

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

1.1 Product identifier

Product Name • Stencil Remover 100

Chemical Name • Sodium periodate.

Product Description • White to light yellow solid.

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

Relevant identified use(s) • Screen mesh reclaimer

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

- Oxidizing Solids 2 - H272
- Skin Irritation 2 - H315
- Eye Irritation 2 - H319
- Specific Target Organ Toxicity Repeated Exposure 2 - H373

DSD/DPD

- Oxidizing (O)
 - Irritant (Xi)
- R36/37/38

2.2 Label Elements

CLP

DANGER



Hazard statements • H272 - May intensify fire; oxidizer
H315 - Causes skin irritation

H319 - Causes serious eye irritation
H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

- Prevention** • P210 - Keep away from heat.
P220 - Keep/Store away from clothing and other combustible materials.
P221 - Take any precaution to avoid mixing with combustibles
P260 - Do not breathe dust, fume, gas, mist, vapors and/or spray.
P264 - Wash thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- Response** • P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
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.
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment, see supplemental first aid information.
P362 - Take off contaminated clothing and wash before reuse.
P370+P378 - In case of fire: Use appropriate media for surrounding fire for extinction.
- Storage/Disposal** • P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

DSD/DPD



Risk phrases • R36/37/38 - Irritating to eyes, respiratory system and skin.

Safety phrases • S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

2.3 Other Hazards

- | | |
|---------|---------------------|
| CLP | • No data available |
| DSD/DPD | • No data available |

UN GHS

According to Third Revised Edition

2.1 Classification of the substance or mixture

- UN GHS** • Oxidizing Solids 2 - H272
Skin Irritation 2 - H315
Eye Irritation 2A - H319
Specific Target Organ Toxicity Repeated Exposure 2 - H373

2.2 Label elements

UN GHS

DANGER



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P321 - Specific treatment, see supplemental first aid information.
P362 - Take off contaminated clothing and wash before reuse.
P370+P378 - In case of fire: Use appropriate media for surrounding fire for extinction.

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

- Oxidizing Solids 2 - H272
- Skin Irritation 2 - H315
- Eye Irritation 2A - H319
- Specific Target Organ Toxicity Repeated Exposure 2 - H373

2.2 Label elements

OSHA HCS 2012

DANGER



Hazard statements • May intensify fire; oxidizer - H272
Causes skin irritation - H315
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Precautionary statements

Prevention • Keep away from heat. - P210
Keep/Store away from clothing and other combustible materials. - P220
Take any precaution to avoid mixing with combustibles - P221
Do not breathe dust, fume, gas, mist, vapors and/or spray. - P260
Wash thoroughly after handling. - P264
Wear protective gloves/protective clothing/eye protection/face protection. - P280

Response • IF ON SKIN: Wash with plenty of soap and water. - P302+P352
If skin irritation occurs: Get medical advice/attention. - P332+P313
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
Get medical advice/attention if you feel unwell. - P314
Specific treatment, see supplemental first aid information. - P321
Take off contaminated clothing and wash before reuse. - P362
In case of fire: Use appropriate media for surrounding fire for extinction. - P370+P378

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

2.1 Classification of the substance or mixture

WHMIS

- Oxidizing - C
- Other Toxic Effects - D2B

2.2 Label elements

WHMIS



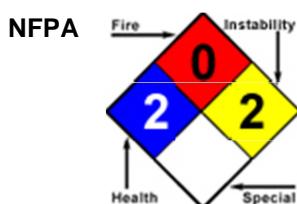
- Oxidizing - C
- Other Toxic Effects - D2B

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.

Section 3 - Composition/Information on Ingredients

3.1 Substances

Hazardous Components					
Chemical Name	Identifiers	% (weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
Periodic acid, sodium salt	CAS:7790-28-5 EC Number:232-197-6 EINECS:232-197-6	95% TO 100%	NDA	WHMIS: Other Toxic Effects - D2B; Oxidizing - C UN GHS: Ox. Sol. 2; Eye Irrit. 2A; Skin Irrit. 2; STOT RE 2 EU DSD/DPD: Irritant(Xi); Oxidizing(O); R36/37/38 EU CLP: OSHA HCS 2012:	

3.2 Mixtures

Key to abbreviations

= See Section 16 for full text of R and S phrases.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

- IF INHALED: 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. Take off contaminated clothing and wash before reuse.
- 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

4.4 Other information

- Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media • Material is non-combustible. In case of fire use media as appropriate for surrounding fire.

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 • Material is non-combustible and is not expected to pose a fire or explosion hazard.

Hazardous Combustion Products • Non-combustible, substance itself does not burn but may decompose upon heating to produce toxic fumes.

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

Emergency Procedures • Ventilate closed spaces before entering. Keep unauthorized personnel away. Stop leak if you can do it without risk. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

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)
SMALL DRY SPILLS: With clean shovel place material into clean, dry container and

cover loosely; move containers from spill area.

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. Use only with adequate ventilation. Do not breathe (dust, vapor or spray mist)

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Store in a well-ventilated place. Keep container tightly closed. Do not store and transport with flammable/combustible materials etc.

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.

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

- Handle in accordance with good industrial hygiene and safety practice.

Considerations

Environmental Exposure Controls

- No data available

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description

Physical Form	Solid	Appearance/Description	Powder
Color	White to light yellow.	Odor	No data available.
Taste	Not relevant	Odor Threshold	No data available
Physical and Chemical Properties	Not relevant		

General Properties

Boiling Point	No data available	Melting Point	300 C(572 F)
Decomposition Temperature	No data available	Heat of Decomposition	No data available
pH	3.5 to 5.5 107 g/L	Specific Gravity/Relative Density	No data available
Density	8.3 g/mL	Water Solubility	107 g/L @ 20 C(68 F)
Viscosity	Not relevant	Explosive Properties	Not relevant
Oxidizing Properties:	Oxidizing as a solid and in water solution.		

Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available	VOC (Wt.)	0 %
Volatiles (Wt.)	0 %		
Flammability			
Flash Point	No data available	UEL	No data available
LEL	No data available	Autoignition	No data available
Self-Accelerating Decomposition Temperature (SADT)	No data available	Heat of Combustion (ΔH_c)	No data available
Burning Time	No data available	Flame Height	No data available
Flame Extension	No data available	Ignition Distance	No data available
Flame Duration	No data available	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/BOD ₅	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

- Reacts with reducing agents and readily oxidized materials.

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

- Excess heat. Incompatible materials.

10.5 Incompatible materials

- Reducing agents.

10.6 Hazardous decomposition products

- Heat can cause decomposition to oxygen and iodine vapors.

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•Skin Irritation 2 OSHA HCS 2012•Skin Irritation 2 UN GHS•Skin Irritation 2
Skin sensitization	EU/CLP• OSHA HCS 2012• UN GHS•
STOT-RE	EU/CLP•Specific Target Organ Toxicity Repeated Exposure 2 OSHA HCS 2012• UN GHS•Specific Target Organ Toxicity Repeated Exposure 2
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•Eye Irritation 2 OSHA HCS 2012•Eye Irritation 2A UN GHS•Eye Irritation 2A

Route(s) of entry/exposure

- Skin, eye, inhalation

Medical Conditions Aggravated by Exposure

- Disorders of the skin, eye and lungs.

Potential Health Effects

Inhalation

Acute (Immediate)

- May cause respiratory irritation.

Chronic (Delayed)

- No specific information available.

Skin

Acute (Immediate)

- Causes skin irritation.

Chronic (Delayed)

- No specific information available.

Eye

Acute (Immediate)

- Causes serious eye irritation.

Chronic (Delayed)

- No specific information available.

Ingestion

Acute (Immediate)

- May cause irritation.

Chronic (Delayed)

- No specific information available.

Mutagenic Effects

- No data available.

Carcinogenic Effects

- No data available.

Reproductive Effects

- 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	3087	Oxidizing solid, toxic, n.o.s. (Sodium periodate)	5.1, 6.1	II	NDA
IMO/IMDG	3087	Oxidizing solid, toxic, n.o.s. (Sodium periodate)	5.1, 6.1	II	NDA
IATA/ICAO	3087	Oxidizing solid, toxic, n.o.s. (Sodium periodate)	5.1, 6.1	II	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

- This product is provided only in non-bulk containers.

Section 15 - Regulatory Information

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

SARA Hazard Classifications

- Acute

Inventory						
Component	CAS	Australia AICS	Canada DSL	China	EU EINECS	Japan ENCS
Periodic acid, sodium salt	7790-28-5	Yes	Yes	Yes	Yes	Yes
Inventory (Con't.)						
Component	CAS	Korea KECL	New Zealand	Philippines PICCS	TSCA	
Periodic acid, sodium salt	7790-28-5	Yes	Yes	Yes	Yes	

Canada

Labor

Canada - WHMIS - Classifications of Substances

- Periodic acid, sodium salt 7790-28-5 95% TO 100% C

China

Other

China - Classification and Labeling of Dangerous Chemical Substances Commonly Used

• Periodic acid, sodium salt 7790-28-5 95% TO 100% Primary Symbol: 9 Primary Class: oxidizer Statements: 5.70, 5.94, 5.110, 5.115

Japan**Other****Japan - Fire Service Law - Hazardous Materials**

• Periodic acid, sodium salt 7790-28-5 95% TO 100% Group 1 - Oxidizing solids III (listed under Periodates)

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

Section 16 - Other Information**Relevant Phrases (code & full text)**

- H272 - May intensify fire; oxidizer
- H315 - Causes skin irritation
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- H373 - May cause damage to organs through prolonged or repeated exposure.
- P210 - Keep away from heat.
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- P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
- R36/37/38 - Irritating to eyes, respiratory system and skin.
- S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Last Revision Date

- 24 April 2013

Preparation Date

- 15 July 2015

Other Information

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

Disclaimer/Statement of Liability

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