

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

1.1 Product identifier

Product Name • **Image Mate Blockout Red 421**

Product Description • Red liquid.

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

Relevant identified use(s) • Liquid blockout

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 Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 2015/830]

2.1 Classification of the substance or mixture

CLP • Not classified

2.2 Label Elements

CLP

Precautionary statements

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

Response • P301+P312 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.

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.

P337+P313 - If eye irritation persists: Get medical advice/attention.

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

2.3 Other Hazards

CLP • No data available

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 • Not classified

2.2 Label elements

UN GHS

Precautionary statements

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

Response • P301+P312 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.
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.
P337+P313 - If eye irritation persists: Get medical advice/attention.

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 • Not classified

2.2 Label elements

OSHA HCS 2012

Precautionary statements

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

Response • IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell. - P301+P312
IF ON SKIN: Wash with plenty of soap and water. - P302+P352
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338
If eye irritation persists: Get medical advice/attention. - P337+P313

Storage/Disposal • 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

2.1 Classification of the substance or mixture

WHMIS 2015 • Not classified

2.2 Label elements

WHMIS 2015

Precautionary statements

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

Response • IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell. - P301+P312

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

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

If eye irritation persists: Get medical advice/attention. - P337+P313

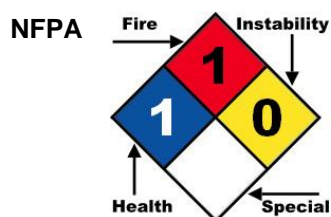
Storage/Disposal • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

2.3 Other hazards

WHMIS 2015

- No data available

2.4 Other information



Section 3 - Composition/Information on Ingredients

3.1 Substances

3.2 Mixtures

Composition				
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive
2-Propanol, 1-methoxy-	CAS:107-98-2 EC Number:203-539-1 UN:UN3092 EINECS:203-539-1	5% TO 7%	Inhalation-Rat LC50 • 10000 ppm 5 Hour(s) Skin-Rabbit LD50 • 13 g/kg Ingestion/Oral-Rat LD50 • 6600 mg/kg	GHS / CLP / OSHA / WHMIS:Flam. Liq. 3; STOT SE 3

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

Notes to Physician

- No data available.

Antidotes

- 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 • Some of these materials 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 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 or walk through spilled material. Ventilate enclosed areas.

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

Handling • Use good safety and industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Store away from extreme heat. Do not freeze. 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

Exposure Limits/Guidelines • No data available.

Exposure Limits/Guidelines						
	Result	ACGIH	Argentina	Australia	Belgium	Canada Alberta
2-Propanol, 1-methoxy-(107-98-2)	STELs	100 ppm STEL	150 ppm STEL [CMP-CPT]	150 ppm STEL; 553 mg/m3 STEL	150 ppm STEL; 568 mg/m3 STEL	150 ppm STEL; 553 mg/m3 STEL
	TWAs	50 ppm TWA	100 ppm TWA [CMP]	100 ppm TWA; 369 mg/m3 TWA	100 ppm TWA; 375 mg/m3 TWA	100 ppm TWA; 369 mg/m3 TWA
Exposure Limits/Guidelines (Con't.)						
	Result	Canada British Columbia	Canada Manitoba	Canada New Brunswick	Canada Northwest Territories	Canada Nova Scotia
2-Propanol, 1-methoxy-(107-98-2)	STELs	75 ppm STEL	100 ppm STEL	150 ppm STEL; 553 mg/m3 STEL	150 ppm STEL; 540 mg/m3 STEL	100 ppm STEL
	TWAs	50 ppm TWA	50 ppm TWA	100 ppm TWA; 369 mg/m3 TWA	100 ppm TWA; 360 mg/m3 TWA	50 ppm TWA
Exposure Limits/Guidelines (Con't.)						
	Result	Canada Nunavut	Canada Ontario	Canada Quebec	Canada Saskatchewan	Canada Yukon
2-Propanol, 1-methoxy-(107-98-2)	STELs	150 ppm STEL; 540 mg/m3 STEL	150 ppm STEL	150 ppm STEV; 553 mg/m3 STEV	150 ppm STEL	150 ppm STEL; 450 mg/m3 STEL
	TWAs	100 ppm TWA; 360 mg/m3 TWA	100 ppm TWA	100 ppm TWAEV; 369 mg/m3 TWAEV	100 ppm TWA	100 ppm TWA; 360 mg/m3 TWA
Exposure Limits/Guidelines (Con't.)						
	Result	Denmark	Finland	France	Germany DFG	Germany TRGS
2-Propanol, 1-methoxy-(107-98-2)	TWAs	50 ppm TWA; 185 mg/m3 TWA	100 ppm TWA; 370 mg/m3 TWA	50 ppm TWA [VME] (restrictive limit); 188 mg/m3 TWA [VME] (restrictive limit)	Not established	100 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2); 370 mg/m3 TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2)
	STELs	Not established	150 ppm STEL; 560 mg/m3 STEL	100 ppm STEL [VLCT] (restrictive limit); 375 mg/m3 STEL [VLCT] (restrictive limit)	Not established	Not established
	Ceilings	Not established	Not established	Not established	200 ppm Peak; 740 mg/m3 Peak	Not established
	MAKs	Not established	Not established	Not established	100 ppm TWA MAK; 370 mg/m3 TWA MAK	Not established
Exposure Limits/Guidelines (Con't.)						
	Result	Hong Kong	Indonesia	Ireland	Italy	Korea
2-Propanol, 1-	STELs	150 ppm STEL; 553	Not established	150 ppm STEL; 568	150 ppm STEL; 568	150 ppm STEL

methoxy- (107-98-2)		mg/m3 STEL		mg/m3 STEL	mg/m3 STEL	(Serial No. 653); 540 mg/m3 STEL (Serial No. 653)
	TWAs	Not established	100 ppm TWA	100 ppm TWA; 375 mg/m3 TWA	100 ppm TWA; 375 mg/m3 TWA	100 ppm TWA (Serial No. 650); 360 mg/m3 TWA (Serial No. 650)
Exposure Limits/Guidelines (Con't.)						
	Result	Netherlands	New Zealand	NIOSH	Norway	Poland
2-Propanol, 1-methoxy- (107-98-2)	TWAs	375 mg/m3 TWA	100 ppm TWA; 369 mg/m3 TWA	100 ppm TWA; 360 mg/m3 TWA	50 ppm TWA; 180 mg/m3 TWA	180 mg/m3 TWA [NDS]
	STELs	563 mg/m3 STEL	150 ppm STEL; 553 mg/m3 STEL	150 ppm STEL; 540 mg/m3 STEL	Not established	360 mg/m3 STEL [NDSch]
Exposure Limits/Guidelines (Con't.)						
	Result	Portugal	Singapore	South Africa	Spain	Sweden
2-Propanol, 1-methoxy- (107-98-2)	STELs	150 ppm STEL [VLE-CD]	150 ppm STEL; 553 mg/m3 STEL	300 ppm STEL; 1080 mg/m3 STEL	150 ppm STEL [VLA-EC]; 568 mg/m3 STEL [VLA-EC]	75 ppm STV; 300 mg/m3 STV
	TWAs	100 ppm TWA [VLE-MP]	100 ppm PEL; 369 mg/m3 PEL	100 ppm TWA; 360 mg/m3 TWA	100 ppm TWA [VLA-ED] (indicative limit value); 375 mg/m3 TWA [VLA-ED] (indicative limit value)	50 ppm LLV; 190 mg/m3 LLV
Exposure Limits/Guidelines (Con't.)						
	Result	Switzerland		Taiwan		
2-Propanol, 1-methoxy- (107-98-2)	MAKs	100 ppm TWA [MAK]; 360 mg/m3 TWA [MAK]		Not established		
	STELs	200 ppm STEL [KZW] (4 X 15); 720 mg/m3 STEL [KZW] (4 X 15)		Not established		
	TWAs	Not established		100 ppm TWA; 369 mg/m3 TWA		

Exposure Control Notations

Denmark

•2-Propanol, 1-methoxy- (107-98-2): **Skin Notations:** (Potential for cutaneous absorption)

Norway

•2-Propanol, 1-methoxy- (107-98-2): **Skin:** (Skin notation)

Italy

•2-Propanol, 1-methoxy- (107-98-2): **Skin:** (skin - potential for cutaneous absorption)

Netherlands

•2-Propanol, 1-methoxy- (107-98-2): **Skin:** (skin notation)

South Africa

•2-Propanol, 1-methoxy- (107-98-2): **Skin:** (Skin Notation)

Belgium

•2-Propanol, 1-methoxy- (107-98-2): **Skin:** (Skin)

Finland

•2-Propanol, 1-methoxy- (107-98-2): **Skin:** (Potential for cutaneous absorption)

Spain

•2-Propanol, 1-methoxy- (107-98-2): **Skin:** (skin - potential for cutaneous exposure)

Exposure Limits Supplemental

Switzerland

•2-Propanol, 1-methoxy- (107-98-2): **Biological Limit Values:** (20 mg/L Medium: urine Time: end of shift Parameter: 1-Methoxypropanol-2)

ACGIH

Germany TRGS

•2-Propanol, 1-methoxy- (107-98-2): **BELs:** (15 mg/L Medium: urine Time: end of shift Parameter: 1-Methoxypropan-2-ol)

8.2 Exposure controls

Engineering Measures/Controls

- Local exhaust is recommended but not required. Provide adequate ventilation as necessary.

Personal Protective Equipment

Pictograms



Respiratory

- Not required.

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	Clear red liquid.
Color	Red	Odor	Mild
Odor Threshold	No data available		
General Properties			
Boiling Point	100 C(212 F)	Melting Point	No data available
pH	5.1	Density	8.8 lbs/gal
Water Solubility	Dispersible	Explosive Properties	None.
Oxidizing Properties:	None.		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	< 1 n-Butyl Acetate = 1	VOC (Wt.)	7 %
Volatiles (Wt.)	85 %		
Flammability			
Flash Point	> 200 F(> 93.3333 C)	UEL	No data available
LEL	No data available	Autoignition	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 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

- Avoid freezing. Excess heat.

10.5 Incompatible materials

- No data available.

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).

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Component Name	CAS	Data
2-Propanol, 1-methoxy- (5% TO 7%)	107-98-2	Acute Toxicity: orl-rat LD50:6600 mg/kg; ihl-rat LC50:10000 ppm/5H; skn-rbt LD50:13 gm/kg

Potential Health Effects

Inhalation

- Acute (Immediate)** • May cause mild 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 mild 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

- 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 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 • No data available

State Right To Know				
Component	CAS	MA	NJ	PA
2-Propanol, 1-methoxy-	107-98-2	Yes	Yes	Yes

Inventory						
Component	CAS	Australia AICS	Canada DSL	China	EU EINECS	Japan ENCS
2-Propanol, 1-methoxy-	107-98-2	Yes	Yes	Yes	Yes	Yes

Inventory (Con't.)					
Component	CAS	Korea KECL	New Zealand	Philippines PICCS	TSCA
2-Propanol, 1-methoxy-	107-98-2	Yes	Yes	Yes	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

•2-Propanol, 1-methoxy- 107-98-2 B2

Canada - WHMIS - Ingredient Disclosure List

•2-Propanol, 1-methoxy- 107-98-2 1 %

China

Other

China - Dangerous Goods List

•2-Propanol, 1-methoxy- 107-98-2

Germany

Environment

Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes

•2-Propanol, 1-methoxy- 107-98-2 ID Number 1597, hazard

Japan

Labor

Japan - ISHL Dangerous Substances

•2-Propanol, 1-methoxy-

107-98-2

Flammable substance

Japan - ISHL Notifiable Substances

•2-Propanol, 1-methoxy-

107-98-2

>1 % weight [Table 9, 496]

Other

Japan - Chemical Substance Control Law (CSCL) - Examined Existing Chemical Substances

•2-Propanol, 1-methoxy-

107-98-2

Readily biodegradable

Japan - Fire Service Law - Hazardous Materials

•2-Propanol, 1-methoxy-

107-98-2

Group 4 - Flammable liquids III (listed under 2nd Class petroleum - soluble)

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 or birth defects or other reproductive harm.

Section 16 - Other Information

Relevant Phrases (code & full text)

- H226 - Flammable liquid and vapor
- H336 - May cause drowsiness or dizziness
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P312 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.
- 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.
- P337+P313 - If eye irritation persists: Get medical advice/attention.
- 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

- 12 November 2013

Preparation Date

- 17 May 2021

Other Information

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

Disclaimer/Statement of Liability

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