for user • None specified.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code • Data lacking.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Acute, Fire

Inventory						
Component	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS	TSCA
trans-1,2-Dichloroethylene	156-60-5	Yes	No	Yes	No	Yes
cis-1,2-Dichloroethylene	156-59-2	No	Yes	Yes	No	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

- trans-1,2-Dichloroethylene 156-60-5 B2, D2B
- cis-1,2-Dichloroethylene 156-59-2 B2, D2B

Canada - WHMIS - Ingredient Disclosure List

- trans-1,2-Dichloroethylene 156-60-5 Not Listed
- cis-1,2-Dichloroethylene 156-59-2 Not Listed

Environment

Canada - CEPA - Priority Substances List

- trans-1,2-Dichloroethylene 156-60-5 Not Listed
- cis-1,2-Dichloroethylene 156-59-2 Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

- trans-1,2-Dichloroethylene 156-60-5 Not Listed
- cis-1,2-Dichloroethylene 156-59-2 Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

- trans-1,2-Dichloroethylene 156-60-5 Not Listed
- cis-1,2-Dichloroethylene 156-59-2 Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

- trans-1,2-Dichloroethylene 156-60-5 Not Listed

• cis-1,2-Dichloroethylene	156-59-2	Not Listed
U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities		
• trans-1,2-Dichloroethylene	156-60-5	1000 lb final RQ (listed under 1,2-Dichloroethylene); 454 kg final RQ (listed under 1,2-Dichloroethylene)
• cis-1,2-Dichloroethylene	156-59-2	1000 lb final RQ; 454 kg final RQ
U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities		
• trans-1,2-Dichloroethylene	156-60-5	Not Listed
• cis-1,2-Dichloroethylene	156-59-2	Not Listed
U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
• trans-1,2-Dichloroethylene	156-60-5	Not Listed
• cis-1,2-Dichloroethylene	156-59-2	Not Listed
U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
• trans-1,2-Dichloroethylene	156-60-5	Not Listed
• cis-1,2-Dichloroethylene	156-59-2	Not Listed
U.S. - CERCLA/SARA - Section 313 - Emission Reporting		
• trans-1,2-Dichloroethylene	156-60-5	Not Listed
• cis-1,2-Dichloroethylene	156-59-2	Not Listed
U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing		
• trans-1,2-Dichloroethylene	156-60-5	Not Listed
• cis-1,2-Dichloroethylene	156-59-2	Not Listed
U.S. - TSCA (Toxic Substances Control Act) - Section 12(b) - Export Notification		
• trans-1,2-Dichloroethylene	156-60-5	Not Listed
• cis-1,2-Dichloroethylene	156-59-2	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• trans-1,2-Dichloroethylene	156-60-5	Not Listed
• cis-1,2-Dichloroethylene	156-59-2	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• trans-1,2-Dichloroethylene	156-60-5	Not Listed
• cis-1,2-Dichloroethylene	156-59-2	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• trans-1,2-Dichloroethylene	156-60-5	Not Listed
• cis-1,2-Dichloroethylene	156-59-2	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• trans-1,2-Dichloroethylene	156-60-5	Not Listed
• cis-1,2-Dichloroethylene	156-59-2	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• trans-1,2-Dichloroethylene	156-60-5	Not Listed
• cis-1,2-Dichloroethylene	156-59-2	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• trans-1,2-Dichloroethylene	156-60-5	Not Listed
• cis-1,2-Dichloroethylene	156-59-2	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Revision Date	<ul style="list-style-type: none">• 04/March/2016
Preparation Date	<ul style="list-style-type: none">• 23/December/2014
Disclaimer/Statement of Liability	<ul style="list-style-type: none">• The technical data given herein is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. No guarantee is being given as to the end use performance. The product is sold on the basis that buyers test the product for their specific purposes. This information related to the material designated and may not be valid for such material used in combination with any other materials or in any process.

Key to abbreviations

NDA = No Data Available