

Safety Data Sheet

Revision: 21 March 2023

Supersedes: N/A

IKONICS®

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

1.1 Product identifier

Product Name: Chroma/Last iSC

Product Description: Colorless liquid

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

Relevant identified use(s): Screen printing stencil hardener

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier 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
Skin Corrosion	1B	H314
Skin Sensitizer	1	H317
Serious Eye Damage	1	H318

2.2 Label Elements

CLP

DANGER



Hazard Statement	Code
Causes severe skin burns and eye damage	H314
May cause an allergic skin reaction	H317
Contains sensitizing substance (Glyoxal). May produce an allergic reaction.	EUH208

Precautionary Measures

Category	Code	Statement
Prevention	P260	Do not breathe dust/fume/gas/mist/vapors/spray.
	P264	Wash thoroughly after handling.
	P272	Contaminated work clothing should not be allowed out of the workplace.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
	P304+P340+312	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
	P305+P351+P338+P317	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help.
	P362+P364	Take off contaminated clothing and wash before reuse.
Storage	P405	Store locked up.
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): Ninth Revised Edition

2.1 Classification of the substance or mixture

UN GHS

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UN GHS

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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
Skin Corrosion	1B	H314
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2.2 Label Elements

OSHA HCS 2012

DANGER



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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
Skin Corrosion	1B	H314
Skin Sensitizer	1	H317
Serious Eye Damage	1	H318

2.2 Label Elements**WHMIS 2015****DANGER**

Hazard Statement	Code
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Precautionary Measures

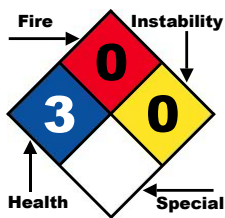
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2.3 Other hazards

WHMIS 2015 No data available

2.4 Other information

NFPA



Section 3 - Composition/Information on Ingredients

3.1 Substances

3.2 Mixtures

Chemical Name	CAS number	%	LD50/LC50	Classifications According to Regulation/Directive
Methanesulfonic acid	75-75-2	5-10 %	Ingestion/Oral-Rat LD50 648.7 mg/kg; Skin-Rabbit LD50 2000 mg/kg	GHS / CLP / OSHA / WHMIS: Skin Corr. 1B; Eye Dam. 1
Glyoxal	107-22-2	< 1 %	Ingestion/Oral-Rat LD50 3300 mg/kg; Skin-Rabbit LD50 10,000 mg/kg	GHS / CLP / OSHA / WHMIS: Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1; Acute Tox. 4; Muta. 2

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. 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

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 is non-combustible.

Hazardous combustion products. Products of combustion include: carbon oxides (CO_x), sulfur oxides (SO_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.

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.

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: Do not breathe vapors or mists. 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	Clear
Color	Colorless	Odor	No data available
General Properties			
Boiling Point	No data available	Melting/Freezing Point	No data available
Decomposition Temperature	No data available	pH	< 1
Density	8.66 lb/gal (1.038 g/mL)	Water Solubility	Miscible
Viscosity	No data available	Kinematic Viscosity	No data available
Explosive Properties	Not relevant	Oxidizing Properties	Not relevant
Volatility			
Vapor Pressure	Not relevant	Vapor Density	Not relevant
Evaporation Rate	No data available	VOC (Wt.)	< 1 %
Volatiles (Wt.)	Approx. 99 %		
Flammability			
Flash Point	Not relevant	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. None known.

10.5 Incompatible materials. No data available.

10.6 Hazardous decomposition products. Hazardous decomposition products formed under fire conditions - carbon oxides (COx), sulfur oxides (SOx). 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	Skin Corrosion 1B
Serious eye damage/irritation	Serious Eye Damage 1
Respiratory/skin sensitization	Skin Sensitizer 1
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

Route(s) of entry/exposure: Skin, eye, ingestion

Potential Health Effects

Inhalation

Acute (Immediate): May cause respiratory irritation.

Chronic (Delayed): Repeated and prolonged exposure will cause severe irritation and/or burns.

Skin

Acute (Immediate): May cause severe irritation and/or burns.

Chronic (Delayed): Repeated and prolonged exposure causes severe skin burns. May cause sensitization.

Eye

Acute (Immediate): May cause severe irritation and eye damage.

Chronic (Delayed): Repeated and prolonged exposure causes serious eye damage.

Ingestion

Acute (Immediate): May be harmful.

Chronic (Delayed): Repeated and prolonged exposure will cause severe irritation and/or burns.

Section 12 - Ecological Information

12.1 Toxicity

Methanesulfonic acid CAS # 75-75-2

Toxicity to fish LC50 - *Oncorhynchus mykiss* (rainbow trout) - 73 mg/l - 96 h

Toxicity to daphnia EC50 - *Daphnia magna* (Water flea) - 70 mg/l - 48 h

Toxicity to algae *Pseudokirchneriella subcapitata* (green algae) - 12 - 24 mg/l - 72 h

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

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

Avoid release to the environment. 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	3265	Corrosive liquid, acidic, organic, n.o.s. (contains methanesulfonic acid)	8	III	NDA
IMO/IMDG	3265	Corrosive liquid, acidic, organic, n.o.s. (contains methanesulfonic acid)	8	III	NDA

IATA/ICAO	3265	Corrosive liquid, acidic, organic, n.o.s. (contains methanesulfonic acid)	8	III	NDA
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14.6 Special precautions for user. None specified.

14.7 Transport in bulk according to IMO instruments. Not relevant.

14.8 Other information

Section 15 - Regulatory Information

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

SARA hazard classifications. Acute

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.

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 does not contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Section 16 - Other Information

Relevant phrases (code & full text)

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264 - Wash thoroughly after handling.

P272 - Contaminated work clothing should not be allowed out of the workplace.

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

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P362+P364 - Take off contaminated clothing and wash before reuse.

P405 - Store locked up.

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: N/A

Preparation date: 21 March 2023

Changes to the current revision: New document.

Other information

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

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