

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

1.1 Product identifier

Product Name • Resist Remover

Product Description • Clear liquid

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

Relevant identified use(s) • Aqueous mask 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

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 453/2010]

2.1 Classification of the substance or mixture

CLP • Skin Irritation 2 - H315
Eye Irritation 2 - H319
Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation - H335

2.2 Label Elements

CLP

WARNING



Hazard statements • H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

Precautionary statements

Prevention • P261 - Avoid breathing 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.

P304+P340 - IF INHALED: 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.

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

P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

P321 - Specific treatment, see supplemental first aid information.

P362 - Take off contaminated clothing and wash before reuse.

- Storage/Disposal**
- P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
 - 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)

2.1 Classification of the substance or mixture

- UN GHS
- Skin Irritation 2
 - Eye Irritation 2
 - Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation

2.2 Label elements

UN GHS

WARNING



- Hazard statements**
- Causes skin irritation
 - Causes serious eye irritation
 - May cause respiratory irritation

Precautionary statements

- Prevention**
- Avoid breathing dust, fume, gas, mist, vapors and/or spray.
 - Wash thoroughly after handling.
 - Wear protective gloves/protective clothing/eye protection/face protection.
- Response**
- IF ON SKIN: Wash with plenty of soap and water.
 - If skin irritation occurs: Get medical advice/attention.
 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 - 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.
 - Call a POISON CENTER or doctor/physician if you feel unwell.
 - Specific treatment, see supplemental first aid information.
 - Take off contaminated clothing and wash before reuse.

- Storage/Disposal**
- Store in a well-ventilated place. Keep container tightly closed.
 - 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
- Eye Irritation 2
- Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation

2.2 Label elements

OSHA HCS 2012

WARNING



- Hazard statements**
- Causes skin irritation
 - Causes serious eye irritation
 - May cause respiratory irritation

Precautionary statements

- Prevention**
- Avoid breathing dust, fume, gas, mist, vapors and/or spray.
 - Wash : thoroughly after handling.
 - Wear protective gloves/protective clothing/eye protection/face protection.
- Response**
- IF ON SKIN: Wash with plenty of soap and water.
 - If skin irritation occurs: Get medical advice/attention.
 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 - 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.
 - Call a POISON CENTER or doctor/physician if you feel unwell.
 - Specific treatment, see supplemental first aid information.
 - Take off contaminated clothing and wash before reuse.

- Storage/Disposal**
- Store in a well-ventilated place. Keep container tightly closed.
 - 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

- Other Toxic Effects - D2B

2.2 Label elements

WHMIS



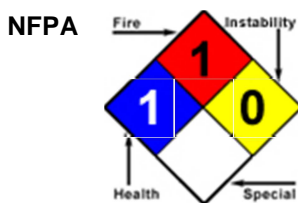
- Other Toxic Effects - D2B

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
Periodic acid, sodium salt	CAS:7790-28-5 EC Number:232-197-6 EINECS:232-197-6	2% TO 3%	NDA	WHMIS: Other Toxic Effects - D2B; Oxidizing - C UN GHS: Skin Irrit. 2; Eye Irrit. 2A; STOT RE 2; Ox. Sol. 2 EU CLP:	NDA

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

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

- Contact may irritate or burn skin and eyes. 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.

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. 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. Store away from extreme heat. Do not freeze.

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

Eye/Face

Hands

Skin/Body

General Industrial Hygiene Considerations

Environmental Exposure Controls

- 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.
- 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 liquid.
Color	Colorless	Odor	Not relevant
Odor Threshold	No data available		
General Properties			
Boiling Point	100 C(212 F)	Melting Point	<= 0 C(<= 32 F)
Decomposition Temperature	Not relevant	pH	3
Specific Gravity/Relative Density	Not relevant	Density	8.3 lbs/gal
Water Solubility	Miscible	Viscosity	No data available
Explosive Properties	Not relevant	Oxidizing Properties:	Mild oxidizer.
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available	VOC (Wt.)	Not relevant
Volatiles (Wt.)	95 %		
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 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• OSHA HCS 2012• UN GHS•
STOT-SE	EU/CLP•Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation OSHA HCS 2012•Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation UN GHS•Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
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 2 UN GHS•Eye Irritation 2

Target Organs

- Respiratory tract irritation

Route(s) of entry/exposure

- Inhalation, Skin, Eye, Ingestion/Oral

Medical Conditions Aggravated by Exposure

- Disorders of the skin, eye and lungs.

Potential Health Effects

Inhalation

Acute (Immediate)

- May cause respiratory irritation.

Chronic (Delayed)

- Repeated and prolonged exposure may cause irritation.

Skin

Acute (Immediate)

- Causes skin irritation.

Chronic (Delayed)

- Repeated and prolonged exposure may cause irritation.

Eye

Acute (Immediate)

- Causes serious eye irritation.

Chronic (Delayed)

- Repeated and prolonged exposure may be harmful.

Ingestion

Acute (Immediate)

- May cause irritation.

Chronic (Delayed)

- Repeated and prolonged exposure may cause irritation.

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	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 known.

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.

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

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 C

Japan**Other**

Japan - Fire Service Law - Hazardous Materials

- Periodic acid, sodium salt

7790-28-5

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)

- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H335 - May cause respiratory irritation
- P261 - Avoid breathing dust, fume, gas, mist, vapors and/or spray.
- P264 - Wash thoroughly after handling.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
- P304+P340 - IF INHALED: 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.
- P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
- P321 - Specific treatment, see supplemental first aid information.
- P332+P313 - If skin irritation occurs: Get medical advice/attention.
- P337+P313 - If eye irritation persists: Get medical advice/attention.
- P362 - Take off contaminated clothing and wash before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
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**
- 17 August 2004
- Preparation Date**
- 30 April 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.
-