

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 Corporation4832 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 2015/830]

2.1 Classification of the substance or mixture**CLP** • Skin Sensitization 1 - H317
Hazardous to the aquatic environment Chronic 3 - H412
EUH208**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.

2.3 Other Hazards

- CLP
- No data available

UN GHS

According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Sixth 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.
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 - 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 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

Canada

According to WHMIS 2015

2.1 Classification of the substance or mixture

- WHMIS 2015 • Skin Sensitization 1 - H317

2.2 Label elements

WHMIS 2015

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

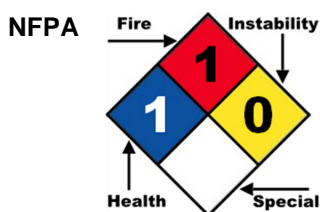
- Response** • IF ON SKIN: Wash with plenty of soap and water. - P302+P352
If skin irritation or rash occurs: Get medical advice/attention. - P333+P313
Specific treatment, see supplemental first aid information. - P321
Wash contaminated clothing before reuse. - P363

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

2.3 Other hazards

- WHMIS 2015 • No data available

2.4 Other information



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%		UN GHS / EU CLP / OSHA HCS 2012 / WHMIS 2015: Acute Tox. Oral 4; Eye Irrit. 2A; Skin Irrit. 2; Skin Sens. 1; STOT SE 3; Resp. Irrit.	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	EU CLP / UN GHS: Aquatic Acute 1; Aquatic Chronic 1; Eye Irrit. 2; Skin Irrit. 2 OSHA HCS 2012 / WHMIS 2015: Eye Irrit. 2A; Skin Irrit. 3	NDA

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, CO₂, 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 (CO_x).

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

- Not required.

Eye/Face

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

Hands

- Wear appropriate gloves.

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, brown or purple.	Odor	Not relevant
Odor Threshold	Not relevant		
General Properties			
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		
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 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	Acute Toxicity: 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	Crustacea: 24 Hour(s) EC50 Crustacea <i>Daphnia magna</i> 0.28 mg/L ;	

		Fish: 96 Hour(s) LC50 Fish <i>fathead minnow</i> 14.2 mg/L	
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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 can expose you to a chemical known to the State of California to cause cancer:
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.

Last Revision Date • 31 October 2014

Preparation Date • 07 February 2018

Other Information

**Disclaimer/Statement
of Liability**

- Approved by: Troy Bergstedt, Director of Chemical Research, (218) 628-2217 ext.142.
 - The information contained herein is based on data available to us and is believed to be correct. Since this information may have been obtained in part from independent laboratories or other sources not under direct supervision, no representation is made that the information is accurate, reliable, complete, or representative and Buyer may rely thereon only at the Buyer's risk. We make no guarantee that the health and safety precautions we have suggested will be adequate for all individuals and / or situations involving its handling and uses. No warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Vendor assumes no responsibility for injury to vendee or third person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet.
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