

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking**1.1 Product identifier****Product Name** • **Alpha Film Prototype 13-39N****Product Description** • Green 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 (Acrylic acid, propylenebis(oxypropylene) ester; 2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester; Pentaerythritol Tetraacrylate; 4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer). 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** • P301+P312 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.
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.
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

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.
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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.
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

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
Harmful to aquatic life with long lasting effects - H412

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
Avoid release to the environment. - P273
Wear protective gloves/protective clothing/eye protection/face protection. - P280
- Response** • IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell. - P301+P312
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
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

Canada

According to WHMIS

2.1 Classification of the substance or mixture

WHMIS • Other Toxic Effects - D2B

2.2 Label elements

WHMIS



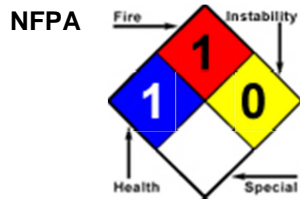
• Other Toxic Effects - D2B

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	%	Hazardous	LD50/LC50	Classifications According to Regulation/Directive
Acrylic acid, propylenebis(oxypropylene) ester	CAS:42978-66-5 EC Number:256-032-2 EU Index:607-249-00-X EINECS:256-032-2	3% TO 4%	Yes	Ingestion/Oral-Rat LD50 • 6200 mg/kg Skin-Rabbit LD50 • >2 g/kg	WHMIS: UN GHS: Aquatic Chronic 2; Eye Irrit. 2A; Skin Irrit. 2; Skin Sens. 1; STOT SE 3: Resp. Irrit. EU DSD/DPD: Environment(N); Irritant(Xi); R36/37/38; R43; R51; R53 EU CLP: Annex VI: Eye Irrit. 2; STOT SE 3; Skin Irrit. 2; Skin Sens. 1; Aquatic Chronic 2; H319; H335; H315; H317; H411 OSHA HCS 2012:
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	< 1%	Yes	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: Annex VI: Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1; H319; H315; H317 OSHA HCS 2012:
Pentaerythritol Tetraacrylate	CAS:4986-89-4 EC Number:225-644-1 EU Index:607-122-00-9 EINECS:225-644-1	3% TO 4%	Yes		WHMIS: UN GHS: Eye Irrit. 2A; Skin Irrit. 2; Skin Sens. 1 EU DSD/DPD: Irritant(Xi); R36/38; R43 EU CLP: Annex VI: Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1; H319; H315; H317 OSHA HCS 2012:
Benzophenone	CAS:119-61-9 EINECS:204-337-6	< 0.2%	Yes	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:
4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	CAS:41432-19-3	1% TO 1.5%	Yes		WHMIS: Other Toxic Effects - D2B UN GHS: Acute Tox. Oral 4; Eye Irrit. 2A; Skin Irrit. 2; Skin Sens. 1; STOT SE 3: Resp. Irrit.

					EU DSD/DPD: Harmful(Xn); R22; R36/37/38; R43 EU CLP: Acute Tox. Oral 4; Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1B; STOT SE 3: Resp. Irrit. OSHA HCS 2012:
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Key to abbreviations

= See Section 16 for full text of R and S 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. If large quantities are swallowed, call a physician 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

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).

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 positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal Precautions**
- Avoid any skin contact. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Emergency Procedures • No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended. Use normal clean up procedures.

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 • 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 • Keep container closed when not in use. Store in a cool, dry place.

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, propylenebis(oxypropylene) ester (42978-66-5): **Sensitizers:** (skin sensitizer) | **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	Green	Odor	Mild
Taste	No data available.	Odor Threshold	No data available
Physical and Chemical Properties	Not relevant		

General Properties			
Boiling Point	Not relevant	Melting Point	No data available
Decomposition Temperature	No data available	pH	Not relevant
Specific Gravity/Relative Density	Not relevant	Density	No data available
Water Solubility	Dispersible	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)	Combustible solid.		
Environmental			
Half-Life	No data available	Octanol/Water Partition coefficient	No data available
Coefficient of water/oil distribution	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 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

- UV reactive.

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Excess heat.

10.5 Incompatible materials

- No data available

10.6 Hazardous decomposition products

- No decomposition is expected under normal storage and use conditions. Hazardous decomposition products formed under fire conditions - carbon oxides (COx).

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Component Name	CAS	Data
Acrylic acid, propylenebis(oxypropylene) ester (3% TO 4%)	42978-66-5	Acute Toxicity: orl-rat LD50:6200 mg/kg; skn-rbt LD50:>2 gm/kg; Irritation: eye-rbt 100 uL/24H SEV; skn-rbt 500 mg MOD; Multi-dose Toxicity: skn-gpg TDL0:5 pph/12W-l
2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester (< 1%)	3524-68-3	Acute Toxicity: orl-rat LD50:1830 mg/kg; skn-rbt LD50:4 mL/kg; Irritation: eye-rbt 1 mg SEV; skn-rbt 500 mg open MLD; Multi-dose Toxicity: skn-gpg TDL0:5 pph/12W-l
Benzophenone (< 0.2%)	119-61-9	Acute Toxicity: orl-rat LD50:>10 gm/kg; skn-rbt 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• 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•

Route(s) of entry/exposure

- Skin

Potential Health Effects

Inhalation

Acute (Immediate)

- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

- No specific information available.

Skin

Acute (Immediate)

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

Chronic (Delayed)

- Repeated and prolonged exposure may cause irritation. Repeated and prolonged exposure may cause sensitization.

Eye

Acute (Immediate)

- May cause mild irritation.

Chronic (Delayed)

- Repeated and prolonged exposure may cause irritation.

Ingestion

Acute (Immediate)

- May cause irritation.

Chronic (Delayed)

- No specific information available.

Carcinogenic Effects

	CAS	IARC	NTP
Benzophenone	119-61-9	Group 2B-Possible Carcinogen	Evidence of Carcinogenicity

Section 12 - Ecological Information

12.1 Toxicity

Component	CAS	Data	Comments
Benzophenone (< 0.2%)	119-61-9	Crustacea: 24 Hour(s) EC50 Crustacea .28 mg/L ; Fish: 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.

13.2 Other Information

- 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

- 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
4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Yes	No	Yes	No	No
Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	Yes	Yes	No	Yes	Yes
Benzophenone	119-61-9	Yes	Yes	No	Yes	Yes
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
4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Yes	Yes	Yes	Yes	Yes
Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	Yes	Yes	Yes	Yes	Yes
Benzophenone	119-61-9	Yes	Yes	Yes	Yes	Yes
Pentaerythritol Tetraacrylate	4986-89-4	Yes	Yes	Yes	Yes	Yes

Australia

Labor

Australia - High Volume Industrial Chemicals List

•Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	
•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
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Not Listed

Australia - List of Designated Hazardous Substances - Classification

•Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	Xi, N R36/37/38, R43, R51, R53
•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
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Not Listed

Europe

Other

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

•Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	Xi; R36/37/38 R43 N; R51-53
•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
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

•Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	10%<=C: Xi; R:36/37/38
•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
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Not Listed

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

•Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	Xi N R:36/37/38-43-51/53 S:(2)-24-37-61
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•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
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations		
•Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	Not Listed
•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
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases		
•Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	S:(2)-24-37-61
•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
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Not Listed
EU - Endocrine Disrupters (COM (2001)262) - Candidate List of Substances		
•Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	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
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Not Listed

Germany

Environment

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

•Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	ID Number 1868, hazard class 2 - 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
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Not Listed

Germany - Water Classification (VwVwS) - Annex 3

•Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	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
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Not Listed

Japan

Environment

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

•Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	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 %
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Not Listed

Inventory - Japan - Industrial Safety and Health Law Substances (ISHL)

•Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	9-768; 9-2531
•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
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Not Listed

Other

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

•Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	Not Listed
•2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	Non-biodegradable/Low bioconcentration
•Pentaerythritol Tetraacrylate	4986-89-4	Not Listed
•Benzophenone	119-61-9	Non-biodegradable/Low bioconcentration
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Not Listed

Japan - Fire Service Law - Hazardous Materials

•Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	Group 4 - Flammable liquids III (listed under 3rd Class)
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		petroleums - insoluble)
		Group 4 - Flammable liquids
•2-Propenoic acid, 2-(hydroxymethyl)-2-(((1-oxo-2-propenyl)oxy)methyl)-1,3-propanediyl ester	3524-68-3	III (listed under 3rd Class
		petroleums - insoluble)
•Pentaerythritol Tetraacrylate	4986-89-4	Not Listed
•Benzophenone	119-61-9	Not Listed
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Not Listed

United States - California

Environment

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

•Acrylic acid, propylenebis(oxypropylene) ester	42978-66-5	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
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Not Listed

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 <0.2%

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
H335 - May cause respiratory irritation
H411 - Toxic to aquatic life with long lasting effects
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.
P301+P312 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.
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.
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.
R36/37/38 - Irritating to eyes, respiratory system 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.
R51 - Toxic to aquatic organisms.
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53 - 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

- 03 December 2013

Preparation Date

- 31 October 2014

Other Information

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

Disclaimer/Statement of Liability

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