

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

**1.1 Product identifier**

**Product Name** • **Magna/Cure Film, all thicknesses**  
**Product Description** • Blue-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 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 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 substance. May produce an allergic reaction.

## Precautionary statements

- Prevention** • P261 - Avoid breathing dust, fume, gas, mist, vapors and/or spray.  
P272 - Contaminated work clothing should not be allowed out of the workplace.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- Response** • P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P321 - Specific treatment, see supplemental first aid information.  
P363 - Wash contaminated clothing before reuse.
- Storage/Disposal** • P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## DSD/DPD



- Risk phrases** • R43 - May cause sensitization by skin contact.  
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Safety phrases** • S24 - Avoid contact with skin.  
S37 - Wear suitable gloves.  
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## 2.3 Other Hazards

- CLP • No data available
- DSD/DPD • No data available

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## UN GHS

According to Third Revised Edition

### 2.1 Classification of the substance or mixture

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

### 2.2 Label elements

UN GHS

#### WARNING



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

#### Precautionary statements

- Prevention** • P261 - Avoid breathing dust, fume, gas, mist, vapors and/or spray.  
P272 - Contaminated work clothing should not be allowed out of the workplace.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- Response** • P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P321 - Specific treatment, see supplemental first aid information.  
P363 - Wash contaminated clothing before reuse.
- Storage/Disposal** • P501 - Dispose of content and/or container in accordance with local, regional, national,

and/or international regulations.

## 2.3 Other hazards

UN GHS • No data available

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## United States (US)

According to OSHA 29 CFR 1910.1200 HCS

### 2.1 Classification of the substance or mixture

OSHA HCS 2012 • Skin Sensitization 1 - H317

### 2.2 Label elements

OSHA HCS 2012

#### WARNING



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

#### Precautionary statements

**Prevention** • Avoid breathing dust, fume, gas, mist, vapors and/or spray. - P261  
Contaminated work clothing should not be allowed out of the workplace. - P272  
Wear protective gloves/protective clothing/eye protection/face protection. - P280

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

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

## 2.3 Other hazards

OSHA HCS 2012 • No data available

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## Canada

According to WHMIS

### 2.1 Classification of the substance or mixture

WHMIS • Other Toxic Effects - D2B

### 2.2 Label elements

WHMIS



• Other Toxic Effects - D2B

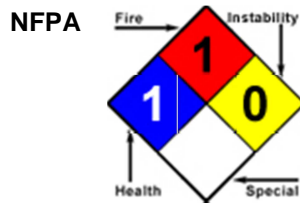
## 2.3 Other hazards

WHMIS • No data available

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## 2.4 Other information



### Key to abbreviations

= See Section 16 for full text of R and S phrases.

See Section 12 for Ecological Information.

## Section 3 - Composition/Information on Ingredients

### 3.1 Substances

### 3.2 Mixtures

Hazardous Components					
Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
1-hydroxycyclohexyl phenyl ketone	CAS:947-19-3 EC Number:213-426-9 EINECS:213-426-9	0.5% TO 2.5%		<b>WHMIS:</b> <b>UN GHS:</b> Acute Tox. 5; Eye Irrit. 2A; Skin Irrit. 2 <b>EU DSD/DPD:</b> R36/37/38 <b>EU CLP:</b> Eye Irrit. 2; Skin Irrit. 2 <b>OSHA HCS 2012:</b>	
Benzophenone	CAS:119-61-9 EINECS:204-337-6	0.5% TO 2.5%	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>	
4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	CAS:41432-19-3	0.1% TO 0.3%		<b>WHMIS:</b> Other Toxic Effects - D2B <b>UN GHS:</b> Acute Tox. 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. 4; Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1B; STOT SE 3: Resp. Irrit. <b>OSHA HCS 2012:</b>	

### Key to abbreviations

= See Section 16 for full text of R phrases

## Section 4 - First Aid Measures

### 4.1 Description of first aid measures

#### Inhalation

- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration and call 911 or emergency medical service.

#### Skin

- IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

#### Eye

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

#### Ingestion

- If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Rinse mouth. Never give anything by mouth to an unconscious person. If large quantities are

swallowed, call a physician immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

- No data available

#### 4.3 Indication of any immediate medical attention and special treatment needed

### Section 5 - Firefighting Measures

#### 5.1 Extinguishing media

**Suitable Extinguishing Media** • SMALL FIRES: Dry chemical, CO<sub>2</sub>, water spray or regular foam.  
LARGE FIRE: Water spray, fog or regular foam.

**Unsuitable Extinguishing Media** • No data available

**Firefighting Procedures** • LARGE FIRES: Use extinguishing agent suitable for type of surrounding fire.  
Keep unauthorized personnel away.  
Ventilate closed spaces before entering.

#### 5.2 Special hazards arising from the substance or mixture

**Unusual Fire and Explosion Hazards** • Some of these materials may burn, but none ignite readily.

**Hazardous Combustion Products** • Products of combustion include: carbon oxides (CO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>).

#### 5.3 Advice for firefighters

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.  
Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.  
Wear positive pressure self-contained breathing apparatus (SCBA).

### Section 6 - Accidental Release Measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

**Personal Precautions** • No special precautions expected to be necessary if material is used under ordinary conditions and as recommended.

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

#### 6.2 Environmental precautions

- No data available

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

**Containment/Clean-up Measures** • Use appropriate Personal Protective Equipment (PPE)  
No special precautions or procedures are necessary.

#### 6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

### Section 7 - Handling and Storage

#### 7.1 Precautions for safe handling

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

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

**Storage** • Store in a cool, dry place.

**Special Packaging Materials** • Package in opaque containers and/or use additional light-blocking materials.

**7.3 Specific end use(s)**

- Refer to Section 1.2 - Relevant identified uses.

**Section 8 - Exposure Controls/Personal Protection**

**8.1 Control parameters**

**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**

<b>Material Description</b>			
Physical Form	Solid	Appearance/Description	Film
Color	Blue-green	Odor	Not relevant
Taste	Not relevant	Odor Threshold	Not relevant
Physical and Chemical Properties	Not relevant		
<b>General Properties</b>			
Boiling Point	Not relevant	Melting Point	No data available
Decomposition Temperature	Not relevant	pH	Not relevant
Specific Gravity/Relative Density	Not relevant	Water Solubility	Soluble
Viscosity	Not relevant	Explosive Properties	Not relevant
Oxidizing Properties:	Not relevant		
<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
<b>Environmental</b>			
Half-Life	No data available	Octanol/Water Partition coefficient	No data available
Bioaccumulation Factor	No data available	Bioconcentration Factor	No data available
Biochemical Oxygen Demand BOD/BOD5	No data available	Chemical Oxygen Demand	No data available
Persistence	No data available	Degradation	No data available

**9.2 Other Information**

- No data available

## Section 10: Stability and Reactivity

### 10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

- Stable

### 10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

### 10.4 Conditions to avoid

- Excess heat. Strong light.

### 10.5 Incompatible materials

- No data available

### 10.6 Hazardous decomposition products

- Hazardous decomposition products formed under fire conditions - carbon oxides, nitrogen oxides.

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

Component Name	CAS	Data
Benzophenone (0.5% TO 2.5%)	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• OSHA HCS 2012• UN GHS•	
Skin sensitization	EU/CLP•Skin Sensitizer 1 OSHA HCS 2012•Skin Sensitizer 1 UN GHS•Skin Sensitizer 1	
STOT-RE	EU/CLP• OSHA HCS 2012• UN GHS•	
STOT-SE	EU/CLP• OSHA HCS 2012• UN GHS•	
Toxicity for Reproduction	EU/CLP• OSHA HCS 2012• UN GHS•	

Respiratory sensitization	EU/CLP• OSHA HCS 2012• UN GHS•
Serious eye damage/Irritation	EU/CLP• OSHA HCS 2012• UN GHS•

## Potential Health Effects

### Inhalation

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

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

### Skin

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

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

### Eye

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

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

### Ingestion

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

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

## Section 12 - Ecological Information

### 12.1 Toxicity

Component	CAS	Data	Comments
Benzophenone (0.5% TO 2.5%)	119-61-9	<b>Crustacea:</b> 24 Hour(s) EC50 Crustacea .28 mg/L ; <b>Fish:</b> 96 Hour(s) LC50 Fish 14.2 mg/L	

### 12.2 Persistence and degradability

- No data available

### 12.3 Bioaccumulative potential

- No data available

### 12.4 Mobility in Soil

- No data available

### 12.5 Results of PBT and vPvB assessment

- No data available

### 12.6 Other adverse effects

## Section 13 - Disposal Considerations

### 13.1 Waste treatment methods

**Product waste** • Dispose of content in accordance with local, regional, national, and/or international regulations.

**Packaging waste** • Dispose of container in accordance with local, regional, national, and/or international regulations.



## Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	NDA	NDA	NDA	NDA
IMO/IMDG	NDA	NDA	NDA	NDA	NDA
IATA/ICAO	NDA	NDA	NDA	NDA	NDA

### 14.6 Special precautions for user

- None specified.

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Not relevant.

### 14.8 Other information

- DOT • Not regulated.  
 IMO/IMDG • Not regulated.  
 IATA/ICAO • Not regulated.

## Section 15 - Regulatory Information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### SARA Hazard Classifications • Acute

Inventory						
Component	CAS	Australia AICS	Canada DSL	Canada NDSL	China	EU EINECS
1-hydroxycyclohexyl phenyl ketone	947-19-3	Yes	Yes	No	Yes	Yes
Benzophenone	119-61-9	Yes	Yes	No	Yes	Yes
4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Yes	No	Yes	No	No

Inventory (Con't.)						
Component	CAS	Japan ENCS	Korea KECL	New Zealand	Philippines PICCS	TSCA
1-hydroxycyclohexyl phenyl ketone	947-19-3	Yes	Yes	Yes	Yes	Yes
Benzophenone	119-61-9	Yes	Yes	Yes	Yes	Yes
4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Yes	Yes	Yes	Yes	Yes

## Denmark

### Environment

#### Denmark - Advisory List for Self-Classification of Dangerous Substances

- 1-hydroxycyclohexyl phenyl ketone 947-19-3 0.5% TO 2.5% R52/53
- Benzophenone 119-61-9 0.5% TO 2.5% Not Listed
- 4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer 41432-19-3 0.1% TO 0.3% Not Listed

## Europe

### Other

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

- 1-hydroxycyclohexyl phenyl ketone 947-19-3 0.5% TO 2.5% Not Listed
- Benzophenone 119-61-9 0.5% TO 2.5% Not Listed
- 4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer 41432-19-3 0.1% TO 0.3% Not Listed

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

- 1-hydroxycyclohexyl phenyl ketone 947-19-3 0.5% TO 2.5% Not Listed
- Benzophenone 119-61-9 0.5% TO 2.5% Group III Chemical
- 4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer 41432-19-3 0.1% TO 0.3% Not Listed

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

- 1-hydroxycyclohexyl phenyl ketone 947-19-3 0.5% TO 2.5% Not Listed
- Benzophenone 119-61-9 0.5% TO 2.5%
- 4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer 41432-19-3 0.1% TO 0.3% Not Listed

### Germany

#### Environment

##### Germany - Water Classification (VwVwS) - Annex 3

- 1-hydroxycyclohexyl phenyl ketone 947-19-3 0.5% TO 2.5% ID Number 2124, not considered hazardous to water
- Benzophenone 119-61-9 0.5% TO 2.5% ID Number 2024, hazard class 2 - hazard to waters
- 4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer 41432-19-3 0.1% TO 0.3% Not Listed

### Japan

#### Environment

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

- 1-hydroxycyclohexyl phenyl ketone 947-19-3 0.5% TO 2.5% Not Listed
- Benzophenone 119-61-9 0.5% TO 2.5% 403 >=1 %
- 4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer 41432-19-3 0.1% TO 0.3% Not Listed

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

- 1-hydroxycyclohexyl phenyl ketone 947-19-3 0.5% TO 2.5% 7-(4)-697
- Benzophenone 119-61-9 0.5% TO 2.5% Not Listed
- 4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer 41432-19-3 0.1% TO 0.3% Not Listed

#### Other

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

- 1-hydroxycyclohexyl phenyl ketone 947-19-3 0.5% TO 2.5% Not Listed
- Benzophenone 119-61-9 0.5% TO 2.5% Low-decomposable (see also 4-125); Non-decomposable/Low-concentrate (see also 4-125)
- 4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer 41432-19-3 0.1% TO 0.3% 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.

## 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.

R36/37/38 - Irritating to eyes, respiratory system and skin.  
R36/38 - Irritating to eyes and skin.  
R43 - May cause sensitization by skin contact.  
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
S24 - Avoid contact with skin.  
S37 - Wear suitable gloves.  
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

- Classification method for mixtures** • Calculation method.
- Last Revision Date** • 03 September 2003
- Preparation Date** • 18 February 2013
- Other Information** • Approved by: Troy Bergstedt, Director of Chemical Research, (218) 628-2217 ext.142.
- Disclaimer/Statement of Liability** • 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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