

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

**1.1 Product identifier**

**Product Name** • **Razor Red Film**

**Product Description** • Red film.

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

**Relevant identified use(s)** • Photostencil film

**1.3 Details of the supplier of the safety data sheet**

**Manufacturer** • IKONICS Corporation  
4832 Grand Ave.  
Duluth, MN 55807  
United States  
www.ikonics.com  
sds@ikonics.com

**Telephone (General)** • (218) 628-2217

**Telephone (General)** • (800) 328-4261 - Toll free

**1.4 Emergency telephone number**

**Chemtrec** • 1-800-424-9300 - Within USA and Canada  
• +1 703-527-3887 - Outside USA and Canada (collect calls accepted)

**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** • Skin Irritation 2 - H315  
Skin Sensitization 1 - H317  
Eye Irritation 2 - H319  
Hazardous to the aquatic environment Chronic 3 - H412  
EUH208

**DSD/DPD** • Irritant (Xi)  
Sensitizer  
R36/38, R43, R53

**2.2 Label Elements**

**CLP**

**WARNING**



**Hazard statements** • H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation

H412 - Harmful to aquatic life with long lasting effects  
EUH208 - Contains sensitizing substances (Alkoxylated nonylphenol acrylate; Pentaerythritol Tetraacrylate; Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol; 2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester). May produce an allergic reaction.

### Precautionary statements

- Prevention**
- P261 - Avoid breathing dust, fume, gas, mist, vapors and/or spray.
  - P264 - Wash thoroughly after handling.
  - P272 - Contaminated work clothing should not be allowed out of the workplace.
  - P273 - Avoid release to the environment.
  - P280 - Wear protective gloves/protective clothing/eye protection/face protection.

- Response**
- P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
  - 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.
  - P321 - Specific treatment, see supplemental first aid information.
  - P362 - Take off contaminated clothing and wash before reuse.

- Storage/Disposal**
- P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

### DSD/DPD



- Risk phrases**
- R36/38 - Irritating to eyes and skin.
  - R43 - May cause sensitization by skin contact.
  - R53 - May cause long-term adverse effects in the aquatic environment.

- Safety phrases**
- S24 - Avoid contact with skin.
  - S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  - 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 • No data available

DSD/DPD • No data available

---

## UN GHS

According to Third Revised Edition

### 2.1 Classification of the substance or mixture

- UN GHS
- Skin Irritation 2 - H315
  - Skin Sensitization 1 - H317
  - Eye Irritation 2 - H319
  - Hazardous to the aquatic environment Chronic 3 - H412

### 2.2 Label elements

UN GHS

**WARNING**



- Hazard statements**
- H315 - Causes skin irritation
  - H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation  
H412 - Harmful to aquatic life with long lasting effects

### Precautionary statements

**Prevention** • P261 - Avoid breathing dust, fume, gas, mist, vapors and/or spray.  
P264 - Wash thoroughly after handling.  
P272 - Contaminated work clothing should not be allowed out of the workplace.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

**Response** • P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
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.  
P321 - Specific treatment, see supplemental first aid information.  
P362 - Take off contaminated clothing and wash before reuse.

**Storage/Disposal** • P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

### 2.3 Other hazards

UN GHS

- No data available

---

### United States (US)

According to OSHA 29 CFR 1910.1200 HCS

### 2.1 Classification of the substance or mixture

OSHA HCS 2012

- Skin Irritation 2 - H315  
Skin Sensitization 1 - H317  
Eye Irritation 2 - H319

### 2.2 Label elements

OSHA HCS 2012

#### WARNING



**Hazard statements** • Causes skin irritation - H315  
May cause an allergic skin reaction - H317  
Causes serious eye irritation - H319

### Precautionary statements

**Prevention** • Avoid breathing dust/fume/gas/mist/vapors/spray. - P261  
Wash thoroughly after handling. - P264  
Contaminated work clothing should not be allowed out of the workplace. - P272  
Avoid release to the environment. - P273  
Wear protective gloves/protective clothing/eye protection/face protection. - P280

**Response** • IF ON SKIN: Wash with plenty of soap and water. - P302+P352  
If skin irritation or rash occurs: Get medical advice/attention. - P333+P313  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338  
If eye irritation persists: Get medical advice/attention. - P337+P313  
Specific treatment, see supplemental first aid information. - P321  
Take off contaminated clothing and wash before reuse. - P362

**Storage/Disposal** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

### 2.3 Other hazards

**Canada**  
According to WHMIS

**2.1 Classification of the substance or mixture**

WHMIS • Other Toxic Effects - D2B

**2.2 Label elements**

WHMIS



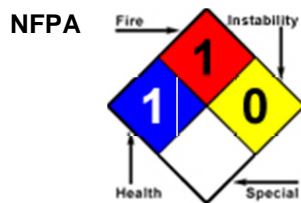
• Other Toxic Effects - D2B

**2.3 Other hazards**

WHMIS

• No data available

**2.4 Other information**



**Key to abbreviations**

= See Section 16 for full text of R and S phrases.

See Section 12 for Ecological Information.

**Section 3 - Composition/Information on Ingredients**

**3.1 Substances**

**3.2 Mixtures**

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Alkoxylated nonylphenol acrylate		5% TO 8%		<b>WHMIS:</b> <b>UN GHS:</b> Skin Irrit. 2; Skin Sens. 1 <b>EU DSD/DPD:</b> <b>EU CLP:</b> <b>OSHA HCS 2012:</b>	NDA
Pentaerythritol Tetraacrylate	<b>CAS:</b> 4986-89-4 <b>EC Number:</b> 225-644-1 <b>EU Index:</b> 607-122-00-9 <b>EINECS:</b> 225-644-1	3% TO 5%		<b>WHMIS:</b> <b>UN GHS:</b> Eye Irrit. 2A; Skin Irrit. 2; Skin Sens. 1 <b>EU DSD/DPD:</b> Irritant(Xi); R36/38; R43 <b>EU CLP:</b> <b>OSHA HCS 2012:</b>	NDA
Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	<b>CAS:</b> 15625-89-5 <b>EC Number:</b> 239-701-3 <b>EU</b>	1% TO 2%	Ingestion/Oral- Rat LD50 • 5190 µL/kg Skin-Rabbit LD50 • 5170 mg/kg	<b>WHMIS:</b> <b>UN GHS:</b> Eye Irrit. 2A; Skin Irrit. 2; Skin Sens. 1 <b>EU DSD/DPD:</b> Irritant(Xi);	NDA

	<b>Index:</b> 607-111-00-9 <b>EINECS:</b> 239-701-3			R36/38; R43 <b>EU CLP:</b> <b>OSHA HCS 2012:</b>	
2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	<b>CAS:</b> 3524-68-3 <b>EC Number:</b> 222-540-8 <b>EU Index:</b> 607-110-00-3 <b>EINECS:</b> 222-540-8	0.6% TO 1.2%	Ingestion/Oral- Rat LD50 • 1830 mg/kg Skin-Rabbit LD50 • 4 mL/kg	<b>WHMIS:</b> <b>UN GHS:</b> Skin Irrit. 2; Skin Sens. 1 <b>EU</b> <b>DSD/DPD:</b> Irritant(Xi); R36/38; R43 <b>EU CLP:</b> <b>OSHA HCS 2012:</b>	NDA
Benzophenone	<b>CAS:</b> 119-61-9 <b>EINECS:</b> 204-337-6	0.3% TO 0.5%	Ingestion/Oral- Rat LD50 • >10 g/kg Skin-Rabbit LD50 • 3535 mg/kg	<b>WHMIS:</b> Other Toxic Effects - D2B <b>UN GHS:</b> Aquatic Acute 1; Aquatic Chronic 1; Eye Irrit. 2A; Skin Irrit. 3 <b>EU</b> <b>DSD/DPD:</b> R36/38; R50/53 <b>EU CLP:</b> Aquatic Acute 1; Aquatic Chronic 1; Eye Irrit. 2; Skin Irrit. 2 <b>OSHA HCS 2012:</b>	NDA

**Key to abbreviations**

= See Section 16 for full text of R phrases

See Section 11 for Toxicological Information.

## Section 4 - First Aid Measures

### 4.1 Description of first aid measures

**Inhalation**

- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration and call 911 or emergency medical service.

**Skin**

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

**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**

- If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Rinse mouth. Never give anything by mouth to an unconscious person.

### 4.2 Most important symptoms and effects, both acute and delayed

- No data available

### 4.3 Indication of any immediate medical attention and special treatment needed

## Section 5 - Firefighting Measures

### 5.1 Extinguishing media

**Suitable Extinguishing Media**

- SMALL FIRES: Dry chemical, CO2, water spray or regular foam.  
LARGE FIRE: Water spray, fog or regular foam.

**Unsuitable Extinguishing Media**

- No data available

**Firefighting Procedures**

- LARGE FIRES: Use extinguishing agent suitable for type of surrounding fire. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep unauthorized personnel away. Ventilate closed spaces before entering.

### 5.2 Special hazards arising from the substance or mixture

**Unusual Fire and Explosion Hazards**

- Some of these materials may burn, but none ignite readily.

**Hazardous Combustion Products**

- Products of combustion include: carbon oxides (COx), nitrogen oxides (NOx).

**5.3 Advice for firefighters**

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.  
Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.  
Wear positive pressure self-contained breathing apparatus (SCBA).

---

**Section 6 - Accidental Release Measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

- Personal Precautions**
- No special precautions expected to be necessary if material is used under ordinary conditions and as recommended.
- Emergency Procedures**
- No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended.

**6.2 Environmental precautions**

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

**6.3 Methods and material for containment and cleaning up**

- Containment/Clean-up Measures**
- No special precautions or procedures are necessary.

**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 store under yellow lights to prevent exposure to UV radiation. Use good safety and industrial hygiene practices.

**7.2 Conditions for safe storage, including any incompatibilities**

- Storage**
- Store in a cool, dry place.
- Special Packaging Materials**
- Package in opaque containers and/or use additional light-blocking materials.

**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 Control Notations  
Germany DFG**

- Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (15625-89-5): **Sensitizers:** (skin sensitizer)
- 2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester (3524-68-3): **Sensitizers:** (skin sensitizer)

**8.2 Exposure controls**

- Engineering Measures/Controls**
- Local exhaust is recommended but not required. Provide adequate ventilation as necessary.

## Personal Protective Equipment

### Pictograms



### Respiratory

- Do not breathe vapors or mists. In case of insufficient ventilation, wear suitable respiratory equipment.

### Eye/Face

- Wear protective eyewear (goggles, face shield, or safety glasses).

### Hands

- Wear protective gloves - rubber or neoprene.

### Skin/Body

- Wear protective clothing - apron or other impervious body coverings.

### General Industrial Hygiene Considerations

- Handle in accordance with good industrial hygiene and safety practice.

### Environmental Exposure Controls

- No data available

## Section 9 - Physical and Chemical Properties

### 9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Film
Color	Red	Odor	Not relevant
Taste	Not relevant	Odor Threshold	Not relevant
Physical and Chemical Properties	Not relevant		
General Properties			
Boiling Point	Not relevant	Melting Point	No data available
Decomposition Temperature	Not relevant	pH	Not relevant
Specific Gravity/Relative Density	Not relevant	Density	No data available
Water Solubility	Soluble	Viscosity	Not relevant
Explosive Properties	Not relevant	Oxidizing Properties:	Not relevant
Volatility			
Vapor Pressure	Not relevant	Vapor Density	Not relevant
Evaporation Rate	Not relevant		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant
Flammability (solid, gas)	Not relevant		
Environmental			
Half-Life	No data available	Octanol/Water Partition coefficient	No data available
Bioaccumulation Factor	No data available	Bioconcentration Factor	No data available
Biochemical Oxygen Demand BOD/BOD5	No data available	Chemical Oxygen Demand	No data available
Persistence	No data available	Degradation	No data available

### 9.2 Other Information

- No data available

## Section 10: Stability and Reactivity

### 10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

- UV reactive.

### 10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

#### 10.4 Conditions to avoid

- Excess heat. Strong light.

#### 10.5 Incompatible materials

- No data available

#### 10.6 Hazardous decomposition products

- Hazardous decomposition products formed under fire conditions - carbon oxides, nitrogen oxides.

### Section 11 - Toxicological Information

#### 11.1 Information on toxicological effects

Components		
Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (1% TO 2%)	15625-89-5	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 5190 µL/kg; Skin-Rabbit LD50 • 5170 mg/kg; <b>Irritation:</b> Eye-Rabbit • 100 mg • Moderate irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Moderate irritation
2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester (0.6% TO 1.2%)	3524-68-3	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 1830 mg/kg; <i>Gastrointestinal:Ulceration or bleeding from small intestine; Gastrointestinal:Ulceration or bleeding from large intestine; Gastrointestinal:Other changes;</i> Skin-Rabbit LD50 • 4 mL/kg; <b>Irritation:</b> Eye-Rabbit • 1 mg • Severe irritation; Skin-Rabbit • 500 mg • Moderate irritation
Benzophenone (0.3% TO 0.5%)	119-61-9	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • >10 g/kg; Skin-Rabbit LD50 • 3535 mg/kg

GHS Properties	Classification
Acute toxicity	EU/CLP• OSHA HCS 2012• UN GHS•
Aspiration Hazard	EU/CLP• OSHA HCS 2012• UN GHS•
Carcinogenicity	EU/CLP• OSHA HCS 2012• UN GHS•
Germ Cell Mutagenicity	EU/CLP• OSHA HCS 2012• UN GHS•
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• OSHA HCS 2012• UN GHS•
STOT-SE	EU/CLP• OSHA HCS 2012• UN GHS•
Toxicity for Reproduction	EU/CLP• OSHA HCS 2012• UN GHS•
Respiratory sensitization	EU/CLP•



	OSHA HCS 2012• UN GHS•
Serious eye damage/Irritation	EU/CLP•Eye Irritation 2 OSHA HCS 2012•Eye Irritation 2 UN GHS•Eye Irritation 2

**Route(s) of entry/exposure** • Skin, Eye

**Potential Health Effects**

**Inhalation**

**Acute (Immediate)**

- May cause irritation.

**Chronic (Delayed)**

- Repeated and prolonged exposure may cause irritation.

**Skin**

**Acute (Immediate)**

- Causes skin irritation. May cause an allergic skin reaction.

**Chronic (Delayed)**

- Repeated and prolonged exposure may cause sensitization.

**Eye**

**Acute (Immediate)**

- Causes eye irritation.

**Chronic (Delayed)**

- Repeated and prolonged exposure may cause irritation.

**Ingestion**

**Acute (Immediate)**

- May cause irritation.

**Chronic (Delayed)**

- No specific information available.

**Section 12 - Ecological Information**

**12.1 Toxicity**

Component	CAS	Data	Comments
Benzophenone (0.3% TO 0.5%)	119-61-9	<b>Crustacea:</b> 24 Hour(s) EC50 Crustacea .28 mg/L ; <b>Fish:</b> 96 Hour(s) LC50 Fish 14.2 mg/L	

**12.2 Persistence and degradability**

- No data available

**12.3 Bioaccumulative potential**

- No data available

**12.4 Mobility in Soil**

- No data available

**12.5 Results of PBT and vPvB assessment**

- No data available

**12.6 Other adverse effects**

**Potential Environmental Effects**

- May cause long lasting harmful effects to aquatic life.

**Section 13 - Disposal Considerations**

**13.1 Waste treatment methods**

**Product waste**

- Dispose of content in accordance with local, regional, national, and/or international regulations.

**Packaging waste**

- Dispose of container in accordance with local, regional, national, and/or international regulations.

**13.2 Other Information**

- Avoid release to the environment. Dispose of wastes in an approved waste disposal facility.

## 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	NDA	NDA	NDA	NDA	NDA
IMO/IMDG	NDA	NDA	NDA	NDA	NDA
IATA/ICAO	NDA	NDA	NDA	NDA	NDA

### 14.6 Special precautions for user

- No special precautions.

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Not relevant.

### 14.8 Other information

- DOT • Not regulated.  
 IMO/IMDG • Not regulated.  
 IATA/ICAO • Not regulated.

## Section 15 - Regulatory Information

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

SARA Hazard Classifications • Acute

Inventory						
Component	CAS	Australia AICS	Canada DSL	China	EU EINECS	Japan ENCS
2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	Yes	Yes	Yes	Yes	Yes
Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	Yes	Yes	Yes	Yes	Yes
Benzophenone	119-61-9	Yes	Yes	Yes	Yes	Yes
Pentaerythritol Tetraacrylate	4986-89-4	Yes	Yes	Yes	Yes	Yes
Inventory (Con't.)						
Component	CAS	Korea KECL	New Zealand	Philippines PICCS	TSCA	
2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	Yes	Yes	Yes	Yes	
Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	Yes	Yes	Yes	Yes	
Benzophenone	119-61-9	Yes	Yes	Yes	Yes	
Pentaerythritol Tetraacrylate	4986-89-4	Yes	Yes	Yes	Yes	

## Australia

### Labor

#### Australia - List of Designated Hazardous Substances - Classification

- Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol 15625-89-5 Xi R36/38, R43
- 2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester 3524-68-3 Xi R36/38, R43

•Pentaerythritol Tetraacrylate	4986-89-4	Xi R36/38, R43
•Benzophenone	119-61-9	Not Listed

## Canada

### Labor

#### Canada - WHMIS - Classifications of Substances

•Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	D2B
•2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	Not Listed
•Pentaerythritol Tetraacrylate	4986-89-4	Not Listed
•Benzophenone	119-61-9	Not Listed

## Europe

### Other

#### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

•Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	Xi; R36/38 R43
•2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	Xi; R36/38 R43
•Pentaerythritol Tetraacrylate	4986-89-4	Xi; R36/38 R43
•Benzophenone	119-61-9	Not Listed

#### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

•Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	Xi R:36/38-43 S:(2)-39
•2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	Xi R:36/38-43 S:(2)-39
•Pentaerythritol Tetraacrylate	4986-89-4	Xi R:36/38-43 S:(2)-26-39
•Benzophenone	119-61-9	Not Listed

#### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

•Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	D
•2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	D
•Pentaerythritol Tetraacrylate	4986-89-4	D
•Benzophenone	119-61-9	Not Listed

#### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

•Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	S:(2)-39
•2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	S:(2)-39
•Pentaerythritol Tetraacrylate	4986-89-4	S:(2)-26-39
•Benzophenone	119-61-9	Not Listed

#### EU - Endocrine Disrupters (COM (2001)262) - Candidate List of Substances

•Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	Not Listed
•2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	Not Listed
•Pentaerythritol Tetraacrylate	4986-89-4	Not Listed
•Benzophenone	119-61-9	Group III Chemical

## Germany

### Environment

#### Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes

•Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	ID Number 1845, hazard class 1 - low hazard to waters
•2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	Not Listed
•Pentaerythritol Tetraacrylate	4986-89-4	Not Listed
•Benzophenone	119-61-9	Not Listed

#### Germany - Water Classification (VwVwS) - Annex 3

•Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	Not Listed
•2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	Not Listed
•Pentaerythritol Tetraacrylate	4986-89-4	Not Listed
•Benzophenone	119-61-9	ID Number 2024, hazard class 2 - hazard to waters

## Japan

### Environment

#### Japan - Pollutant Release Transfer Register (PRTR) - Class 1 Substances

•Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	Not Listed
•2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	Not Listed
•Pentaerythritol Tetraacrylate	4986-89-4	Not Listed
•Benzophenone	119-61-9	403 >=1 %

### Other

#### Japan - Chemical Substance Control Law (CSCL) - Examined Existing Chemical Substances

•Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	Non-biodegradable/Low
--	------------	-----------------------

•2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	bioconcentration Non-biodegradable/Low bioconcentration
•Pentaerythritol Tetraacrylate	4986-89-4	Not Listed
•Benzophenone	119-61-9	Non-biodegradable/Low bioconcentration
<b>Japan - Fire Service Law - Hazardous Materials</b>		
•Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	Group 4 - Flammable liquids III (listed under 3rd Class petroleums - insoluble)
•2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	Group 4 - Flammable liquids III (listed under 3rd Class petroleums - insoluble)
•Pentaerythritol Tetraacrylate	4986-89-4	Not Listed
•Benzophenone	119-61-9	Not Listed

## United States - California

### Environment

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

•Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	Not Listed
•2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	Not Listed
•Pentaerythritol Tetraacrylate	4986-89-4	Not Listed
•Benzophenone	119-61-9	carcinogen, initial date 6/22/12

## 15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

## 15.3 Other Information

- California Proposition 65: This product contains or may contain a substance(s) known to the State of California to cause cancer and/or reproductive toxicity:  
Benzophenone CAS #119-61-9 0.3-0.5%

## Section 16 - Other Information

### Relevant Phrases (code & full text)

- EUH208 - Contains sensitizing substances. May produce an allergic reaction.
- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H319 - Causes serious eye irritation
- H412 - Harmful to aquatic life with long lasting effects
- P261 - Avoid breathing dust, fume, gas, mist, vapours and/or spray.
- P264 - Wash thoroughly after handling.
- P272 - Contaminated work clothing should not be allowed out of the workplace.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P321 - Specific treatment, see supplemental first aid information.
- P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 - If eye irritation persists: Get medical advice/attention.
- P362 - Take off contaminated clothing and wash before reuse.
- P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
- R36/38 - Irritating to eyes and skin.
- R43 - May cause sensitization by skin contact.
- R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R53 - May cause long-term adverse effects in the aquatic environment.
- S37 - Wear suitable gloves.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Classification method for mixtures**

- Calculation method.

**Last Revision Date**

- 11 September 2014

**Preparation Date**

- 31 October 2014

**Other Information**

- Approved by: Troy Bergstedt, Director of Chemical Research, (218) 628-2217 ext.142.

**Disclaimer/Statement of Liability**

- The information contained herein is based on data available to us and is believed to be correct. Since this information may have been obtained in part from independent laboratories or other sources not under direct supervision, no representation is made that the information is accurate, reliable, complete, or representative and Buyer may rely thereon only at the Buyer's risk. We make no guarantee that the health and safety precautions we have suggested will be adequate for all individuals and / or situations involving its handling and uses. No warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Vendor assumes no responsibility for injury to vendee or third person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet.
-