

## 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.

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 2015

### 2.1 Classification of the substance or mixture

**WHMIS 2015** 

Skin Irritation 2
 Eye Irritation 2

Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation

### 2.2 Label elements

**WHMIS 2015** 

## **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.

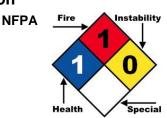
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## 2.3 Other hazards

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	Comments		
Periodic acid, sodium salt	CAS:7790-28-5 EC Number:232- 197-6 EINECS:232- 197-6	2% TO 3%	NDA	GHS / CLP: Skin Corr. 1; Eye Dam.1; STOT RE 2; Ox. Sol. 1; Aquatic Acute 1 OSHA / WHMIS: Skin Corr. 1; Eye Dam.1; STOT RE 2; Ox. Sol. 1	NDA		
Benzene, 1,1'-oxybis-, tetrapropylene derivs., sulfonated, sodium salts	<b>CAS:</b> 119345-04-9	<= 2.5%	NDA	GHS / CLP: Eye Dam. 1; Aquatic Chronic 2 OSHA / WHMIS: Eye Dam. 1	NDA		

## **Section 4 - First Aid Measures**

### 4.1 Description of first aid measures

Inhalation • IF IN

• 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

Media

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

Unsuitable

No data available

**Extinguishing Media** 

Firefighting Procedures • Fire fighters should wear complete protective clothing including self-contained breathing

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.

**Products** 

Hazardous Combustion • 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.

• 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

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	рН	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				
Skin corrosion/Irritation	EU/CLP•Skin Irritation 2 OSHA HCS 2012•Skin Irritation 2 UN GHS•Skin Irritation 2 WHMIS 2015•Skin Irritation 2				
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 WHMIS 2015•Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation				
Serious eye damage/Irritation	EU/CLP•Eye Irritation 2 OSHA HCS 2012•Eye Irritation 2 UN GHS•Eye Irritation 2 WHMIS 2015•Eye Irritation 2				

Target Organs

Route(s) of entry/exposure

**Medical Conditions Aggravated by** 

**Exposure** 

Exposure

**Potential Health Effects** 

Inhalation

Acute (Immediate)

Chronic (Delayed)

Skin

Acute (Immediate)

Chronic (Delayed)

Eye

Acute (Immediate)

Chronic (Delayed)

Ingestion

Acute (Immediate)

Chronic (Delayed)

Mutagenic Effects
Carcinogenic Effects
Reproductive Effects

· Respiratory tract irritation

• Inhalation, Skin, Eye, Ingestion/Oral

• Disorders of the skin, eye and lungs.

• May cause respiratory irritation.

• Repeated and prolonged exposure may cause irritation.

• Causes skin irritation.

• Repeated and prolonged exposure may cause irritation.

Causes serious eye irritation.

Repeated and prolonged exposure may be harmful.

May cause irritation.

Repeated and prolonged exposure may cause irritation.

No data available.No data available.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

• 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		S
	Inventory (Con't.)									
Component CAS		3	Korea KECL		New	Zealand Phili		Philippines PICCS		TSCA
Periodic acid, sodiui salt	m 7790-28	-5 Yes	S		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.

#### 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)

• 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 Preparation Date** 

• 30 April 2015 • 26 January 2021

Other Information

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

Liability

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