

# Safety Data Sheet

Revision: 09 October 2024  
Supersedes: 03 August 2018



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

### 1.1 Product identifier

**Product Name:** D-2 Emulsion

**Product Description:** White liquid

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

**Relevant identified use(s):** Water-based screen printing emulsion

### 1.3 Details of the supplier of the safety data sheet

**Manufacturer** IKONICS  
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 2020/878]

### 2.1 Classification of the substance or mixture

CLP

Hazard Class	Category	Code
Not classified		

### 2.2 Label Elements

CLP

Hazard Statement	Code
Not classified	

### Precautionary Measures

Category	Code	Statement
Prevention	P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	P302+P352	IF ON SKIN: Wash with plenty of soap and water.
	P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	N/A	
Disposal	P501	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

### 2.3 Other Hazards

CLP

This mixture does not meet the criteria for persistent, bioaccumulative and toxic or very persistent and very bioaccumulative in accordance with REACH Annex XIII.

### Endocrine Disrupting Properties

**Human Health:** This mixture does not contain components having endocrine disrupting properties in accordance with REACH Article 59(1), Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/603 at a concentration equal to or greater than 0.1% by weight.

**Environment:** This mixture does not contain components having endocrine disrupting properties in accordance with REACH Article 59(1), Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/603 at a concentration equal to or greater than 0.1% by weight.

**UN GHS**

According to UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Eighth Revised Edition

**2.1 Classification of the substance or mixture****UN GHS**

Hazard Class	Category	Code
Not classified		

**2.2 Label Elements****UN GHS**

Hazard Statement	Code
Not classified	

**Precautionary Measures**

Category	Code	Statement
<b>Prevention</b>	P280	Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	P302+P352	IF ON SKIN: Wash with plenty of soap and water.
	P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>Storage</b>	N/A	
<b>Disposal</b>	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**

Hazard Class	Category	Code
Not classified		

**2.2 Label Elements****OSHA HCS 2012**

Hazard Statement	Code
Not classified	

**Precautionary Measures**

Category	Code	Statement
<b>Prevention</b>	P280	Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	P302+P352	IF ON SKIN: Wash with plenty of soap and water.
	P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>Storage</b>	N/A	
<b>Disposal</b>	P501	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**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**

Hazard Class	Category	Code
Not classified		

## 2.2 Label Elements

### WHMIS 2015

Hazard Statement	Code
Not classified	

### Precautionary Measures

Category	Code	Statement
Prevention	P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	P302+P352	IF ON SKIN: Wash with plenty of soap and water.
	P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	N/A	
Disposal	P501	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## 2.3 Other hazards

WHMIS 2015 No data available

## 2.4 Other information

### NFPA



## Section 3 - Composition/Information on Ingredients

### 3.1 Substances

### 3.2 Mixtures

No ingredients are hazardous according to CLP, GHS, OSHA or WHMIS criteria.

## Section 4 - First Aid Measures

### 4.1 Description of first aid measures

**Inhalation.** 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.** Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

**Eye.** 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

No data available

## 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. LARGE FIRES: Use extinguishing agent suitable for type of surrounding fire.

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

**Unusual fire and explosion hazards.** Material may burn, but does not ignite readily.

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

### 5.3 Advice for firefighters

Wear positive pressure self-contained breathing apparatus (SCBA).

## Section 6 - Accidental Release Measures

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

**Personal precautions.** Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

**Emergency procedures.** No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended. Use normal clean up procedures.

### 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.** Use appropriate Personal Protective Equipment (PPE). Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container.

### 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

Use good safety and industrial hygiene practices.

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

Keep container closed when not in use. Store away from extreme heat. Do not freeze.

### 7.3 Specific end use(s)

Refer to Section 1.2 - Relevant identified uses.

## Section 8 - Exposure Controls/Personal Protection

### 8.1 Control parameters

None specified

### 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. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

**Environmental exposure controls:** No data available

## Section 9 - Physical and Chemical Properties

### 9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Viscous liquid
Color	White	Odor	Mild
General Properties			
Boiling Point	Approximately 100 C (212 F)	Melting/Freezing Point	Approximately 0 C (32 F)
Decomposition Temperature	Not relevant	pH	No data available
Density	8.7 lbs/gal (1.09 kg/L)	Water Solubility	Miscible
Viscosity	5300-7300 Centipoise (cPs, cP) or mPas @ 25 C (77 F)	Kinematic Viscosity	5080-7000 mm <sup>2</sup> /s
Explosive Properties	Not relevant	Oxidizing Properties	Not relevant
Volatility			
Vapor Pressure	Not relevant	Vapor Density	Not relevant
Evaporation Rate	No data available	VOC (Wt.)	8%
Volatiles (Wt.)	80 %		
Flammability			
Flash Point	No data available	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
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.** Stable

**10.3 Possibility of hazardous reactions.** Hazardous polymerization will not occur.

**10.4 Conditions to avoid.** Excess heat. Avoid freezing.

**10.5 Incompatible materials.** Strong oxidizing agents, strong acids, strong bases.

**10.6 Hazardous decomposition products.** Hazardous decomposition products formed under fire conditions - carbon oxides (COx). No decomposition is expected under normal storage and use conditions.

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

Hazard	Hazard Classification
Acute toxicity	Based on available data, the classification criteria are not met
Skin corrosion/irritation	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Based on available data, the classification criteria are not met
Respiratory/skin sensitization	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Carcinogenicity	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-Single Exposure	Based on available data, the classification criteria are not met
STOT-Repeated Exposure	Based on available data, the classification criteria are not met
Aspiration	Based on available data, the classification criteria are not met

### Potential Health Effects

#### Inhalation

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

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

#### Skin

**Acute (Immediate):** May cause mild irritation.

**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):** May cause mild irritation.

**Chronic (Delayed):** No specific information available.

## Section 12 - Ecological Information

### 12.1 Toxicity

No data available

### 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 Endocrine disrupting properties

No endocrine disrupting components identified

### 12.7 Other adverse effects

None noted

## 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 IMO instruments. 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. Not classified

REACH compliance. No components at a concentration of 0.1% w/w or above are included in the Authorization List or the Candidate List of Substances of Very High Concern for Authorization .

US TSCA. All components of this product are listed on the TSCA Inventory.

### 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:

1,4-Dioxane CAS #123-91-1 <0.00007%

## Section 16 - Other Information

### Relevant phrases (code & full text)

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P304+P3341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

Classification method for mixtures: Calculation method.

Last revision date: 03 August 2018

Preparation date: 09 October 2024

Changes to the current revision: Section 2 CLP regulatory updates; Section 12.6; Section 11.1; general reformatting.

### Other information

Approved by: Troy Bergstedt, Director of Chemical Research, (218) 628-2217 ext.142.

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