

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, brown or violet film			
1.2 Relevant identified u	uses of the substance or mixture and uses advised against			
Relevant identified use(s)	(s) • Photostencil film			
1.3 Details of the suppli	er of the safety data sheet			
Manufacturer	 IKONICS Corporation 4832 Grand Ave. Duluth, MN 55807 United States www.ikonics.com sds@ikonics.com 			
Telephone (Generation	al) • (218) 628-2217			
Telephone (Generation	al) • (800) 328-4261 - Toll free			
1.4 Emergency telephor	ne 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 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 (4-Diazodiphenylamine hydrogen sulfa formaldehyde polymer). May produce an allergic reaction. 	te,
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. 	
Magna/Cure Film	Safety Data Sheet	Page

1 of 10

CLP	No data available
2.3 Other Hazards	
Storage/Disposa	 P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
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.
	P280 - Wear protective gloves/protective clothing/eye protection/face protection.

UN GHS

According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Seventh 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

$\langle \mathbf{b} \rangle$

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

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



Precautior stateme	•
Preven	 tion • 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
Respo	 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/Disp	 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

WHMIS 2015

• Skin Sensitization 1 - H317

2.2 Label elements

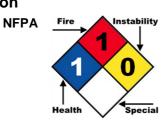
WHMIS 2015

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	
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

Hazardous Components				
Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive
1-hydroxycyclohexyl phenyl ketone	CAS:947-19-3 EC Number:213-426-9 EINECS:213-426-9	0.5% TO 2.5%		GHS: Acute Tox. 5; Eye Irrit. 2A; Skin Irrit. 2 CLP / OSHA / WHMIS: Eye Irrit. 2; Skin Irrit. 2:
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	GHS / CLP: Aquatic Acute 1; Aquatic Chronic 1; Eye Irrit. 2 OSHA / WHMIS 2015: Eye Irrit. 2
4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	CAS:41432-19-3	0.1% TO 0.3%		GHS / CLP / OSHA / WHMIS: Acute Tox. 4; Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1; STOT SE 3: Resp. Irrit.

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, 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. 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).
COAdulas fou flusfin	b to me

5.3 Advice for firefighters

Magna/Cure Film

 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

- 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

- Use appropriate Personal Protective Equipment (PPE)
- Containment/Clean-up Measures

Personal Precautions

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

General Industrial Hygiene

Respiratory

Eye/Face

Skin/Body

Considerations

Hands



- In case of insufficient ventilation, wear suitable respiratory equipment.
- Wear protective eyewear (goggles, face shield, or safety glasses).
- Wear protective gloves rubber or neoprene.
- Wear protective clothing apron or other impervious body coverings.
- Handle in accordance with good industrial hygiene and safety practice.

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Film
Color	Blue-green, brown or violet	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	рН	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
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

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

Magna/Cure Film

Component Name	CAS	Data				
enzophenone (0.5% TO .5%) 119-61-9		Acute Toxicity: orl-rat LD50:>10 gm/kg; Skin-Rabbit LD50 • 3535 mg/kg				
GHS Properties	Classifi	Classification				
Skin sensitization OS		EU/CLP•Skin Sensitizer 1 OSHA HCS 2012•Skin Sensitizer 1 UN GHS•Skin Sensitizer 1				
	Canada	Canada WHMIS•Skin Sensitizer 1				

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%)	110_61_0	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.

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		No				
			Inventory (Co	n'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 Dangerou	us Substanc	es		
 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 polyme 	r 41432-19-3	0.1% TO 0.	3% Not Listed	
Europe				
Other				
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification				
	0 1 7 10 0			

•1-hydroxycyclohexyl phenyl ketone	947-19-3	0.5%	TO 2	2.5%	Not Listed	
•Benzophenone	119-61-9	0.5%	TO 2	2.5%	Not Listed	
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polyme	r 41432-19-3	0.1%	TO ().3%	Not Listed	
EU - Endocrine Disrupters (COM (2001)262) - Candidate List	t of Substand	ces				
 1-hydroxycyclohexyl phenyl ketone 	947-19-3	0.5%	TO 2	2.5%	Not Listed	
•Benzophenone	119-61-9	0.5%	TO 2	2.5%	Group III Chemica	al
•4-Diazodiphenylamine hydrogen sulfate, formaldehyde polyme	r 41432-19-3	0.1%	ТО ().3%	Not Listed	
	Data Chart					

EU - Existing Substance Regulation (793/9	3/EEC) - Evaluation of	f Existin	g HPV Cher	nicals (REPEALED)
 1-hydroxycyclohexyl phenyl ketone 	947	-19-3	0.5% TO 2.5	i% Not Listed
•Benzophenone	119	-61-9	0.5% TO 2.5	5%
 4-Diazodiphenylamine hydrogen sulfate, form 	aldehyde polymer 414	32-19-3	0.1% TO 0.3	3% Not Listed
Germany				
Environment				
Germany - Water Classification (VwVwS) -	Annex 3			
 1-hydroxycyclohexyl phenyl ketone 				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, form polymer 	aldehyde 41432-	19-3 0.1	% TO 0.3%	Not Listed
Japan				
Environment				
Japan - Pollutant Release Transfer Registe	er (PRTR) - Class 1 Su	Ibstance	s	
 1-hydroxycyclohexyl phenyl ketone 	947	'-19-3	0.5% TO 2.5	5% Not Listed
•Benzophenone				5% 403 >=1 %
 4-Diazodiphenylamine hydrogen sulfate, form 			0.1% TO 0.3	3% Not Listed
Inventory - Japan - Industrial Safety and He		• •		
 1-hydroxycyclohexyl phenyl ketone 				5% 7-(4)-697
•Benzophenone				5% Not Listed
 4-Diazodiphenylamine hydrogen sulfate, form 	haldehyde polymer 414	32-19-3	0.1% TO 0.3	3% Not Listed
Other				
Japan - Chemical Substance Control Law (CSCL) - Examined Ex	isting Cł	nemical Sub	stances
 1-hydroxycyclohexyl phenyl ketone 	947-19-3 0.5% TO	2.5% No	ot Listed	
•Benzophenone	119-61-9 0.5% TO	2.5% Lo	ow-decompo oncentrate (s	sable (see also 4-125); Non-decomposable/Low ee also 4-125)
 4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer 	41432-19-3 0.1% TO	0.3% N	ot 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 can expose you to chemicals known to the State of California to cause cancer: Benzophenone CAS #119-61-9 0.5-2.5%

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
	P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
Classification method for mixtures	Calculation method.

for mixtures

Last Revision Date	• 29 March 2017
Preparation Date	• 03 August 2018
Other Information	• Approved by: Troy Bergstedt, Director of Chemical Research, (218) 628-2217 ext.142.
Disclaimer/Statement of Liability	f • 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.