

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

**1.1 Product identifier**

**Product Name** • Pro/Cap TD 25/30/38/50 Films

**Product Description** • Green, brown or purple film.

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

**Relevant identified use(s)** • Pre-sensitized capillary 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, R53

**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 substance (diazo sensitizer). 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.
  - R53 - 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  
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 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



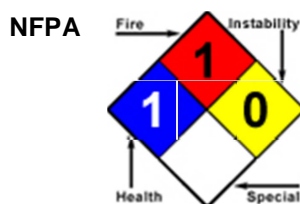
- Other Toxic Effects - D2B

### 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
Diazo sensitizer	CAS:41432-19-3	0.4% TO 0.65%		<b>WHMIS:</b> Other Toxic Effects - D2B <b>UN GHS:</b> Acute Tox. Oral 4; Eye Irrit. 2A; Skin Irrit. 2; Skin Sens. 1; STOT SE 3: Resp. Irrit. <b>EU DSD/DPD:</b> Harmful(Xn); R22; R36/37/38; R43 <b>EU CLP:</b> Acute Tox. Oral 4; Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1; STOT SE 3: Resp. Irrit. <b>OSHA HCS 2012:</b>	NDA
Benzophenone	CAS:119-61-9 EINECS:204-337-6	0.25% TO 0.45%	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 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 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.
- 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, 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**
- Fire fighters should wear complete protective clothing including self-contained breathing apparatus.  
Keep unauthorized personnel away.

Ventilate closed spaces before entering.  
Use extinguishing agent suitable for type of surrounding fire.

## 5.2 Special hazards arising from the substance or mixture

**Unusual Fire and Explosion Hazards** • Combustible material: may burn but does not ignite readily.

**Hazardous Combustion Products** • Products of combustion include: carbon oxides (COx).

## 5.3 Advice for firefighters

- Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

## 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

- Avoid run off to waterways and sewers.

### 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** • Use good safety and industrial hygiene practices.

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

**Storage** • 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

### 8.2 Exposure controls

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

**Personal Protective Equipment**

**Pictograms**



**Respiratory**

**Eye/Face**

**Hands**

**Skin/Body**

- Not required.
- Wear protective eyewear (goggles, face shield, or safety glasses).
- Wear appropriate gloves.
- 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**

<b>Material Description</b>			
Physical Form	Solid	Appearance/Description	Film
Color	Green, brown or purple.	Odor	Not relevant
Odor Threshold	Not relevant		
<b>General Properties</b>			
Boiling Point	Not relevant	Melting Point	Not relevant
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		
<b>Volatility</b>			
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
Flammability (solid, gas)	Combustible solid.		
<b>Environmental</b>			
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 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**

- Direct sunlight. Excess heat.

**10.5 Incompatible materials**

- No data available

**10.6 Hazardous decomposition products**

- Hazardous decomposition products formed under fire conditions - carbon oxides (COx).

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

Components	
Benzophenone (0.25% TO 0.45%)	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• 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)

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

###### Chronic (Delayed)

- No data available

##### Skin

###### Acute (Immediate)

- May cause an allergic skin reaction.

###### Chronic (Delayed)

- No data available

##### Eye

###### Acute (Immediate)

- May cause irritation.

###### Chronic (Delayed)

- No data available

## Ingestion

Acute (Immediate) • No data available.

Chronic (Delayed) • No data available

## Section 12 - Ecological Information

### 12.1 Toxicity

Component	CAS	Data	Comments
Benzophenone (0.25% TO 0.45%)	119-61-9	<b>Crustacea:</b> 24 Hour(s) EC50 Crustacea <i>Daphnia magna</i> 0.28 mg/L ; <b>Fish:</b> 96 Hour(s) LC50 Fish <i>fathead minnow</i> 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

- 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
Diazo sensitizer	41432-19-3	Yes	No	Yes	No	No
Benzophenone	119-61-9	Yes	Yes	No	Yes	Yes

Inventory (Con't.)						
Component	CAS	Japan ENCS	Korea KECL	New Zealand	Philippines PICCS	TSCA
Diazo sensitizer	41432-19-3	Yes	Yes	Yes	Yes	Yes
Benzophenone	119-61-9	Yes	Yes	Yes	Yes	Yes

#### Europe

##### Other

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

- Benzophenone 119-61-9 Group III Chemical
- Diazo sensitizer 41432-19-3 Not Listed

#### Germany

##### Environment

Germany - Water Classification (VwVwS) - Annex 3

- Benzophenone 119-61-9 ID Number 2024, hazard class 2 - hazard to waters
- Diazo sensitizer 41432-19-3 Not Listed

#### Japan

##### Other

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

- Benzophenone 119-61-9 Non-biodegradable/Low bioconcentration
- Diazo sensitizer 41432-19-3 Not Listed

#### United States - California

##### Environment

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

- Benzophenone 119-61-9 carcinogen, initial date 6/22/12
- Diazo sensitizer 41432-19-3 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 trace quantities if a substance(s) known to the State of California to cause cancer and/or reproductive toxicity:  
Benzophenone CAS #119-61-9 <0.45%

## 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.  
R22 - Harmful if swallowed.  
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.  
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).

**Last Revision Date**

- 06 May 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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