

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

1.1 Product identifier

Product Name • **A-1 Emulsion**

Product Description • Blue liquid.

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

Relevant identified use(s) • Water-based emulsion

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 • Not classified

DSD/DPD • Not classified

2.2 Label Elements

CLP

Hazard statements • Not classified

Precautionary statements

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

DSD/DPD

- Safety phrases** • S24/25 - Avoid contact with skin and eyes.
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

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 • Not classified

2.2 Label elements

UN GHS

- Hazard statements** • Not classified

Precautionary statements

- 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/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 • Not classified
OSHA HCS 1994 • Not classified

2.2 Label elements

OSHA HCS 2012

Precautionary statements

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

- OSHA HCS 1994 • Not classified

2.3 Other hazards

- OSHA HCS 2012 • No data available

Canada

According to WHMIS

2.1 Classification of the substance or mixture

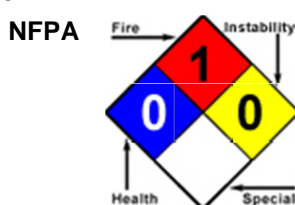
WHMIS • Not classified

2.2 Label elements

WHMIS • No data available

2.3 Other hazards

WHMIS • No data available

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**

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

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. Take off contaminated clothing and wash before reuse. 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.
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 • Some may burn but none ignite readily.

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

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 • Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material.

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

- No data available.

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

Handling • Use good safety and industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Storage • Keep container closed when not in use. Store away from extreme heat. Do not freeze.
Ventilate enclosed areas.

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

General Industrial Hygiene Considerations

- 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. 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	Blue	Odor	Not relevant
Taste	Not relevant	Particulate Type	Not relevant
Particulate Size	Not relevant	Aerosol Type	Not relevant
Odor Threshold	Not relevant	Physical and Chemical Properties	Not relevant
General Properties			
Boiling Point	100 C(212 F)	Melting Point	Not relevant
Decomposition Temperature	Not relevant	Heat of Decomposition	Not relevant
pH	No data available	Specific Gravity/Relative Density	No data available
Density	8.78 lbs/gal	Bulk Density	Not relevant
Water Solubility	Dispersible	Solvent Solubility	Not relevant
Viscosity	No data available	Explosive Properties	None.
Oxidizing Properties:	None.		
Volatility			
Vapor Pressure	Not relevant	Vapor Density	Not relevant
Evaporation Rate	No data available	VOC (Wt.)	Not relevant
VOC (Vol.)	Not relevant	Volatiles (Wt.)	75 %
Volatiles (Vol.)	Not relevant		
Flammability			
Flash Point	> 200 F(> 93.3333 C)	UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant

Self-Accelerating Decomposition Temperature (SADT)	Not relevant	Heat of Combustion (ΔH_c)	Not relevant
Burning Time	Not relevant	Flame Duration	Not relevant
Flame Height	Not relevant	Flame Extension	Not relevant
Ignition Distance	Not relevant	Flammability (solid, gas)	Non-flammable in liquid form. When dry, product will burn as an ordinary combustible material.
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

- Avoid freezing. Excess heat.

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 (CO_x). No decomposition is expected under normal storage and use conditions.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

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• OSHA HCS 2012• UN GHS•
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 specific information available.

Skin

Acute (Immediate)

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

Chronic (Delayed)

- No specific information available.

Eye

Acute (Immediate)

- May cause irritation.

Chronic (Delayed)

- Repeated and prolonged exposure may cause irritation.

Ingestion

Acute (Immediate)

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

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 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.

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 dangerous goods.
IMO/IMDG • Not dangerous goods.
IATA/ICAO • Not dangerous goods.

Section 15 - Regulatory Information

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

SARA Hazard Classifications • Not classified

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:

Formaldehyde	CAS No. 50-00-0	<0.002%
1,4-Dioxane	CAS No. 123-91-1	<0.00016%
Acetaldehyde	CAS No. 75-07-0	<0.00004%
Toluene	CAS No. 108-88-3	<0.00004%

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+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.
P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
S24/25 - Avoid contact with skin and eyes.
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

- **Last Revision Date** 15 July 2009
 - **Preparation Date** 06 August 2013
 - **Other Information** Approved by: Troy Bergstedt, Director of Chemical Research, (218) 628-2217 ext.142.
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