Safety Data Sheet



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

1.1 Product identifier

Product Name • Buehler Varidur Liquid & Varidur Kit / SDS# 9107495

SDS Number/Grade • 9107495

• 20-3570; 20-3574 & 20-3578

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

Relevant identified use(s) • Acrylic Hardener

1.3 Details of the supplier of the safety data sheet

BUEHLER, a division of Illinios Tool Works Inc.

41 Waukegan Road Lake Bluff, IL 60044 United States

Telephone (Technical) • 847-295-6500

1.4 Emergency telephone number

Manufacturer • 800-424-9300 - CHEMTREC

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

• Flammable Liquids 3 - H226

Acute Toxicity Dermal 4 - H312 Skin Irritation 2 - H315 Skin Sensitization 1 - H317 Eye Irritation 2 - H319

Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation - H335

DSD/DPD • Flammable

Flammable Irritant (Xi) Harmful (Xn)

R10, R21, R36/37/38, R43

2.2 Label Elements

Preparation Date: 10/April/2013

Revision Date: 24/July/2015

CLP

WARNING





- Hazard statements H226 Flammable liquid and vapour
 - H312 Harmful in contact with skin
 - H315 Causes skin irritation
 - H317 May cause an allergic skin reaction
 - H319 Causes serious eye irritation
 - H335 May cause respiratory irritation

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.
 - P272 Contaminated work clothing should not be allowed out of the workplace. 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.
 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.
 - P363 Wash contaminated clothing before reuse.
 - P321 Specific treatment, see supplemental first aid information.
 - P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.
 - Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: 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 R10 Flammable.
 - R21 Harmful in contact with skin.
 - R36/37/38 Irritating to eyes, respiratory system and skin.
 - R43 May cause sensitisation by skin contact.

- **Safety phrases** S24 Avoid contact with skin.
 - S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 - S36 Wear suitable protective clothing.
 - S37 Wear suitable gloves.
 - S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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 3 Skin Irritation 2 Skin Sensitization 1 Eve Irritation 2

2.2 Label elements

UN GHS

WARNING





Hazard statements . Flammable liquid and vapour

Causes skin irritation

May cause an allergic skin reaction Causes serious eye irritation

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.

Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response •

In case of fire: Use appropriate media for extinction.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

Wash contaminated clothing before reuse.

Specific treatment, see supplemental first aid information. If skin irritation or rash 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 cool.

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 3 Skin Irritation 2 Eve Irritation 2 Skin Sensitization 1

2.2 Label elements

OSHA HCS 2012

WARNING





Hazard statements • Flammable liquid and vapour Causes skin irritation Causes serious eye irritation

Precautionary statements

Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking. Prevention •

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.

Wash thoroughly after handling.

Wear protective gloves and eye/face protection, .

In case of fire: Use appropriate media for extinction. Response •

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

Wash contaminated clothing 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 cool.

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





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	
Methacrylic acid, isobutyl ester	CAS:97-86-9 EC Number:202- 613-0 EU Index:607- 113-00-X	< 90%	NDA	UN GHS: Flam. Liq. 3; Eye Irrit. 2; Skin Irrit. 2 EU DSD/DPD: Annex VI, Table 3.2: R10; Xi, R36/37/38; R43; N, R50 EU CLP: Annex VI, Table 3.1: Flam. Liq. 3, H226; Eye Irrit. 2, H319; STOT SE 3: Resp. Irrit., H335; Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Acute 1, H400 OSHA HCS 2012: Flam. Liq. 3; Eye Irrit. 2; Skin Irrit. 2	NDA	
1,3-Propanediol, 2- ethyl-2-hydroxymethyl-, trimethacrylate	CAS:3290-92-4 EINECS:221- 950-4	< 20%	NDA	UN GHS: Skin Irrit. 3 EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA	
p-Toluidine, N,N- dimethyl-	CAS:99-97-8 EC Number:202- 805-4 EU Index:612- 056-00-9	< 3%	Inhalation-Rat LC50 • 1400 mg/m³ 4 Hour(s) Skin-Rabbit LD50 • >2000 mg/kg Ingestion/Oral-Rat LD50 • 980 mg/kg	UN GHS: Flam. Liq. 4; Acute Tox. 4 (orl); Acute Tox. 2 (inhl); Eye Irrit. 2; Aquatic Acute 3 EU DSD/DPD: Annex VI, Table 3.2: T, R23/24/25; R33; R52, R53 EU CLP: Annex VI, Table 3.1: Acute Tox. 3 *, H331; Acute Tox. 3 *, H311; Acute Tox. 3 *, H301; STOT RE 2 *, H373 **; Aquatic Chronic 3, H412 OSHA HCS 2012: Flam. Liq. 4; Acute Tox. 4 (orl); Acute Tox. 2 (inhl); Eye Irrit. 2	NDA	

See Section 16 for full text of H-statements and R-phrases.

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. If signs/symptoms continue, get medical attention.

Skin

 In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing. Wash skin with soap and water. 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. If eye irritation persists: Get medical advice/attention.

Ingestion

• Do NOT induce vomiting. Give victim a glass of water or milk. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

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, foam, water fog.

Unsuitable Extinguishing Media

Do not use a direct stream of water.

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

No data available

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 the area before entry. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. 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. 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) ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Stay upwind. Keep out of low areas.

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

• Use only in well ventilated areas. Avoid contact with heat and ignition sources. Do not use sparking tools. Take precautionary measures against static charges. All equipment used when handling the product must be grounded. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing mist, vapours and/or spray. Avoid contact with skin, eyes, and 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

Keep container closed. Do not expose to direct sunlight. Store in a cool/low-temperature, well-ventilated dry place away from heat and ignition sources. Vapors are uninhibited and may form polymers in vents or flame arresters, resulting in blockage of vents.

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

No applicable exposure limits available for product or components.

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

 In case of insufficient ventilation, wear suitable respiratory equipment. 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 Skin/Body Wear safety goggles.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.

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Clear liquid with an ester-like odor.
Color	Clear	Odor	Ester-like
Odor Threshold	Data lacking		
General Properties			-
Boiling Point	155 C(311 F) at 1013 hPa	Melting Point/Freezing Point	Data lacking

Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	= 0.8914 Water=1	Water Solubility	470 mg/L @ 20 C(68 F)
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	2.11 hPa @ 20 C(68 F)	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability			
Flash Point	49.4 C(120.92 F) CC (Closed Cup)	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
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 under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

Hazardous polymerization can occur when not used under normal conditions.

10.4 Conditions to avoid

· Keep away from heat, sparks and flame.

10.5 Incompatible materials

· Reducing and oxidizing agents. Tertiary amines. Heavy metals. Peroxides.

10.6 Hazardous decomposition products

· None when used as directed.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components					
1,3-Propanediol, 2- ethyl-2- hydroxymethyl-, trimethacrylate (< 20%)		Acute Toxicity: Ingestion/Oral-Rat LD50 • 5660 µL/kg; Skin-Rabbit LD50 • 16 mL/kg; Irritation: Skin-Rabbit • 500 mg • Mild irritation; Reproductive: Ingestion/Oral-Rat TDLo • 25 g/kg (6-15D preg); Reproductive Effects:Maternal Effects:Uterus, cervix, vagina; Reproductive Effects:Effects on Fertility:Post-implantation mortality			
Methacrylic acid, isobutyl ester (< 90%)	97- 86-9	Acute Toxicity: Ingestion/Oral-Mouse LD50 • 11990 mg/kg			
p-Toluidine, N,N-	99-	Acute Toxicity: Eye-Rabbit TDLo • 100 mg/kg; Sense Organs and Special Senses:Eye:Lacrimation; Sense Organs and Special Senses:Eye:Conjunctive irritation; Ingestion/Oral-Rat LD50 • 1650 mg/kg; Ingestion/Oral-Mouse TDLo • 250 mg/kg; Behavioral:Somnolence (general depressed activity); Lungs, Thorax, or Respiration:Respiratory depression; Kidney, Ureter, and Bladder:Urine volume decreased; Inhalation-Rat			

dimethyl- (< 3%)	97-8	LC50 • 1400 mg/m³ 4 Hour(s); Inhalation-Mouse TCLo • 800 mg/m³ 2 Hour(s); Lungs, Thorax, or
		Respiration:Structural or functional change in trachea or bronchi; Lungs, Thorax, or
		Respiration: Dyspnea ; Skin-Rabbit LD50 • >2000 mg/kg;
		Mutagen: DNA damage • Ingestion/Oral-Rat • 1082 mg/kg

GHS Properties	Classification
Acute toxicity	EU/CLP • Acute Toxicity - Dermal 4 - ATEmix(dermal) =1044 mg/kg OSHA HCS 2012 • Data lacking UN GHS • Data lacking
Aspiration Hazard	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking UN GHS • Data lacking
Carcinogenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking UN GHS • Data lacking
Germ Cell Mutagenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking UN GHS • Data lacking
Skin corrosion/Irritation	EU/CLP • Skin Irritation 2 OSHA HCS 2012 • Skin Irritation 2 UN GHS • Skin Irritation 2
Skin sensitization	EU/CLP • Skin Sensitizer 1 OSHA HCS 2012 • Skin Sensitizer 1 UN GHS • Skin Sensitizer 1
STOT-RE	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking UN GHS • Data lacking
STOT-SE	EU/CLP • Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation OSHA HCS 2012 • Data lacking UN GHS • Data lacking
Toxicity for Reproduction	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking UN GHS • Data lacking
Respiratory sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking UN GHS • Data lacking
Serious eye damage/Irritation	EU/CLP • Eye Irritation 2 OSHA HCS 2012 • Eye Irritation 2 UN GHS • Eye Irritation 2

Potential Health Effects Inhalation

Acute (Immediate)

• May cause respiratory irritation.

Chronic (Delayed)

· No data available.

Skin

Acute (Immediate)

• Harmful in contact with skin. Causes skin irritation. May cause skin sensitization. Symptoms include redness, and skin rash.

Chronic (Delayed)

No data available.

Eye

Acute (Immediate)

Chronic (Delayed)

- · Causes serious eye irritation.
- · No data available.

Ingestion

Acute (Immediate)

Chronic (Delayed)

- May cause nausea and vomiting.
- · No data available.

Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

TD = Toxic Dose

Section 12 - Ecological Information

12.1 Toxicity

Buehler Varidur Liquid & Varidur Kit / SDS# 9107495					
Dosage	Species Duration			Exposure Conditions	Comments
42-50.5 mg/L	Fish: Fathead minnow	4 Day(s)	LC50	NDA	p-Toluidine, N,N-dimethyl- (99-97-8)

12.2 Persistence and degradability

• Readily biodegradable: 74% in 28 days.

12.3 Bioaccumulative potential

· Moderate potential for bioaccumulation.

12.4 Mobility in Soil

· Predicted to have moderate mobility in soil.

12.5 Results of PBT and vPvB assessment

• No PBT and vPvB assessment has been conducted.

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
I	I		l l	I	1 I

DOT	UN1993	Flammable liquids, n.o.s. (Isobutyl methacrylate, Trimethylolpropane Trimethacrylate solution)	3	III	NDA
TDG	UN1993	FLAMMABLE LIQUID, N.O.S. (Isobutyl methacrylate, Trimethylolpropane Trimethacrylate solution)	3	III	NDA
IATA/ICAO	UN1993	Flammable liquid, n.o.s. (Isobutyl methacrylate, Trimethylolpropane Trimethacrylate solution)	3	III	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
1,3-Propanediol, 2- ethyl-2- hydroxymethyl-, trimethacrylate	3290-92-4	Yes	No	Yes	No	Yes
Methacrylic acid, isobutyl ester	97-86-9	Yes	No	Yes	No	Yes
p-Toluidine, N,N- dimethyl-	99-97-8	Yes	No	Yes	No	Yes

Canada

abor Canada - WHMIS - Classifications of Substances		
• p-Toluidine, N,N-dimethyl-	99-97-8	Not Listed
• 1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate	3290-92-4	Not Listed
Methacrylic acid, isobutyl ester	97-86-9	В3
Canada - WHMIS - Ingredient Disclosure List		
• p-Toluidine, N,N-dimethyl-	99-97-8	Not Listed
• 1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate	3290-92-4	Not Listed
Methacrylic acid, isobutyl ester	97-86-9	Not Listed

Environment

Canada - CEPA - Priority Substances List

• p-Toluidine, N,N-dimethyl-	99-97-8	Not Listed
• 1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate	3290-92-4	Not Listed
Methacrylic acid, isobutyl ester	97-86-9	Not Listed

United States

-	La	h	റ	r	

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

• p-Toluidine, N,N-dimethyl-	99-97-8	Not Listed
 1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate 	3290-92-4	Not Listed
Methacrylic acid, isobutyl ester	97-86-9	Not Listed
U.S OSHA - Specifically Regulated Chemicals		
• p-Toluidine, N,N-dimethyl-	99-97-8	Not Listed
 1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate 	3290-92-4	Not Listed
Methacrylic acid, isobutyl ester	97-86-9	Not Listed
Environment		
U.S CAA (Clean Air Act) - 1990 Hazardous Air Pollutants		
• p-Toluidine, N,N-dimethyl-	99-97-8	Not Listed
• 1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate	3290-92-4	Not Listed
Methacrylic acid, isobutyl ester	97-86-9	Not Listed
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities		
• p-Toluidine, N,N-dimethyl-	99-97-8	Not Listed
1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate	3290-92-4	Not Listed
Methacrylic acid, isobutyl ester	97-86-9	Not Listed
U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities		
• p-Toluidine, N,N-dimethyl-	99-97-8	Not Listed
 1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate 	3290-92-4	Not Listed
Methacrylic acid, isobutyl ester	97-86-9	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
• p-Toluidine, N,N-dimethyl-	99-97-8	Not Listed
1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate	3290-92-4	Not Listed
Methacrylic acid, isobutyl ester	97-86-9	Not Listed
H.O. OFFICIA/OAPA Oastisus 200 Futus made Harmadaya Outa (
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs	00.07.0	Night Lights d
• p-Toluidine, N,N-dimethyl-	99-97-8	Not Listed
1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate	3290-92-4	Not Listed
Methacrylic acid, isobutyl ester	97-86-9	Not Listed

United States - California

• p-Toluidine, N,N-dimethyl-

• p-Toluidine, N,N-dimethyl-

• Methacrylic acid, isobutyl ester

· Methacrylic acid, isobutyl ester

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• 1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• 1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate

Environment U.S California - Proposition 65 - Carcinogens List			
• p-Toluidine, N,N-dimethyl-	99-97-8	carcinogen, initial date 5/2/14	
• 1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate	3290-92-4	Not Listed	
Methacrylic acid, isobutyl ester	97-86-9	Not Listed	
U.S California - Proposition 65 - Developmental Toxicity			
• p-Toluidine, N,N-dimethyl-	99-97-8	Not Listed	

Preparation Date: 10/April/2013 Revision Date: 24/July/2015 99-97-8

97-86-9

99-97-8

97-86-9

3290-92-4

3290-92-4

Not Listed

Not Listed

Not Listed

Not Listed

Not Listed

Not Listed

• 1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate	3290-92-4	Not Listed
Methacrylic acid, isobutyl ester	97-86-9	Not Listed
U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL)		
• p-Toluidine, N,N-dimethyl-	99-97-8	Not Listed
 1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate 	3290-92-4	Not Listed
Methacrylic acid, isobutyl ester	97-86-9	Not Listed
U.S California - Proposition 65 - No Significant Risk Levels (NSRL)		
• p-Toluidine, N,N-dimethyl-	99-97-8	Not Listed
 1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate 	3290-92-4	Not Listed
Methacrylic acid, isobutyl ester	97-86-9	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Female		
• p-Toluidine, N,N-dimethyl-	99-97-8	Not Listed
 1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate 	3290-92-4	Not Listed
Methacrylic acid, isobutyl ester	97-86-9	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Male		
• p-Toluidine, N,N-dimethyl-	99-97-8	Not Listed
 1,3-Propanediol, 2-ethyl-2-hydroxymethyl-, trimethacrylate 	3290-92-4	Not Listed
Methacrylic acid, isobutyl ester	97-86-9	Not Listed

15.2 Chemical Safety Assessment

· No Chemical Safety Assessment has been carried out.

15.3 Other Information

 WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16 - Other Information

Relevant Phrases (code & full text)

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H331 - Toxic if inhaled

H373 - May cause damage to organs through prolonged or repeated exposure.

H400 - Very toxic to aquatic life

H412 - Harmful to aquatic life with long lasting effects

R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.

R33 - Danger of cumulative effects.

R50 - Very toxic to aquatic organisms.

R52 - Harmful to aquatic organisms.

R53 - May cause long-term adverse effects in the aquatic environment.

Last Revision Date

Preparation Date

Disclaimer/Statement of Liability

24/July/2015

10/April/2013

To the best of our knowledge, the information contained in this SDS is accurate or is
obtained from sources believed to be accurate. However, no liability, expressed or
implied, is assumed for the accuracy or completeness of the information contained
herein. Buyer assumes liability in its use of the material.

Key to abbreviations

NDA = No data available

Buehler Varidur Liquid & Varidur Kit / SDS# 9107495