

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

**1.1 Product identifier**

**Product Name** • Alpha Micro-Cap S

**Product Description** • Blue 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 Sensitization 1 - H317  
 Hazardous to the aquatic environment Chronic 3 - H412  
 EUH208

**DSD/DPD** • Sensitizer  
 R43, R52/53

**2.2 Label Elements**

**CLP**

**WARNING**



**Hazard statements** • H317 - May cause an allergic skin reaction  
 H412 - Harmful to aquatic life with long lasting effects  
 EUH208 - Contains sensitizing substances (Ethoxylated nonyl phenol acrylate; Pentaerythritol Tetraacrylate; 2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester; Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol). May produce an allergic reaction.

## Precautionary statements

- Prevention**
- P261 - Avoid breathing dust, fume, gas, mist, vapors and/or spray.
  - 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.
  - P321 - Specific treatment, see supplemental first aid information.
  - P363 - Wash contaminated clothing 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**
- R43 - May cause sensitization by skin contact.
  - R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- Safety phrases**
- S24 - Avoid contact with skin.
  - 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

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## UN GHS

According to Third Revised Edition

### 2.1 Classification of the substance or mixture

- UN GHS**
- Skin Sensitization 1 - H317
  - Hazardous to the aquatic environment Chronic 3 - H412

### 2.2 Label elements

**UN GHS**

#### WARNING



- Hazard statements**
- H317 - May cause an allergic skin reaction
  - H412 - Harmful to aquatic life with long lasting effects

#### Precautionary statements

- Prevention**
- P261 - Avoid breathing dust, fume, gas, mist, vapors and/or spray.
  - 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.
  - P321 - Specific treatment, see supplemental first aid information.
  - P363 - Wash contaminated clothing 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

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## United States (US)

According to OSHA 29 CFR 1910.1200 HCS

### 2.1 Classification of the substance or mixture

OSHA HCS 2012 • Skin Sensitization 1 - H317

### 2.2 Label elements

OSHA HCS 2012

#### WARNING



**Hazard statements** • May cause an allergic skin reaction - H317

#### Precautionary statements

**Prevention** • Avoid breathing dust, fume, gas, mist, vapors and/or spray. - P261  
Contaminated work clothing should not be allowed out of the workplace. - P272  
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  
Specific treatment, see supplemental first aid information. - P321  
Wash contaminated clothing before reuse. - P363

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

## 2.3 Other hazards

OSHA HCS 2012 • No data available

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## Canada

According to WHMIS

### 2.1 Classification of the substance or mixture

WHMIS • Other Toxic Effects - D2B

### 2.2 Label elements

WHMIS



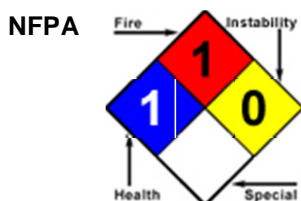
• Other Toxic Effects - D2B

## 2.3 Other hazards

WHMIS • No data available

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## 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
Ethoxylated nonyl phenol acrylate	CAS:678991-31-6	1% TO 5%		WHMIS: UN GHS: Skin Irrit. 2; Skin Sens. 1 EU DSD/DPD: EU CLP: OSHA HCS 2012:	NDA
Pentaerythritol Tetraacrylate	CAS:4986-89-4 EC Number:225-644-1 EU Index:607-122-00-9 EINECS:225-644-1	1% TO 3%		WHMIS: UN GHS: Eye Irrit. 2A; Skin Irrit. 2; Skin Sens. 1 EU DSD/DPD: Irritant(Xi); R36/38; R43 EU CLP: OSHA HCS 2012:	NDA
Benzophenone	CAS:119-61-9 EINECS:204-337-6	0.1% TO 0.3%	Ingestion/Oral-Rat LD50 • >10 g/kg Skin-Rabbit LD50 • 3535 mg/kg	WHMIS: Other Toxic Effects - D2B UN GHS: Aquatic Acute 1; Aquatic Chronic 1; Eye Irrit. 2A; Skin Irrit. 3 EU DSD/DPD: R36/38; R50/53 EU CLP: Aquatic Acute 1; Aquatic Chronic 1; Eye Irrit. 2; Skin Irrit. 2 OSHA HCS 2012:	NDA
2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	CAS:3524-68-3 EC Number:222-540-8 EU Index:607-110-00-3 EINECS:222-540-8	0.4% TO 1.5%	Ingestion/Oral-Rat LD50 • 1830 mg/kg Skin-Rabbit LD50 • 4 mL/kg	WHMIS: UN GHS: Skin Irrit. 2; Skin Sens. 1 EU DSD/DPD: Irritant(Xi); R36/38; R43 EU CLP: OSHA HCS 2012:	NDA
Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	CAS:15625-89-5 EC Number:239-701-3 EU Index:607-111-00-9 EINECS:239-701-3	0.4% TO 1.2%	Ingestion/Oral-Rat LD50 • 5190 µL/kg Skin-Rabbit LD50 • 5170 mg/kg	WHMIS: UN GHS: Eye Irrit. 2A; Skin Irrit. 2; Skin Sens. 1 EU DSD/DPD: Irritant(Xi); R36/38; R43 EU CLP: OSHA HCS 2012:	NDA

**European Chemicals Agency – Candidate List of Substances of Very High Concern for Authorization**

Ethoxylated nonyl phenol acrylate, CAS #678991-31-6; (4-Nonylphenol, branched and linear, ethoxylated); listed 2013/06/20; 1-5%.

**Key to abbreviations**

= See Section 16 for full text of R phrases

**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. If large quantities are swallowed, call a physician immediately.

#### 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, CO<sub>2</sub>, 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. 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 (CO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>).

#### 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

- No data available

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

**Containment/Clean-up Measures**

- Use appropriate Personal Protective Equipment (PPE) 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** • 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

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

- 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	Blue	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	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		
<b>Flammability</b>			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant
<b>Environmental</b>			
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

- Stable

### 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		
Benzophenone (0.1% TO 0.3%)	119-61-9	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • >10 g/kg; Skin-Rabbit LD50 • 3535 mg/kg
2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester (0.4% TO 1.5%)	3524-68-3	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 1830 mg/kg; <i>Gastrointestinal:Ulceration or bleeding from small intestine;</i> <i>Gastrointestinal:Ulceration or bleeding from large intestine;</i> <i>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
Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (0.4% TO 1.2%)	15625-89-5	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 5190 µL/kg; Skin-Rabbit LD50 • 5170 mg/kg

GHS Properties	Classification
Acute toxicity	<b>EU/CLP•</b> <b>OSHA HCS 2012•</b> <b>UN GHS•</b>
Aspiration Hazard	<b>EU/CLP•</b> <b>OSHA HCS 2012•</b> <b>UN GHS•</b>

Carcinogenicity	EU/CLP• OSHA HCS 2012• UN GHS•
Germ Cell Mutagenicity	EU/CLP• OSHA HCS 2012• UN GHS•
Skin corrosion/Irritation	EU/CLP• OSHA HCS 2012• UN GHS•
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• OSHA HCS 2012• UN GHS•

## Potential Health Effects

### Inhalation

**Acute (Immediate)** • May cause irritation.

**Chronic (Delayed)** • No data available

### Skin

**Acute (Immediate)** • May cause an allergic skin reaction.

**Chronic (Delayed)** • Repeated and prolonged exposure may cause irritation.

### Eye

**Acute (Immediate)** • May cause irritation.

**Chronic (Delayed)** • Repeated and prolonged exposure may cause irritation.

### Ingestion

**Acute (Immediate)** • No data available

**Chronic (Delayed)** • No data available

## Section 12 - Ecological Information

### 12.1 Toxicity

Component	CAS	Data	Comments
Benzophenone (0.1% TO 0.3%)	119-61-9	<b>Crustacea:</b> 24 Hour(s) EC50 Crustacea 0.28 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

### 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.

### 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

- None specified.

#### 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	Canada NDSL	China	EU EINECS
2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	Yes	Yes	No	Yes	Yes
Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	Yes	Yes	No	Yes	Yes
Benzophenone	119-61-9	Yes	Yes	No	Yes	Yes
Ethoxylated nonyl phenol acrylate	678991-31-6	No	No	Yes	No	No
Pentaerythritol Tetraacrylate	4986-89-4	Yes	Yes	No	Yes	Yes

Inventory (Con't.)						
Component	CAS	Japan ENCS	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	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
Ethoxylated nonyl phenol acrylate	678991-31-6	No	No	No	No	Yes
Pentaerythritol Tetraacrylate	4986-89-4	Yes	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
•Ethoxylated nonyl phenol acrylate	678991-31-6	Not Listed
•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
•Ethoxylated nonyl phenol acrylate	678991-31-6	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
•Ethoxylated nonyl phenol acrylate	678991-31-6	Not Listed
•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
•Ethoxylated nonyl phenol acrylate	678991-31-6	Not Listed
•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
•Ethoxylated nonyl phenol acrylate	678991-31-6	Not Listed
•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

•Ethoxylated nonyl phenol acrylate	678991-31-6	Not Listed
•Pentaerythritol Tetraacrylate	4986-89-4	S:(2)-26-39
•Benzophenone	119-61-9	Not Listed
<b>EU - Endocrine Disrupters (COM (2001)262) - Candidate List of Substances</b>		
•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
•Ethoxylated nonyl phenol acrylate	678991-31-6	Not Listed
•Pentaerythritol Tetraacrylate	4986-89-4	Not Listed
•Benzophenone	119-61-9	Group III Chemical
<b>EU - Existing Substance Regulation (793/93/EEC) - Evaluation of Existing HPV Chemicals (REPEALED)</b>		
•Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	
•2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	Not Listed
•Ethoxylated nonyl phenol acrylate	678991-31-6	Not Listed
•Pentaerythritol Tetraacrylate	4986-89-4	Not Listed
•Benzophenone	119-61-9	

## 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
•Ethoxylated nonyl phenol acrylate	678991-31-6	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
•Ethoxylated nonyl phenol acrylate	678991-31-6	Not Listed
•Pentaerythritol Tetraacrylate	4986-89-4	Not Listed
•Benzophenone	119-61-9	ID Number 2024, hazard class 2 - hazard to waters

## Japan

### 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 bioconcentration
•2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	Non-biodegradable/Low bioconcentration
•Ethoxylated nonyl phenol acrylate	678991-31-6	Not Listed
•Pentaerythritol Tetraacrylate	4986-89-4	Not Listed
•Benzophenone	119-61-9	Non-biodegradable/Low bioconcentration

#### Japan - Fire Service Law - Hazardous Materials

•Acrylic acid, triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	15625-89-5	Group 4 - Flammable liquids III (listed under 3rd Class petroleum - 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 petroleum - insoluble)
•Ethoxylated nonyl phenol acrylate	678991-31-6	Not Listed
•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

- Ethoxylated nonyl phenol acrylate
- Pentaerythritol Tetraacrylate
- Benzophenone

678991-31-6 Not Listed  
 4986-89-4 Not Listed  
 119-61-9 carcinogen, initial date  
 6/22/12

## 15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## 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 0.1-0.3%

## Section 16 - Other Information

### Relevant Phrases (code & full text)

- EUH208 - Contains sensitizing substance. May produce an allergic reaction.
- H317 - May cause an allergic skin reaction
- H412 - Harmful to aquatic life with long lasting effects
- P261 - Avoid breathing dust, fume, gas, mist, vapors and/or spray.
- 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.
- P321 - Specific treatment, see supplemental first aid information.
- P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
- P363 - Wash contaminated clothing 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.
- R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- S24 - Avoid contact with skin.
- 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

- N/A

### Preparation Date

- 29 April 2015

### Other Information

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

### Disclaimer/Statement of Liability

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