

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

1.1 Product identifier

Product Name • **Chroma/Stain Remover 560 Red**
Product Description • Red gel.

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

Relevant identified use(s) • Screen mesh stain remover

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
 • (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

UN GHS

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

2.1 Classification of the substance or mixture

UN GHS • Skin Irritation 2
 Serious Eye Damage 1
 Reproductive Toxicity 1B
 Flammable Liquids 4

2.2 Label elements

UN GHS

DANGER



Hazard statements • Causes skin irritation
 Causes serious eye damage
 May damage fertility or the unborn child.

Precautionary statements

Prevention • Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.

Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Use personal protective equipment as required.

- Response** • IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Immediately call a POISON CENTER or doctor/physician.
Specific treatment, see supplemental first aid information.
Take off contaminated clothing and wash before reuse.
In case of fire: Use appropriate media for extinction.

- Storage/Disposal** • Store in a well-ventilated place. Keep cool.
Store locked up.
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 Irritation 2
Serious Eye Damage 1
Reproductive Toxicity 1B
Flammable Liquids 4

2.2 Label elements

OSHA HCS 2012

DANGER



- Hazard statements** • Causes skin irritation
Causes serious eye damage
May damage fertility or the unborn child.

Precautionary statements

- Prevention** • Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
In case of fire: Use appropriate media for extinction.
- Response** • IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Immediately call a POISON CENTER or doctor/physician.
Specific treatment, see supplemental first aid information.
Take off contaminated clothing and wash before reuse.
In case of fire: Use appropriate media for extinction.

- Storage/Disposal** • Store in a well-ventilated place. Keep cool.

Store locked up.
 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

2.1 Classification of the substance or mixture

WHMIS • Combustible Liquids - B3
 Other Toxic Effects - D2B
 Corrosive - E

2.2 Label elements

WHMIS

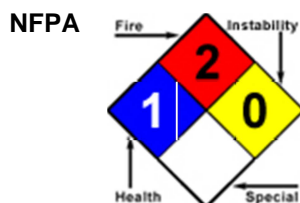


• Combustible Liquids - B3
 Other Toxic Effects - D2B
 Corrosive - E

2.3 Other hazards

WHMIS • No data available

2.4 Other information



Section 3 - Composition/Information on Ingredients

3.1 Substances

3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
2-Pyrrolidinone, 1-methyl-	CAS:872-50-4 EC Number:212-828-1 EU Index:606-021-00-7 EINECS:212-828-1	25% TO 30%	Ingestion/Oral- Rat LD50 • 3914 mg/kg Skin-Rabbit LD50 • 8 g/kg	WHMIS: UN GHS: Skin Irrit. 2; Eye Irrit. 2A; Repr. 1B OSHA HCS 2012:	NDA
1(or 2)-(2-methoxymethylethoxy), propanol acetate	CAS:88917-22-0	20% TO 25%		WHMIS: UN GHS: Skin Irrit. 2; Eye Irrit. 2A; Flam. Liq. 4 OSHA HCS 2012:	NDA
Propionic acid, 3-ethoxy-, ethyl ester	CAS:763-69-	7%	Skin-Rabbit	WHMIS:	NDA

	9 EINECS: 212-112-9	TO 10%	LD50 • 10 mL/kg Ingestion/Oral-Rat LD50 • 3200 mg/kg	UN GHS: Flam. Liq. 3 OSHA HCS 2012:	
1-Methoxy-2-propanol acetate	CAS: 108-65-6 EC Number: 203-603-9 EU Index: 607-195-00-7 EINECS: 203-603-9	5% TO 7%	Ingestion/Oral-Rat LD50 • 8532 mg/kg Skin-Rabbit LD50 • >5 g/kg	WHMIS: Other Toxic Effects - D2B; Comb. Liq. - B3 UN GHS: Eye Irrit. 2A; Flam. Liq. 3 OSHA HCS 2012:	NDA
Nonylphenol polyethylene glycol ether	CAS: 127087-87-0	5%		WHMIS: UN GHS: Eye Dam. 1 OSHA HCS 2012:	NDA

See Section 11 for Toxicological Information.

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.
- 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 alcohol-resistant foam.
 - LARGE FIRES: Water spray, fog or alcohol-resistant 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.

5.2 Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
- Combustible liquid.
- Hazardous Combustion Products**
- Products of combustion include: carbon oxides (CO_x), nitrogen oxides (NO_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**
- Ventilate enclosed areas. Contact may irritate or burn skin and eyes. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Emergency Procedures**
- Personal protective equipment is required for clean-up personnel. Ventilate closed spaces before entering. Keep unauthorized personnel away.

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)
Stop leak if you can do it without risk.
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**
- Keep away from heat and sparks. Use good safety and industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

- Storage**
- Ventilate enclosed areas. Do not store near heat, sparks or open flames. Keep container closed when not in use. Store locked up.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines				
	Result	Canada British Columbia	Canada Ontario	Canada Yukon
1-Methoxy-2-propanol acetate (108-65-6)	STELs	75 ppm STEL	Not established	Not established
	TWAs	50 ppm TWA	50 ppm TWA; 270 mg/m ³ TWA	Not established
Propionic acid, 3-ethoxy-, ethyl ester (763-69-9)	TWAs	Not established	50 ppm TWA; 300 mg/m ³ TWA	Not established
1(or 2)-(2-methoxymethylethoxy), propanol acetate (88917-22-0)	STELs	Not established	150 ppm STEL; 1164 mg/m ³ STEL	Not established
	TWAs	Not established	100 ppm TWA; 776 mg/m ³ TWA	Not established
2-Pyrrolidinone, 1-methyl- (872-50-4)	TWAs	Not established	400 mg/m ³ TWA	100 ppm TWA; 400 mg/m ³ TWA
	STELs	Not established	Not established	125 ppm STEL; 500 mg/m ³ STEL

Exposure Limits Supplemental ACGIH

- 2-Pyrrolidinone, 1-methyl- (872-50-4): **BEIs:** (100 mg/L Medium: urine Time: end of shift Parameter: 5-Hydroxy-N-methyl-2-pyrrolidone)

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

Material Description			
Physical Form	Liquid	Appearance/Description	Gel
Color	Red	Odor	Mild
Taste	No data available.	Odor Threshold	No data available
General Properties			
Boiling Point	385 F(196.1111 C)	Melting Point	No data available
Decomposition Temperature	No data available	pH	Not relevant
Specific Gravity/Relative Density	> 1	Density	8.5 lbs/gal
Water Solubility	Appreciable	Viscosity	No data available
Explosive Properties	Not relevant	Oxidizing Properties:	Not relevant
Volatility			
Vapor Pressure	< 5 mmHg (torr) @ 20 C(68 F)	Vapor Density	No data available
Evaporation Rate	< 0.01 n-Butyl Acetate = 1	VOC (Wt.)	95 %
Flammability			
Flash Point	145 F(62.7778 C)	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	Classification criteria not met.		
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 additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Heat, sparks or open flame.

10.5 Incompatible materials

- Strong oxidizing or reducing agents.

10.6 Hazardous decomposition products

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

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components		
2-Pyrrolidinone, 1-methyl- (25% TO 30%)	872-50-4	Acute Toxicity: Ingestion/Oral-Rat LD50 • 3914 mg/kg; Skin-Rabbit LD50 • 8 g/kg; Irritation: Eye-Rabbit • 100 mg • Moderate irritation; Reproductive: Ingestion/Oral-Rat TDLo • 7.5 g/kg (6-20D preg); <i>Reproductive Effects:Effects on Embryo or Fetus:</i> Fetotoxicity (except death, e.g., stunted fetus); <i>Reproductive Effects:Specific Developmental Abnormalities:</i> Musculoskeletal system; Inhalation-Rat TDLo • 116 ppm 6 Hour(s)(multigenerations); <i>Reproductive Effects:Effects on Embryo or Fetus:</i> Fetotoxicity (except death, e.g., stunted fetus); Skin-Rat TDLo • 7500 mg/kg (6-15D preg); <i>Reproductive Effects:Effects on Fertility:</i> Post-implantation mortality; <i>Reproductive Effects:Effects on Embryo or Fetus:</i> Fetotoxicity (except death, e.g., stunted fetus); <i>Reproductive Effects:Effects on Embryo or Fetus:</i> Fetal death
Propionic acid, 3-ethoxy-, ethyl ester (7% TO 10%)	763-69-9	Acute Toxicity: Ingestion/Oral-Rat LD50 • 3200 mg/kg; <i>Behavioral:</i> Ataxia; Skin-Rabbit LD50 • 10 mL/kg
1-Methoxy-2-propanol acetate (5% TO 7%)	108-65-6	Acute Toxicity: Ingestion/Oral-Rat LD50 • 8532 mg/kg; Skin-Rabbit LD50 • >5 g/kg

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012• UN GHS•
Aspiration Hazard	OSHA HCS 2012• UN GHS•
Carcinogenicity	OSHA HCS 2012• UN GHS•
Germ Cell Mutagenicity	OSHA HCS 2012• UN GHS•
Skin corrosion/Irritation	OSHA HCS 2012•Skin Irritation 2 UN GHS•Skin Irritation 2
Skin sensitization	OSHA HCS 2012• UN GHS•
STOT-RE	OSHA HCS 2012• UN GHS•
STOT-SE	OSHA HCS 2012• UN GHS•
Toxicity for Reproduction	OSHA HCS 2012•Toxic to Reproduction 1B UN GHS•Toxic to Reproduction 1B
Respiratory sensitization	OSHA HCS 2012• UN GHS•

Serious eye damage/Irritation

OSHA HCS 2012•Serious Eye Damage 1
UN GHS•Serious Eye Damage 1

Potential Health Effects

Inhalation

- Acute (Immediate)** • May cause irritation.
- Chronic (Delayed)** • Repeated and prolonged exposure to high concentrations of vapors or mists may cause irritation to nose and throat, loss of coordination, fatigue, drowsiness, and/or dizziness.

Skin

- Acute (Immediate)** • May cause irritation.
- Chronic (Delayed)** • Repeated and prolonged exposure may cause burning, cracking or drying of the skin.

Eye

- Acute (Immediate)** • May cause severe irritation and eye damage.
- Chronic (Delayed)** • Repeated and prolonged exposure may cause irreversible damage to eyes.

Ingestion

- Acute (Immediate)** • May cause irritation.
- Chronic (Delayed)** • No specific information available.

- Reproductive Effects** • Repeated and prolonged exposure may cause reproductive effects.

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
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DOT	NDA	NDA	NDA	NDA	NDA
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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.

Section 15 - Regulatory Information

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

SARA Hazard Classifications • Acute

State Right To Know				
Component	CAS	MA	NJ	PA
1(or 2)-(2-methoxymethylethoxy), propanol acetate	88917-22-0	No	No	No
1-Methoxy-2-propanol acetate	108-65-6	No	No	No
2-Pyrrolidinone, 1-methyl-	872-50-4	Yes	Yes	Yes
Nonylphenol polyethylene glycol ether	127087-87-0	No	No	No
Propionic acid, 3-ethoxy-, ethyl ester	763-69-9	No	No	No

Inventory			
Component	CAS	Canada DSL	TSCA
1(or 2)-(2-methoxymethylethoxy), propanol acetate	88917-22-0	Yes	Yes
1-Methoxy-2-propanol acetate	108-65-6	Yes	Yes
2-Pyrrolidinone, 1-methyl-	872-50-4	Yes	Yes
Nonylphenol polyethylene glycol ether	127087-87-0	Yes	Yes
Propionic acid, 3-ethoxy-, ethyl ester	763-69-9	Yes	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

•1-Methoxy-2-propanol acetate	108-65-6	B3
•2-Pyrrolidinone, 1-methyl-	872-50-4	B3, D2B
•1(or 2)-(2-methoxymethylethoxy), propanol acetate	88917-22-0	Not Listed
•Propionic acid, 3-ethoxy-, ethyl ester	763-69-9	B3, D2B
•Nonylphenol polyethylene glycol ether	127087-87-0	Not Listed

United States

Environment

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

•1-Methoxy-2-propanol acetate	108-65-6	Not Listed
•2-Pyrrolidinone, 1-methyl-	872-50-4	1.0 % de minimis concentration
•1(or 2)-(2-methoxymethylethoxy), propanol acetate	88917-22-0	Not Listed
•Propionic acid, 3-ethoxy-, ethyl ester	763-69-9	Not Listed
•Nonylphenol polyethylene glycol ether	127087-87-0	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Developmental Toxicity

•1-Methoxy-2-propanol acetate	108-65-6	Not Listed
•2-Pyrrolidinone, 1-methyl-	872-50-4	developmental toxicity, initial date 6/15/01
•1(or 2)-(2-methoxymethylethoxy), propanol acetate	88917-22-0	Not Listed
•Propionic acid, 3-ethoxy-, ethyl ester	763-69-9	Not Listed
•Nonylphenol polyethylene glycol ether	127087-87-0	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

•1-Methoxy-2-propanol acetate	108-65-6	Not Listed
•2-Pyrrolidinone, 1-methyl-	872-50-4	3200 µg/day MADL (inhalation); 17000 µg/day MADL (dermal)
•1(or 2)-(2-methoxymethylethoxy), propanol acetate	88917-22-0	Not Listed
•Propionic acid, 3-ethoxy-, ethyl ester	763-69-9	Not Listed
•Nonylphenol polyethylene glycol ether	127087-87-0	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

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)

- H315 - Causes skin irritation
- H318 - Causes serious eye damage
- H360 - May damage fertility or the unborn child.
- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- P264 - Wash thoroughly after handling.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P281 - Use personal protective equipment as required.
- P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P313 - IF exposed or concerned: Get medical advice/attention.
- P310 - Immediately call a POISON CENTER or doctor/physician.
- P321 - Specific treatment, see supplemental first aid information.
- P332+P313 - If skin irritation occurs: Get medical advice/attention.
- P362 - 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

- 06 April 2015

Preparation Date

- 01 June 2015

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.
