

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

FOR SALE AND USE IN THE UNITED STATES ONLY

1.1 Product identifier

Product Name • **Image Mate Degreaser 260**

Product Description • Clear liquid.

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

Relevant identified use(s) • Screen degreaser

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

Section 2: Hazards Identification

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 - H315
Skin Sensitization 1 - H317
Serious Eye Damage 1 - H318

OSHA HCS 1994 • Irritant
Flammable/Combustible Class IIIB

2.2 Label elements

OSHA HCS 2012

DANGER



Hazard statements • Causes skin irritation - H315
May cause an allergic skin reaction - H317

Causes serious eye damage - H318

Precautionary statements

- Prevention**
- Avoid breathing dust, fume, gas, mist, vapors and/or spray. - P261
 - Contaminated work clothing should not be allowed out of the workplace. - P272
 - Avoid release to the environment. - P273
 - 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 or rash occurs: Get medical advice/attention. - P333+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
 - Immediately call a POISON CENTER or doctor/physician. - P310
 - Specific treatment, see supplemental first aid information. - P321
 - Take off contaminated clothing and wash before reuse. - P362
 - Collect spillage. - P391

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

- OSHA HCS 1994**
- Irritant
 - Flammable/Combustible Class IIIA

2.3 Other hazards

- OSHA HCS 2012**
- No data available
- OSHA HCS 1994**
- 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

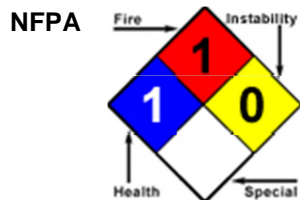


- Other Toxic Effects - D2B

2.3 Other hazards

- WHMIS**
- No data available

2.4 Other information



Key to abbreviations

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

See Section 12 for Ecological Information.

Section 3 - Composition/Information on Ingredients

3.1 Substances

3.2 Mixtures

Hazardous Components					
Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	CAS: 68412-54-4	15% TO 20%		OSHA HCS 1994: WHMIS: UN GHS: Acute Tox. Oral 4; Eye Dam. 1; Aquatic Chronic 2; H302; H318; H411 EU DSD/DPD: Harmful (Xn); Irritant (Xi); Environment (N); R22; R41; R51/53 EU CLP: OSHA HCS 2012:	
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (R)	CAS: 5989-27-5 EC Number: 227-813-5 EINECS: 227-813-5	13% TO 16%	Ingestion/Oral-Rat LD50 • 4400 mg/kg Skin-Rabbit LD50 • >5 g/kg	OSHA HCS 1994: WHMIS: UN GHS: Skin Irrit. 2 EU DSD/DPD: Environment(N); Irritant(Xi); R10; R38; R43; R50; R53 EU CLP: Annex VI: Flam. Liq. 3; Skin Irrit. 2; Skin Sens. 1; Aquatic Acute 1; Aquatic Chronic 1; H226; H315; H317; H400; H410 OSHA HCS 2012:	
Diethylene glycol monobutyl ether	CAS: 112-34-5 EC Number: 203-961-6 EINECS: 203-961-6	5% TO 7%	Ingestion/Oral-Rat LD50 • 5660 mg/kg Skin-Rabbit LD50 • 2700 mg/kg	OSHA HCS 1994: Comb. Liq.; Irrit. WHMIS: Comb. Liq. - B3; Other Toxic Effects - D2B UN GHS: Eye Irrit. 2A EU DSD/DPD: Irritant(Xi); R36 EU CLP: Annex VI: Eye Irrit. 2; H319 OSHA HCS 2012:	
Ethoxylated octylphenol, branched	CAS: 68987-90-6	5% TO 7%		OSHA HCS 1994: WHMIS: UN GHS: Acute Tox Oral 4; Eye Dam. 1; Aquatic Chronic 2; H302; H318; H411 EU DSD/DPD: Xn; Xi; N; R22; R41; R51/53 EU CLP: OSHA HCS 2012:	
Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	CAS: 64-02-8 EC Number: 200-573-9 EINECS: 200-573-9	3% TO 5%	Ingestion/Oral-Rat LD50 • 10 g/kg	OSHA HCS 1994: Irrit. WHMIS: Other Toxic Effects - D2B UN GHS: Eye Irrit. 2A; Skin Irrit. 2 EU DSD/DPD: Annex I: Xn; R22 Xi; R41 EU CLP: Annex VI: Acute Tox. 4; Eye Dam. 1; H302; H318 OSHA HCS 2012:	

Key to abbreviations

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

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. 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. Get medical 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

- No data available

4.3 Indication of any immediate medical attention and special treatment needed

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), 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. Do not touch or walk through spilled material. Ventilate enclosed areas.

Emergency Procedures

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) Keep unauthorized personnel away. Ventilate closed spaces before entering.

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

- Ventilate enclosed areas.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

8.2 Exposure controls

Engineering Measures/Controls

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

Personal Protective Equipment

Respiratory

- In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/Face

- Wear safety goggles.

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 liquid.
Color	Colorless	Odor	Citrus
Taste	No data available		
General Properties			
Boiling Point	102 C(215.6 F)	Melting Point	No data available
pH	8.5	Specific Gravity/Relative Density	1.03 Water=1
Density	8.41 lbs/gal	Water Solubility	Dispersible
Viscosity	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	< 1 n-Butyl Acetate = 1	VOC (Wt.)	Not relevant
Volatiles (Wt.)	76.5 %		
Flammability			
Flash Point	> 100 C(> 212 F)	UEL	No data available
LEL	No data available	Autoignition	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/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

- Excess heat.

10.5 Incompatible materials

- None known.

10.6 Hazardous decomposition products

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

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Component Name	CAS	Data
Diethylene glycol monobutyl ether (5% TO 7%)	112-34-5	Acute Toxicity: orl-rat LD50:5660 mg/kg; skn-rbt LD50:2700 mg/kg; Irritation: eye-rbt 20 mg SEV
Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt (3% TO 5%)	64-02-8	Acute Toxicity: orl-rat LD50:10 gm/kg; Irritation: eye-rbt 100 mg/24H MOD; skn-rbt 500 mg/24H MOD
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•Skin Sensitizer 1 OSHA HCS 2012•Skin Sensitizer 1 UN GHS•Skin Sensitizer 1
STOT-RE	EU/CLP• OSHA HCS 2012• UN GHS•
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•Serious Eye Damage 1 OSHA HCS 2012•Serious Eye Damage 1 UN GHS•Serious Eye Damage 1

Potential Health Effects

Inhalation

Acute (Immediate)

- May cause irritation.

Chronic (Delayed)

- Repeated and prolonged exposure may cause irritation.

Skin

Acute (Immediate)

- Causes skin irritation. May cause an allergic skin reaction.

Chronic (Delayed)

- Repeated and prolonged exposure may be harmful.

Eye

Acute (Immediate)

- Causes serious eye damage.

Chronic (Delayed)

- Repeated and prolonged exposure may be harmful.

Ingestion

Acute (Immediate)

- May cause irritation.

Chronic (Delayed)

- No specific information available.

Section 12 - Ecological Information

12.1 Toxicity

Component	CAS	Data	Comments
Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched (15% TO 20%)	68412-54-4	Fish: 96 Hour(s) LC50 Fish 7.9 mg/L	
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (R) (13% TO 16%)	5989-27-5	Crustacea: 48 Hour(s) EC50 Crustacea 69.6 mg/L ; Fish: 96 Hour(s) LC50 Fish .702 mg/L	

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	3082	Environmentally hazardous substance, liquid, n.o.s.	9	III	Marine Pollutant

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.

Section 15 - Regulatory Information

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

SARA Hazard Classifications • Acute

Inventory (Con't.)		
Component	CAS	TSCA
Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Yes
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (R)	5989-27-5	Yes
Diethylene glycol monobutyl ether	112-34-5	Yes
Ethoxylated octylphenol, branched	68987-90-6	Yes
Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	Yes

United States

Environment

U.S. - EPA - Designated Generic Categories - Certain Glycol Ethers

- Ethoxylated octylphenol, branched 68987-90-6 5% TO 7% Not Listed
- Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt 64-02-8 3% TO 5% Not Listed
- Diethylene glycol monobutyl ether 112-34-5 5% TO 7%

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)

- H226 - Flammable liquid and vapor
- H227 - Combustible liquid
- H302 - Harmful if swallowed
- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H318 - Causes serious eye damage
- H319 - Causes serious eye irritation
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects
- H411 - Toxic to aquatic life with long lasting effects
- P210 - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
- P261 - Avoid breathing dust, fume, gas, mist, vapors and/or 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.
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 - Immediately call a POISON CENTER or doctor/physician.
- P321 - Specific treatment, see supplemental first aid information.
- P332+P313 - If skin irritation occurs: Get medical advice/attention.
- P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
- P362 - Take off contaminated clothing and wash before reuse.
- P370+P378 - In case of fire: Use appropriate media for surrounding fire for extinction.
- P391 - Collect spillage.
- P403+P235 - Store in a well-ventilated place. Keep cool.
- P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
- R10 - Flammable.
- R22 - Harmful if swallowed.
- R36 - Irritating to eyes.
- R38 - Irritating to skin.
- R41 - Risk of serious damage to eyes.
- R43 - May cause sensitization by skin contact.
- R50 - Very toxic to aquatic organisms.
- R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R53 - May cause long-term adverse effects in the aquatic environment.
- S24 - Avoid contact with skin.
- S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S37 - Wear suitable gloves.

S39 - Wear eye/face protection.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S57 - Use appropriate containment to avoid environmental contamination.

Classification method for mixtures

- Calculation method.

Last Revision Date

- 23 October 2013

Preparation Date

- 22 November 2013

Other Information

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

Disclaimer/Statement of Liability

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