

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

1.1 Product identifier

Product Name • **PHAT Film**
Product Description • Translucent 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 EU Directive 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

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

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

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



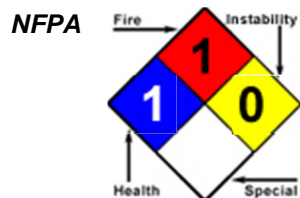
- Other Toxic Effects - D2B

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

| Hazardous Components | | | | | |
|-----------------------------------|--|--------------|-----------|--|----------|
| Chemical Name | Identifiers | %(weight) | LD50/LC50 | Classifications According to Regulation/Directive | Comments |
| aromatic urethane acrylate | | 5% TO 11% | | WHMIS: Comb. Liq. - B3 UN GHS: Eye Irrit. 2B; Skin Irrit. 3 EU DSD/DPD: EU CLP: OSHA HCS 2012: | |
| Acrylic oligomer | | 4% TO 10% | | WHMIS: UN GHS: Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1 EU DSD/DPD: EU CLP: OSHA HCS 2012: | |
| Polyglycol diacrylate | CAS:26570- 48-9 | 4% TO 10% | | WHMIS: UN GHS: Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1 EU DSD/DPD: EU CLP: OSHA HCS 2012: | |
| 1-hydroxycyclohexyl phenyl ketone | CAS:947-19-3 EC Number:213- 426-9 | 1% TO 3% | | WHMIS: UN GHS: Acute Tox. 5; Eye Irrit. 2A; Skin Irrit. 2 EU DSD/DPD: R36/37/38 | |

| | | | | |
|--|---|----------|---|--|
| | EINECS: 213-426-9 | | | EU CLP: Eye Irrit. 2; Skin Irrit. 2 OSHA HCS 2012: |
| Acrylic acid, propylenebis(oxypropylene) ester | CAS: 42978-66-5 EC Number: 256-032-2 EINECS: 256-032-2 | 1% TO 3% | 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: |
| Benzophenone | CAS: 119-61-9 EINECS: 204-337-6 | 1% TO 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: |

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), sulfur oxides (SOx).

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, propylenebis(oxypropylene) ester (42978-66-5): **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

- 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 | Translucent film. |
| Color | White | 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, sulfur oxides.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

| Component Name | CAS | Data |
|---|---|---|
| Acrylic acid, propylenebis(oxypropylene) ester (1% TO 3%) | 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 |
| Benzophenone (1% TO 3%) | 119-61-9 | Acute Toxicity: orl-rat LD50:>10 gm/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.

| 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 (1% TO 3%) | 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

- 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 |
| aromatic urethane acrylate | NDA | No | No | No | No | No |
| Acrylic oligomer | NDA | No | No | No | No | No |
| Polyglycol diacrylate | 26570-48-9 | Yes | Yes | Yes | No | Yes |
| 1-hydroxycyclohexyl phenyl ketone | 947-19-3 | 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 |

| Inventory (Con't.) | | | | | |
|--|------------|------------|-------------|-------------------|------|
| Component | CAS | Korea KECL | New Zealand | Philippines PICCS | TSCA |
| aromatic urethane acrylate | NDA | No | No | No | No |
| Acrylic oligomer | NDA | No | No | No | No |
| Polyglycol diacrylate | 26570-48-9 | Yes | Yes | Yes | Yes |
| 1-hydroxycyclohexyl phenyl ketone | 947-19-3 | Yes | Yes | Yes | Yes |
| Acrylic acid, propylenebis(oxypropylene) ester | 42978-66-5 | Yes | Yes | Yes | Yes |
| Benzophenone | 119-61-9 | Yes | Yes | Yes | Yes |

Australia

Labor

Australia - High Volume Industrial Chemicals List

- Acrylic acid, propylenebis(oxypropylene) ester 42978-66-5 1% TO 3%
- Polyglycol diacrylate 26570-48-9 4% TO 10% Not Listed
- 1-hydroxycyclohexyl phenyl ketone 947-19-3 1% TO 3% Not Listed
- Benzophenone 119-61-9 1% TO 3% Not Listed

Australia - List of Designated Hazardous Substances - Classification

| | | | |
|---|------------|-----------|--------------------------------|
| •Acrylic acid, propylenebis(oxypropylene) ester | 42978-66-5 | 1% TO 3% | Xi, N R36/37/38, R43, R51, R53 |
| •Polyglycol diacrylate | 26570-48-9 | 4% TO 10% | Not Listed |
| •1-hydroxycyclohexyl phenyl ketone | 947-19-3 | 1% TO 3% | Not Listed |
| •Benzophenone | 119-61-9 | 1% TO 3% | Not Listed |

Denmark

Environment

Denmark - Advisory List for Self-Classification of Dangerous Substances

| | | | |
|---|------------|-----------|------------|
| •Acrylic acid, propylenebis(oxypropylene) ester | 42978-66-5 | 1% TO 3% | Not Listed |
| •Polyglycol diacrylate | 26570-48-9 | 4% TO 10% | Not Listed |
| •1-hydroxycyclohexyl phenyl ketone | 947-19-3 | 1% TO 3% | R52/53 |
| •Benzophenone | 119-61-9 | 1% TO 3% | Not Listed |

Europe

Other

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

| | | | |
|---|------------|-----------|-----------------------------|
| •Acrylic acid, propylenebis(oxypropylene) ester | 42978-66-5 | 1% TO 3% | Xi; R36/37/38 R43 N; R51-53 |
| •Polyglycol diacrylate | 26570-48-9 | 4% TO 10% | Not Listed |
| •1-hydroxycyclohexyl phenyl ketone | 947-19-3 | 1% TO 3% | Not Listed |
| •Benzophenone | 119-61-9 | 1% TO 3% | Not Listed |

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

| | | | |
|---|------------|-----------|-----------------------|
| •Acrylic acid, propylenebis(oxypropylene) ester | 42978-66-5 | 1% TO 3% | 10%<=C: Xi; R36/37/38 |
| •Polyglycol diacrylate | 26570-48-9 | 4% TO 10% | Not Listed |
| •1-hydroxycyclohexyl phenyl ketone | 947-19-3 | 1% TO 3% | Not Listed |
| •Benzophenone | 119-61-9 | 1% TO 3% | Not Listed |

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

| | | | |
|---|------------|-----------|---|
| •Acrylic acid, propylenebis(oxypropylene) ester | 42978-66-5 | 1% TO 3% | Xi N R:36/37/38-43-51/53 S:(2)-24-37-61 |
| •Polyglycol diacrylate | 26570-48-9 | 4% TO 10% | Not Listed |
| •1-hydroxycyclohexyl phenyl ketone | 947-19-3 | 1% TO 3% | Not Listed |
| •Benzophenone | 119-61-9 | 1% TO 3% | Not Listed |

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

| | | | |
|---|------------|-----------|----------------|
| •Acrylic acid, propylenebis(oxypropylene) ester | 42978-66-5 | 1% TO 3% | S:(2)-24-37-61 |
| •Polyglycol diacrylate | 26570-48-9 | 4% TO 10% | Not Listed |
| •1-hydroxycyclohexyl phenyl ketone | 947-19-3 | 1% TO 3% | Not Listed |
| •Benzophenone | 119-61-9 | 1% TO 3% | Not Listed |

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

| | | | |
|---|------------|-----------|--------------------|
| •Acrylic acid, propylenebis(oxypropylene) ester | 42978-66-5 | 1% TO 3% | Not Listed |
| •Polyglycol diacrylate | 26570-48-9 | 4% TO 10% | Not Listed |
| •1-hydroxycyclohexyl phenyl ketone | 947-19-3 | 1% TO 3% | Not Listed |
| •Benzophenone | 119-61-9 | 1% TO 3% | Group III Chemical |

EU - Existing Substance Regulation (793/93/EEC) - Evaluation of Existing HPV Chemicals (REPEALED)

| | | | |
|---|------------|-----------|------------|
| •Acrylic acid, propylenebis(oxypropylene) ester | 42978-66-5 | 1% TO 3% | |
| •Polyglycol diacrylate | 26570-48-9 | 4% TO 10% | Not Listed |
| •1-hydroxycyclohexyl phenyl ketone | 947-19-3 | 1% TO 3% | Not Listed |
| •Benzophenone | 119-61-9 | 1% TO 3% | |

Germany

Environment

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

| | | | |
|---|------------|-----------|---|
| •Acrylic acid, propylenebis(oxypropylene) ester | 42978-66-5 | 1% TO 3% | ID Number 1868, hazard class 2 - hazard to waters |
| •Polyglycol diacrylate | 26570-48-9 | 4% TO 10% | Not Listed |
| •1-hydroxycyclohexyl phenyl ketone | 947-19-3 | 1% TO 3% | Not Listed |
| •Benzophenone | 119-61-9 | 1% TO 3% | Not Listed |

Germany - Water Classification (VwVwS) - Annex 3

| | | | |
|---|------------|-----------|---|
| •Acrylic acid, propylenebis(oxypropylene) ester | 42978-66-5 | 1% TO 3% | Not Listed |
| •Polyglycol diacrylate | 26570-48-9 | 4% TO 10% | ID Number 2603, hazard class 1 - low hazard to waters |
| •1-hydroxycyclohexyl phenyl ketone | 947-19-3 | 1% TO 3% | ID Number 2124, not considered hazardous to water |
| •Benzophenone | 119-61-9 | 1% TO 3% | ID Number 2024, hazard class 2 - hazard to waters |

Japan

Environment

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

| | | | |
|---|------------|-----------|------------|
| •Acrylic acid, propylenebis(oxypropylene) ester | 42978-66-5 | 1% TO 3% | Not Listed |
| •Polyglycol diacrylate | 26570-48-9 | 4% TO 10% | Not Listed |

- 1-hydroxycyclohexyl phenyl ketone 947-19-3 1% TO 3% Not Listed
- Benzophenone 119-61-9 1% TO 3% 403 >=1 %

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

- Acrylic acid, propylenebis(oxypropylene) ester 42978-66-5 1% TO 3% 9-768; 9-2531
- Polyglycol diacrylate 26570-48-9 4% TO 10% Not Listed
- 1-hydroxycyclohexyl phenyl ketone 947-19-3 1% TO 3% 7-(4)-697
- Benzophenone 119-61-9 1% TO 3% Not Listed

Other

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

- Acrylic acid, propylenebis(oxypropylene) ester 42978-66-5 1% TO 3% Not Listed
- Polyglycol diacrylate 26570-48-9 4% TO 10% Not Listed
- 1-hydroxycyclohexyl phenyl ketone 947-19-3 1% TO 3% Not Listed
- Benzophenone 119-61-9 1% TO 3% Low-decomposable (see also 4-125); Non-decomposable/Low-concentrate (see also 4-125)

Japan - Fire Service Law - Hazardous Materials

- Acrylic acid, propylenebis(oxypropylene) ester 42978-66-5 1% TO 3% Group 4 - Flammable liquids III (listed under 3rd Class petroleums - insoluble)
- Polyglycol diacrylate 26570-48-9 4% TO 10% Group 4 - Flammable liquids III (listed under 3rd Class petroleums - insoluble)
- 1-hydroxycyclohexyl phenyl ketone 947-19-3 1% TO 3% Not Listed
- Benzophenone 119-61-9 1% TO 3% Not Listed

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 1-3%

Section 16 - Other Information

Relevant Phrases (code & full text)

- 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.
- P264 - Wash thoroughly after handling.
- P272 - Contaminated work clothing should not be allowed out of the workplace.
- P273 - Avoid release to the environment.
- 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.
- 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.

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** • 21 January 2004
- Preparation Date** • 14 December 2012
- Other Information** • Approved by: Troy Bergstedt, Director of Chemical Research, (218) 628-2217 ext.142.
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