

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Version: 1.0

Date of issue: 09/12/2013 Revision date: 05/18/2020 Supersedes: 03/31/2014

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : ORANGE DEGREASER

Product code : ORAD

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Industrial and Institutional Degreaser / Detergent

1.3. Supplier

Sky Blue Industries, Inc. 760 W. Exchange Road Ogden, Utah 84401 - USA T (800) 998-2808

www.skyblueindustries.com

1.4. Emergency telephone number

Emergency number : Chemtrec 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Met. Corr. 1May be corrosive to metalsSkin Irrit. 2Causes skin irritationEye Irrit. 2ACauses serious eye irritationSkin Sens. 1May cause an allergic skin reaction

Aquatic Acute 2 Toxic to aquatic life

Aquatic Chronic 2 Toxic to aquatic life with long lasting effects

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS-US)







Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : May be corrosive to metals

Causes skin irritation

May cause an allergic skin reaction Causes serious eye irritation

Toxic to aquatic life

Toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) : Keep only in original container

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash hands, forearms and face thoroughly after handling

Contaminated work clothing must not be allowed out of the workplace

Avoid release to the environment

Wear protective gloves/protective clothing/eye protection/face protection

If on skin: Wash with plenty of water/...

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing Specific treatment (see ... on this label)

If skin irritation occurs: Get medical advice/attention If skin irritation or rash occurs: Get medical advice/attention If eye irritation persists: Get medical advice/attention Take off contaminated clothing and wash it before reuse

Wash contaminated clothing before reuse Absorb spillage to prevent material damage

Collect spillage

Store in a corrosion resistant container with a resistant inner liner

Dispose of contents/container to ...

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2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
d-Limonene	(CAS-No.) 5989-27-5	3 – 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Ethanolamine	(CAS-No.) 141-43-5	1 – 3	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1, H314 Aquatic Acute 3, H402
Polyoxyethylene (C8-C10) ether phosphate	(CAS-No.) 68130-47-2	1 – 3	Skin Corr. 1C, H314 Aquatic Acute 2, H401

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Wash skin with plenty of water. Take off

or rash occurs: Get medical advice/attention. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : 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. If eye irritation

persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms

: Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation

: May cause an allergic skin reaction.

Symptoms/injuries after skin contact

: Causes skin irritation. Irritation. May cause an allergic skin reaction.

Symptoms/injuries after eye contact

: Causes serious eye irritation. Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of : Toxic fumes may be released.

fire

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

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Protection during firefighting

: Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures

: Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal

protection".

Emergency procedures

: Ventilate area

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Prevent soil and water pollution. See Section 12 for additional Ecological information.

6.3. Methods and material for containment and cleaning up

For containment

: Collect spillage.

Methods for cleaning up

: Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information

: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Avoid breathing fume/gas/mist/spray/vapours. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures

: Wash hands and other exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat sources. Keep container closed when not in use. Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store in a well-ventilated place. Keep cool.

Incompatible products

: Strong acids. Strong bases. Strong oxidizing agents.

Incompatible materials : Sources of ignition. Direct sunlight. Metals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ORANGE DEGREASER			
No additional information available			
Polyoxyethylene (C8-C10) ether phosphate (6813	Polyoxyethylene (C8-C10) ether phosphate (68130-47-2)		
No additional information available			
Ethanolamine (141-43-5)			
USA - ACGIH - Occupational Exposure Limits			
Local name	Ethanolamine		
ACGIH TWA (ppm)	3 ppm		
ACGIH STEL (ppm)	6 ppm		
Remark (ACGIH)	Eye & skin irr		

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USA - OSHA - Occupational Exposure Limits	
Local name	Ethanolamine
OSHA PEL (TWA) (mg/m³)	6 mg/m³
OSHA PEL (TWA) (ppm)	3 ppm
d-Limonene (5989-27-5)	
No additional information available	

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves

Eye protection:

Chemical goggles or safety glasses. Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear appropriate mask

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : Orange
Odor : Citrus

Odor threshold : No data available

pH : 10.8 - 11 pH solution : 1%

Melting point : Not applicable
Freezing point : No data available
Boiling point : No data available

Flash point : > 212 °F

Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Non flammable. Vapor pressure : No data available Relative vapor density at 20 °C : No data available

Relative density : 1.01
Specific gravity / density : 8.44 lb/gal

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: Soluble in water. Solubility Partition coefficient n-octanol/water (Log Pow) : No data available Auto-ignition temperature No data available Decomposition temperature : No data available Viscosity, kinematic : No data available Viscosity, dynamic : No data available **Explosion limits** : No data available Explosive properties No data available Oxidizing properties : No data available

9.2. Other information

VOC content : 5.9 %

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents. metals.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Ethanolamine (141-43-5)	
LD50 oral rat	1515 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 7 day(s))
LD50 dermal rabbit	2504 – 2881 mg/kg body weight (Equivalent or similar to OECD 402, 24 week(s), Rabbit, Male / female, Experimental value, Dermal)
d-Limonene (5989-27-5)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat,
	Female, Experimental value, Oral)

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

pH: 10.8 - 11

pH: 10.8 - 11

Dermal)

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified

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Specific target organ toxicity – repeated

exposure

: Not classified

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation : May cause an allergic skin reaction.

Symptoms/injuries after skin contact : Causes skin irritation. Irritation. May cause an allergic skin reaction.

Symptoms/injuries after eye contact : Causes serious eye irritation. Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Ecology - water : Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Ethanolamine (141-43-5)	
LC50 fish 1	349 mg/l (EU Method C.1, 96 h, Cyprinus carpio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 Daphnia 1	65 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
d-Limonene (5989-27-5)	
LC50 fish 1	720 µg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 Daphnia 1	0.307 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semistatic system, Fresh water, Experimental value, GLP)
ErC50 (algae)	0.32 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability

ORANGE DEGREASER		
Persistence and degradability	May cause long-term adverse effects in the environment.	
Ethanolamine (141-43-5)		
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.	
Biochemical oxygen demand (BOD)	0.8 g O₂/g substance	
Chemical oxygen demand (COD)	1.34 g O₂/g substance	
ThOD	2.49 g O₂/g substance	
BOD (% of ThOD)	0.32	
d-Limonene (5989-27-5)		
Persistence and degradability	Readily biodegradable in water.	
ThOD	3.29 g O₂/g substance	

12.3. Bioaccumulative potential

ORANGE DEGREASER	
Bioaccumulative potential	Not established.
Ethanolamine (141-43-5)	
BCF other aquatic organisms 1	2.3 – 9.2 (BCFWIN, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	-2.3 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Not bioaccumulative.
d-Limonene (5989-27-5)	
BCF fish 1	864.8 l/kg (BCFBAF v3.01, Pisces, QSAR, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	4.38 (Experimental value, Equivalent or similar to OECD 117, 37 °C)
Bioaccumulative potential	Not established.

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12.4. Mobility in soil

Ethanolamine (141-43-5)		
Surface tension	No data available in the literature	
Partition coefficient n-octanol/water (Log Koc)	1.16 (log Koc, Calculated value)	
Ecology - soil	Highly mobile in soil.	
d-Limonene (5989-27-5)		
Ecology - soil	Low potential for mobility in soil.	

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to comply with local/state/federal regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Dangerous for the environment : Yes
Marine pollutant : Yes



Other information : No supplementary information available.

Transportation of Dangerous Goods

Transport by sea

Marine pollutant : Yes



Air transport

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

Liquitint Brilliant Orange (L82000)	CAS-No.	< 0.1%

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Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372

1986 and 40 CFR Part 372.		•	,	
1,4-dioxane		CAS-No. 123-91-1	< 0.1%	
Ethylene oxide		CAS-No. 75-21-8	< 0.1%	
Methyl alcohol		CAS-No. 67-56-1	< 0.1%	
Diethanolamine		CAS-No. 111-42-2	< 0.1%	
Sodium hydroxide (1310-73-2)	_			
CERCLA RQ	1000 lb			
Sodium tripolyphosphate (7758-29-4)				
CERCLA RQ	5000 lb			
Nonylphenol polyethylene gycol ether (12708	7-87-0)			
EPA TSCA Regulatory Flag		XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40		
Polyethylene glocols (25322-68-3)				
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).			
1,4-dioxane (123-91-1)				
Listed on EPA Hazardous Air Pollutant (HAPS)				
CERCLA RQ	CLA RQ 100 lb			
Nonyl nonoxynol 100 (9014-93-1)				
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).			
Ethylene oxide (75-21-8)				
Listed on EPA Hazardous Air Pollutant (HAPS)				
CERCLA RQ	10 lb			
RQ (Reportable quantity, section 304 of EPA's List of Lists)	10 lb			
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb			
Methyl alcohol (67-56-1)				
Listed on EPA Hazardous Air Pollutant (HAPS)				
CERCLA RQ	5000 lb			
Phosphoric acid (7664-38-2)				
CERCLA RQ	5000 lb			
Polyoxyethylene (C8-C10) ether phosphate (6	Polyoxyethylene (C8-C10) ether phosphate (68130-47-2)			
EPA TSCA Regulatory Flag			om reporting under the Inventory Update Reporting entory Data Base Production and Site Reports (40	
Tetrasodium ethylenediaminetetraactetate (64	1-02-8)			
SARA Section 311/312 Hazard Classes	Immediate (acu	te) health hazard		
Diethanolamine (111-42-2)				
Listed on EPA Hazardous Air Pollutant (HAPS)				
CERCLA RQ	100 lb			

15.2. International regulations

1,4-dioxane (123-91-1)	
Listed on IARC (International Agency for Research on Cancer) Listed as carcinogen on NTP (National Toxicology Program)	
Ethylene oxide (75-21-8)	
Listed on IARC (International Agency for Research on Cancer)	

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Diethanolamine (111-42-2)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations



This product can expose you to Ethylene oxide, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
Sodium hydroxide(1310-73-2)	U.S New Jersey - Right to Know Hazardous Substance List
1,4-dioxane(123-91-1)	U.S New Jersey - Right to Know Hazardous Substance List
Ethylene oxide(75-21-8)	U.S New Jersey - Right to Know Hazardous Substance List
Methyl alcohol(67-56-1)	U.S New Jersey - Right to Know Hazardous Substance List
Phosphoric acid(7664-38-2)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List
Ethanolamine(141-43-5)	U.S New Jersey - Right to Know Hazardous Substance List
Diethanolamine(111-42-2)	U.S New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

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Full text of H-phrases:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 3	Flammable liquids Category 3
Flam. Liq. 4	Flammable liquids Category 4
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1	Skin corrosion/irritation Category 1
Skin Corr. 1C	Skin corrosion/irritation Category 1C
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
H226	Flammable liquid and vapor
H227	Combustible liquid
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H332	Harmful if inhaled
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects

SDS US (GHS HazCom 2012)

The information provided on this document is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

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