



Safety Data Sheet

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

1.1 Product identifier

Product Name • Resin Kit Part A & C - BC-490, BC-490G, BC-490RS

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

Relevant identified use(s) • Plastic Scintillator Casting resin

1.3 Details of the supplier of the safety data sheet

Manufacturer • Luxium Solutions
 17900 Great Lakes Parkway
 Hiram, OH 44234
 United States
 www.luxiumsolutions.com

Telephone (General) • (440) 834-5600

1.4 Emergency telephone number

Contract # 6493674

U.S. & Canada • 1-800-255-3924 – VelocityEHS
International • +1-813-248-0585 – VelocityEHS

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 2015/830]

According to: EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP • Flammable Liquids 3 - H226
 Skin Irritation 2 - H315
 Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation - H335
 Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336

DSD/DPD • Irritant (Xi)
 R36/37/38, R67

2.2 Label Elements

CLP

WARNING



Hazard statements • H226 - Flammable liquid and vapour
 H315 - Causes skin irritation

H335 - May cause respiratory irritation

H336 - May cause drowsiness or dizziness

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 mists, vapours, and/or spray.
 P264 - Wash thoroughly after handling.
 P271 - Use only outdoors or in a well-ventilated area.
 P280 - Wear protective gloves and eye/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.
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
 P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P362 - Take off contaminated clothing and wash before reuse.
 P321 - Specific treatment, see supplemental first aid information.
 P332+P313 - If skin irritation occurs: Get medical advice/attention.
- Storage/Disposal** • P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
 P235 - 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** • R36/37/38 - Irritating to eyes, respiratory system and skin.
 R67 - Vapours may cause drowsiness and dizziness.

- Safety phrases** • S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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.

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

- OSHA HCS 2012**
- Flammable Liquids 3
 - Skin Irritation 2
 - Eye Irritation 2
 - Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
 - Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects

2.2 Label elements

OSHA HCS 2012

WARNING



- Hazard statements**
- Flammable liquid and vapour
 - Causes skin irritation
 - Causes serious eye irritation
 - May cause respiratory 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 mists, vapours, and/or spray.
 - Wash thoroughly after handling.
 - Use only outdoors or in a well-ventilated area.
 - Wear protective gloves and eye/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.
 - Call a POISON CENTER or doctor/physician if you feel unwell.
 - If on skin: Wash with plenty of water .
 - Take off contaminated clothing and wash before reuse.
 - Specific treatment, see supplemental first aid information.
 - If skin irritation occurs: Get medical advice/attention.
 - 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.
- 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

- Combustible Liquids - B3
- Other Toxic Effects - D2B

2.2 Label elements

WHMIS



WHMIS

- Combustible Liquids - B3
- 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

- Material does not meet the criteria of a substance.

3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Vinyl Toluene	CAS:25013-15-4 EINECS:246-562-2	> 98.7274%	Ingestion/Oral-Rat LD50 • 2255 mg/kg	EU DSD/DPD: Xi; R36/37/38; R67 EU CLP: Flam. Liq. 3, H226; Skin Irrit. 2, H315; STOT SE 3: Resp. Irrit., H335; STOT SE 3: Narc., H336 OSHA HCS 2012: Flam. Liq. 3; Eye Irrit. 2; Skin Irrit 2; STOT SE 3: Resp. Irrit. & Narc.	NDA
Proprietary	Proprietary	1.1178% TO 1.2284%	NDA	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA
Proprietary	Proprietary	0.0369%	Ingestion/Oral-Rat LD50 • 890 mg/kg	EU CLP: Community workplace exposure limit OSHA HCS 2012: Exposure limits	NDA

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin

- IF ON SKIN: Wash with plenty of soap and water. Wash skin with soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention.

Eye

- 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.

Ingestion

- Do NOT induce vomiting. Keep head below hips if vomiting occurs. Get medical attention immediately.

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

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media • Alcohol foam, CO₂, dry chemical, protein foam or water fog.

Unsuitable Extinguishing Media • No data available

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

- **HIGHLY FLAMMABLE:** Will be easily ignited by heat, sparks or flames. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapor explosion hazard indoors, outdoors or in sewers. Vapors may travel to source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous Combustion Products

- No data available

5.3 Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA). Move containers from fire area if you can do it without risk. Use water spray to cool fire-exposed containers. Structural firefighters' protective clothing will only provide limited protection. Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

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. Wear appropriate protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Emergency Procedures

- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep out of low areas. Keep unauthorized personnel away. Stay upwind. 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. All equipment used when handling the product must be grounded. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Do not use Zorbal. Use clean non-sparking tools to collect absorbed material. A vapor suppressing foam may be used to reduce vapors. **LARGE SPILLS:** Dike far ahead of liquid spill for later disposal.

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**

- Use only in well ventilated areas. Avoid contact with heat and ignition sources. Use only non-sparking tools. Take precautionary measures against static charges. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing mist, vapors, and/or spray. Avoid contact with skin, eyes or clothing. 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**

- Store in a cool/low-temperature, well-ventilated place. Control temperature in storage below 90°F Keep away from heat and ignition sources. Keep container closed when not in use. Keep out of direct sunlight.

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 Manitoba	Canada New Brunswick	Canada Northwest Territories
Proprietary (Proprietary)	TWAs	2 mg/m ³ TWA (inhalable fraction and vapor)	2 mg/m ³ TWA (aerosol, inhalable, and vapour)	2 mg/m ³ TWA (inhalable fraction and vapor)	10 mg/m ³ TWA	2 mg/m ³ TWA (inhalable fraction and vapour)
	STELs	Not established	Not established	Not established	Not established	4 mg/m ³ STEL (inhalable fraction and vapour)
Vinyl Toluene (25013-15-4)	STELs	100 ppm STEL	75 ppm STEL	100 ppm STEL	100 ppm STEL; 483 mg/m ³ STEL	100 ppm STEL
	TWAs	50 ppm TWA	25 ppm TWA	50 ppm TWA	50 ppm TWA; 242 mg/m ³ TWA	50 ppm TWA
Exposure Limits/Guidelines (Con't.)						
	Result	Canada Nova Scotia	Canada Nunavut	Canada Ontario	Canada Quebec	Canada Yukon
Proprietary (Proprietary)	TWAs	2 mg/m ³ TWA (inhalable fraction and vapor)	2 mg/m ³ TWA (inhalable fraction and vapour)	2 mg/m ³ TWA (inhalable fraction and vapor)	Not established	10 mg/m ³ TWA
	STELs	Not established	4 mg/m ³ STEL (inhalable fraction and vapour)	Not established	10 mg/m ³ STEV	20 mg/m ³ STEL
Vinyl Toluene (25013-15-4)	STELs	100 ppm STEL	100 ppm STEL	100 ppm STEL	100 ppm STEV; 483 mg/m ³ STEV	150 ppm STEL; 720 mg/m ³ STEL
	TWAs	50 ppm TWA	50 ppm TWA	50 ppm TWA	50 ppm TWAEV; 242 mg/m ³ TWAEV	100 ppm TWA; 480 mg/m ³ TWA
Exposure Limits/Guidelines (Con't.)						
	Result	Denmark	Finland	France	Germany DFG	Germany TRGS
Proprietary (Proprietary)	TWAs	10 mg/m ³ TWA	10 mg/m ³ TWA	10 mg/m ³ TWA [VME]	Not established	10 mg/m ³ TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, inhalable fraction, exposure factor 4)
	Ceilings	Not established	Not established	Not established	40 mg/m ³ Peak (can occur as vapor and aerosol at the same time, inhalable fraction)	Not established
	MAKs	Not established	Not established	Not established	10 mg/m ³ TWA MAK (can occur as vapor and aerosol at the same time, inhalable fraction)	Not established
						100 ppm TWA AGW

Vinyl Toluene (25013-15-4)	TWAs	25 ppm TWA; 120 mg/m ³ TWA	10 ppm TWA; 49 mg/m ³ TWA	50 ppm TWA [VME]; 240 mg/m ³ TWA [VME]	Not established	(all isomers, exposure factor 2); 490 mg/m ³ TWA AGW (all isomers, exposure factor 2)
	Ceilings	Not established	Not established	Not established	40 ppm Peak (all isomers); 196 mg/m ³ Peak (all isomers)	Not established
	MAKs	Not established	Not established	Not established	20 ppm TWA MAK; 98 mg/m ³ TWA MAK	Not established
Exposure Limits/Guidelines (Con't.)						
	Result	Greece	Ireland	NIOSH	OSHA	Poland
Proprietary (Proprietary)	TWAs	10 mg/m ³ TWA	10 mg/m ³ TWA	10 mg/m ³ TWA	Not established	Not established
	STELs	Not established	30 mg/m ³ STEL (calculated)	Not established	Not established	Not established
Vinyl Toluene (25013-15-4)	TWAs	100 ppm TWA; 480 mg/m ³ TWA	50 ppm TWA; 242 mg/m ³ TWA	100 ppm TWA; 480 mg/m ³ TWA	100 ppm TWA; 480 mg/m ³ TWA	100 mg/m ³ TWA [NDS]
	STELs	150 ppm STEL; 720 mg/m ³ STEL	10 ppm STEL; 483 mg/m ³ STEL	Not established	Not established	300 mg/m ³ STEL [NDSch]
Exposure Limits/Guidelines (Con't.)						
	Result	Portugal		Spain	Sweden	
Proprietary (Proprietary)	TWAs	2 mg/m ³ TWA [VLE-MP] (inhalable fraction, aerosol and vapor)		10 mg/m ³ TWA [VLA-ED]	Not established	
Vinyl Toluene (25013-15-4)	STELs	100 ppm STEL [VLE-CD]		100 ppm STEL [VLA-EC]; 492 mg/m ³ STEL [VLA-EC]	30 ppm Indicative STLV; 150 mg/m ³ Indicative STLV	
	TWAs	50 ppm TWA [VLE-MP]		50 ppm TWA [VLA-ED]; 246 mg/m ³ TWA [VLA-ED]	10 ppm LLV; 50 mg/m ³ LLV	

Exposure Control Notations

Denmark

- Vinyl Toluene (25013-15-4): **Skin Notations:** (Potential for cutaneous absorption (listed under Vinyltoluene, all isomers))

Portugal

- Vinyl Toluene (25013-15-4): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Proprietary (Proprietary): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)

Sweden

- Vinyl Toluene (25013-15-4): **Skin:** (Skin notation)

ACGIH

- Vinyl Toluene (25013-15-4): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Proprietary (Proprietary): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)

Germany DFG

- Vinyl Toluene (25013-15-4): **Pregnancy:** (classification not yet possible (all isomers))
- Proprietary (Proprietary): **Carcinogens:** (Category 4 (no significant contribution to human cancer)) | **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to)

Exposure Limits Supplemental

ACGIH

- Vinyl Toluene (25013-15-4): **TLV Basis - Critical Effects:** (eye and upper respiratory tract irritation)
- Proprietary (Proprietary): **TLV Basis - Critical Effects:** (upper respiratory tract irritation)

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. Use explosion-proof electrical/ventilating/lighting/equipment.

Personal Protective Equipment

Respiratory

- Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear chemical splash safety goggles.

Skin/Body

- Wear appropriate gloves.

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

STEV = Short Term Exposure Value

LLV = Limit Level Value is the exposure limit for 8-hour work day

TLV = Threshold Limit Value determined by the American Conference of Governmental Industrial Hygienists (ACGIH)

NIOSH = National Institute of Occupational Safety and Health

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

OSHA = Occupational Safety and Health Administration

TWAEV = Time-Weighted Average Exposure Value

STEL = Short Term Exposure Limits are based on 15-minute exposures

Section 9 - Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Thick, clear blue fluorescent liquid with aromatic odor.
Color	Clear, blue.	Odor	Aromatic
Odor Threshold	Data lacking		
General Properties			
Boiling Point	334 °F(167.7778 °C)	Melting Point/Freezing Point	Data lacking
Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	= 0.9164 Water=1	Water Solubility	0.0089 %
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	1.1 mmHg (torr) @ 20 °C(68 °F)	Vapor Density	4.08 Air=1
Evaporation Rate	Data lacking		
Flammability			
Flash Point	52.8 °C(127.04 °F) TCC (Tagliabue Closed Cup)	UEL	5.2 % @ 84°C
LEL	1.1 % @ 51°C	Autoignition	538 °C(1000.4 °F)
Flammability (solid, gas)	Data lacking		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

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

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

- Acids, bases, and strong oxidizers.

10.6 Hazardous decomposition products

- None known.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components		
Vinyl Toluene (> 98.7274%)	25013-15-4	Acute Toxicity: Ingestion/Oral-Rat LD50 • 2255 mg/kg; <i>Sense Organs and Special Senses:Eye:Lacrimation; Behavioral:Somnolence (general depressed activity); Skin and Appendages:Other:Hair;</i> Irritation: Eye-Rabbit • 90 mg • Mild irritation; Skin-Rabbit • 100 % • Moderate irritation

GHS Properties	Classification
Acute toxicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Skin corrosion/Irritation	EU/CLP • Skin Irritation 2 OSHA HCS 2012 • Skin Irritation 2
Serious eye damage/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Eye Irritation 2
Skin sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Respiratory sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Aspiration Hazard	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Carcinogenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Germ Cell Mutagenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Toxicity for Reproduction	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
	EU/CLP • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects; Specific

STOT-SE	Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects; Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
STOT-RE	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking

Potential Health Effects

Inhalation

- Acute (Immediate)**
 - May cause respiratory irritation. 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)**
 - May cause gastrointestinal irritation.
- Chronic (Delayed)**
 - No data available

Key to abbreviations

LD = Lethal Dose

Section 12 - Ecological Information

12.1 Toxicity

- Material data lacking.

12.2 Persistence and degradability

- Material data lacking.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- Material data lacking.

12.5 Results of PBT and vPvB assessment

- PBT and vPvB assessment has not been carried out.

12.6 Other adverse effects

- Material data lacking.

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	UN2618	Flammable liquids, n.o.s. (Vinyl Toluene)	3	III	NDA
TDG	UN2618	FLAMMABLE LIQUID, N.O.S. (Vinyl Toluene)	3	III	NDA
IMO/IMDG	UN2618	FLAMMABLE LIQUID, N.O.S. (Vinyl Toluene)	3	III	NDA
IATA/ICAO	UN2618	Flammable liquid, n.o.s. (Vinyl Toluene)	3	III	NDA

14.6 Special precautions for user • None specified.

14.7 Transport in bulk according to Annex II of Marpol 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 • Fire, Acute

State Right To Know		
Component	CAS	PA
Proprietary	Proprietary	Yes
Proprietary	Proprietary	No
p-bis (o-Methylstyryl) Benzene	13280-61-0	No
Vinyl Toluene	25013-15-4	Yes

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
Proprietary	Proprietary	Yes	No	Yes	Yes	No
Proprietary	Proprietary	Yes	No	Yes	Yes	No
p-bis (o-Methylstyryl) Benzene	13280-61-0	Yes	No	Yes	Yes	No
Vinyl Toluene	25013-15-4	Yes	No	Yes	Yes	No

Inventory (Con't.)			
Component	CAS	Korea KECL	TSCA
Proprietary	Proprietary	Yes	Yes
Proprietary	Proprietary	Yes	Yes
p-bis (o-Methylstyryl)Benzene	13280-61-0	Yes	Yes

Vinyl Toluene	25013-15-4	Yes	Yes
---------------	------------	-----	-----

Canada

Labor

Canada - WHMIS 1988 - Classifications of Substances

• Vinyl Toluene	25013-15-4	B3, D2B
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

Canada - WHMIS 1988 - Ingredient Disclosure List

• Vinyl Toluene	25013-15-4	1 %
• <i>Proprietary</i>	<i>Proprietary</i>	1 %
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

Environment

Canada - CEPA - Priority Substances List

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

China

Environment

China - Ozone Depleting Substances - First Schedule

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

China - Ozone Depleting Substances - Second Schedule

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

China - Ozone Depleting Substances - Third Schedule

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

Other

China - Annex I & II - Controlled Chemicals Lists

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

China - Dangerous Goods List

• Vinyl Toluene	25013-15-4	
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed
---------------------------------	------------	------------

Germany

Labor

Germany - Immission Control - Qualifying Quantities for Major Accident Prevention

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

Germany - Immission Control - Qualifying Quantities for Safety Reporting

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

Germany - TRGS 505 - Specific Lead Regulations

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

Environment

Germany - TA Luft - Types and Classes

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

Germany - TA Luft - Emission Limits for Carcinogenic Substances

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

Germany - TA Luft - Emission Limits for Fibers

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

Germany - TA Luft - Emission Limits for Inorganic Dusts

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

Germany - TA Luft - Emission Limits for Inorganic Gases

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

Germany - TA Luft - Emission Limits for Organic Substances

• Vinyl Toluene	25013-15-4	Not Listed
-----------------	------------	------------

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed
Germany - Water Classification (VwVwS) - Annex 1		
• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed
Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes		
• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	ID Number 724, hazard class 1 - low hazard to waters
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed
Germany - Water Classification (VwVwS) - Annex 3		
• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	ID Number 724, hazard class 2 - hazard to waters
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

United States

Labor		
U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals		
• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed
U.S. - OSHA - Specifically Regulated Chemicals		
• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

Environment		
U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants		
• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed
U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities		
• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed
U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities		
• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed
U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed
U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed
U.S. - CERCLA/SARA - Section 313 - Emission Reporting		
• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed
U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing		
• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

United States - California

Environment

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

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

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

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

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

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

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

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

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

• Vinyl Toluene	25013-15-4	Not Listed
-----------------	------------	------------

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

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

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

United States - Pennsylvania**Labor****U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• Vinyl Toluene	25013-15-4	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• p-bis (o-Methylstyryl)Benzene	13280-61-0	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

Section 16 - Other Information**Revision Date**

- 23/May/2023

Preparation Date

- 04/February/2009

Disclaimer/Statement of Liability

- Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgement.

Key to abbreviations

NDA = No Data Available