

Safety Data Sheet

Revision: 06 April 2023

Supersedes: 29 March 2019

IKONICS®

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

1.1 Product identifier

Product Name: Degreaser 260 ISC

Product Description: Clear liquid

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

Relevant identified use(s): Screen printing mesh degreaser

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier IKONICS
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

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

Hazard Class	Category	Code
Skin Irritation	2	H315
Skin Sensitization	1	H317
Eye Damage	1	H318
Hazardous to the Aquatic Environment, Acute	2	H401
Hazardous to the Aquatic Environment, Chronic	2	H411

2.2 Label Elements

UN GHS

DANGER



Hazard Statement	Code
Causes skin irritation	H315
May cause an allergic skin reaction	H317
Causes serious eye damage	H318
Toxic to aquatic life with long lasting effects	H411

Precautionary Measures

Category	Code	Statement
Prevention	P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
	P264	Wash thoroughly after handling.
	P272	Contaminated work clothing should not be allowed out of the workplace.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	P302+P352	IF ON SKIN: Wash with plenty of soap and water.
	P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
	P305+P354+P338+P317	IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help.
	P362+P364	Take off contaminated clothing and wash it before reuse.
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**

Hazard Class	Category	Code
Skin Irritation	2	H315
Skin Sensitization	1	H317
Eye Damage	1	H318

2.2 Label Elements**OSHA HCS 2012****DANGER**

Hazard Statement	Code
Causes skin irritation	H315
May cause an allergic skin reaction	H317
Causes serious eye damage	H318

Precautionary Measures

Category	Code	Statement
Prevention	P261 P264 P272 P280	Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.
Response	P302+P352 P333+P313 P305+P354+P338+P317 P362+P364	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help. Take off contaminated clothing and wash it before reuse.
Storage		
Disposal	P501	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**

Hazard Class	Category	Code
Skin Irritation	2	H315
Skin Sensitization	1	H317
Eye Damage	1	H318

2.2 Label Elements**WHMIS 2015****DANGER**

Hazard Statement	Code
Causes skin irritation	H315
May cause an allergic skin reaction	H317
Causes serious eye damage	H318

Precautionary Measures

Category	Code	Statement
Prevention	P261 P264 P272 P280	Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.
Response	P302+P352 P333+P313	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

	P305+P354+P338+P317 P362+P364	IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help. Take off contaminated clothing and wash it before reuse.
Storage		
Disposal	P501	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

NFPA



Section 3 - Composition/Information on Ingredients

3.1 Substances

3.2 Mixtures

Chemical Name	CAS number	%	LD50/LC50	Classifications According to Regulation/Directive
Poly (oxy-1,2-ethanediyl), alpha-(nonylphenyl)-omega-hydroxy-, branched	68412-54-4	15-20%	Ingestion/Oral-Rat LD50 500 mg/kg; Skin-Rabbit LD50 4400 mg/kg	GHS: Acute Tox. 4; Eye Dam. 1; Aquatic Chronic 2 OSHA / WHMIS: Acute Tox. 4; Eye Dam. 1
d-Limonene	5989-27-5	13-16%	Ingestion/Oral-Rat LD50 >2000 mg/kg; Skin-Rabbit LD50 >5000 mg/kg	GHS: Flam. Liq. 3; Skin Irrit. 2; Skin Sens. 1; Aquatic Acute 1; Aquatic Chronic 1 OSHA / WHMIS: Flam. Liq. 3; Skin Irrit. 2; Skin Sens. 1
2-(2-Butoxyethoxy)ethanol	112-34-5	5-7%	Ingestion/Oral-Mouse LD50 2410 mg/kg; Skin-Rabbit LD50 2764 mg/kg	GHS / OSHA / WHMIS: Eye Irrit. 2
Polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenyl ether	9002-93-1	5-7%	Ingestion/Oral-Rat LD50 >2000 mg/kg; Skin-Rabbit LD50 >3000 mg/kg	GHS / OSHA / WHMIS: Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2
Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt hydrate	64-02-8	1-3%		GHS / OSHA / WHMIS: Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 1; STOT SE 3

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation. 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. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

Eye. 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

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. Material may burn, but does not ignite readily.

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

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

Use good safety and industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Keep container closed when not in use. 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

None specified

8.2 Exposure controls

Engineering measures/controls. Local exhaust is recommended but not required. Provide adequate ventilation as necessary.

Personal Protective Equipment

Pictograms



Respiratory: Do not breathe vapors or mists. 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. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

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 liquid
Color	Colorless	Odor	Citrus
General Properties			
Boiling Point	102 C (216 F)	Melting/Freezing Point	< 0 C (32 F)
Decomposition Temperature	No data available	pH	8.5
Density	8.41 lb/gal (1.01 g/mL)	Water Solubility	Miscible
Viscosity	No data available	Kinematic Viscosity	No data available
Explosive Properties	Not relevant	Oxidizing Properties	Not relevant
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	< 1 n-Butyl Acetate = 1	VOC (Wt.)	18-23 %
Volatiles (Wt.)	72-77 %		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant

Flammability (solid, gas)	Non-flammable in liquid form.		
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

10.3 Possibility of hazardous reactions. Hazardous polymerization will not occur.

10.4 Conditions to avoid. Excess heat.

10.5 Incompatible materials. No data available.

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

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Hazard	Hazard Classification
Acute toxicity	Based on available data, the classification criteria are not met
Skin corrosion/irritation	Skin Irritation 2
Serious eye damage/irritation	Eye Damage 1
Respiratory/skin sensitization	Skin Sensitizer 1
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Carcinogenicity	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-Single Exposure	Based on available data, the classification criteria are not met
STOT-Repeated Exposure	Based on available data, the classification criteria are not met
Aspiration	Based on available data, the classification criteria are not met

Route(s) of entry/exposure: Skin, eye, ingestion

Potential Health Effects

Inhalation

Acute (Immediate): May cause irritation.

Chronic (Delayed): Repeated and prolonged exposure may be harmful.

Skin

Acute (Immediate): Causes skin irritation. May cause an allergic skin reaction.

Chronic (Delayed): Repeated and prolonged exposure may cause sensitization.

Eye

Acute (Immediate): Causes serious eye damage.

Chronic (Delayed): Repeated and prolonged exposure may cause eye damage.

Ingestion

Acute (Immediate): May cause irritation.

Chronic (Delayed): Repeated and prolonged exposure may be harmful.

Section 12 - Ecological Information

12.1 Toxicity

Poly (oxy-1,2-ethanediyl), alpha -(nonylphenyl)-omega-hydroxy-, branched CAS #68412-54-4

Toxicity to fish LC50 - Lepomis macrochirus (Bluegill sunfish) - 7.9 mg/l - 96 h

Toxicity to daphnia EC50 - Daphnia magna (Water flea) - 2.44 mg/l - 48 h

d-Limonene CAS #5989-27-5

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 0.72 mg/l - 96 h

Toxicity to daphnia EC50 - Daphnia magna (Water flea) - 0.307 mg/l - 48 h

Toxicity to algae ErC50 - Pseudokirchneriella subcapitata (green algae) - 0.32 mg/l - 72 h

2-(2-Butoxyethoxy)ethanol CAS #112-34-5

Toxicity to fish LC50 - Lepomis macrochirus (Bluegill sunfish) - 1,300 mg/l - 96 h

Toxicity to daphnia EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h

Toxicity to algae ErC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 96 h

Polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenyl ether CAS #9002-93-1

Toxicity to fish LC50 - Leuciscus idus (Golden orfe) - 0.26 mg/l - 96 h

Toxicity to daphnia EC50 - Daphnia magna (Water flea) - 0.011 mg/l - 48 h

Toxicity to algae EC50 - Pseudokirchneriella subcapitata (green algae) - 1.9 mg/l - 96 h
Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt hydrate CAS #64-02-8
 Toxicity to fish LC50 - Fish - 2070 mg/kg - 96 h
 Toxicity to daphnia EC50 - Daphnia - >500 mg/L - 24 h
 Toxicity to algae IC50 - Algae - 10-100 mg/L - 72 h

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 Endocrine disrupting properties

No endocrine disrupting components identified

12.7 Other adverse effects

May cause long lasting harmful effects to aquatic life.

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

Avoid release to the environment. 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	3082	Environmentally hazardous substance, liquid, n.o.s. (d-Limonene mixture)	9	III	yes
IMO/IMDG	3082	Environmentally hazardous substance, liquid, n.o.s. (d-Limonene mixture)	9	III	yes
IATA/ICAO	3082	Environmentally hazardous substance, liquid, n.o.s. (d-Limonene mixture)	9	III	yes

14.6 Special precautions for user. None specified.

14.7 Transport in bulk according to IMO instruments. Not relevant.

14.8 Other information

Section 15 - Regulatory Information

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

SARA hazard classifications.

SARA 311/312 Hazards: Acute Health Hazard

EPCRA Section 313 chemicals: Poly (oxy-1,2-ethanediyl), alpha-(nonylphenyl)-omega-hydroxy-, branched

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 any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Section 16 - Other Information

Relevant phrases (code & full text)

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

H401 - Toxic to aquatic life.

H411 - Toxic to aquatic life with long lasting effects.

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 - Wash thoroughly after handling.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

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

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

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P305+P354+P338+P317 - IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help.

P321 - Specific treatment, see supplemental first aid information.

P362+P364 - Take off contaminated clothing and wash it before reuse.

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: 29 March 2019

Preparation date: 06 April 2023

Changes to the current revision: Product name change; hazard classification updates in Section 2; Section 11 toxicological information; Section 12 ecological information; general formatting.

Other information

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

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