

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Product name : BUG REMOVER
 Product code : BUG

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Industrial and Institutional Alkaline 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

Skin Irrit. 2 Causes skin irritation
 Eye Dam. 1 Causes serious eye damage

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : Causes skin irritation
 Causes serious eye damage

Precautionary statements (GHS-US) : Wash hands, forearms and face thoroughly after handling
 Wear eye protection, protective clothing, protective gloves
 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
 Immediately call a POISON CENTER, a doctor
 Specific treatment (see ... on this label)
 If skin irritation occurs: Get medical advice/attention
 Take off contaminated clothing and wash it before reuse

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

BUG REMOVER

Safety Data Sheet

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

Name	Product identifier	%	GHS US classification
Ethanolamine	(CAS-No.) 141-43-5	5 – 10	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1, H314 Aquatic Acute 3, H402
Tetrasodium ethylenediaminetetraacetate	(CAS-No.) 64-02-8	1 – 5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Dam. 1, H318
2-(2-butoxyethoxy)ethanol	(CAS-No.) 112-34-5	1 – 3	Eye Irrit. 2A, H319
UNDECETH-5	(CAS-No.) 34398-01-1	1 – 3	Skin Irrit. 2, H315 Eye Irrit. 2A, H319

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 occurs: Get medical advice/attention. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation 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. Immediately call a poison center or doctor/physician. Call a physician immediately.
- 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 skin contact : Causes skin irritation. Irritation.
- Symptoms/injuries after eye contact : Causes serious eye damage. Serious damage to eyes.
- Symptoms/injuries after ingestion : Burns.

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

- Fire hazard : Extremely flammable liquid and vapor.
- Hazardous decomposition products in case of fire : Toxic fumes may be released.

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.
- 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.

BUG REMOVER

Safety Data Sheet

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

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. See Section 12 for additional Ecological information.

6.3. Methods and material for containment and cleaning up

- 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 contact with skin and eyes. Wear personal protective equipment.
- Hygiene measures : Wash hands and other exposed skin thoroughly after handling. 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

- Technical measures : Ground/bond container and receiving equipment.
- 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 a well-ventilated place. Keep cool.
- Incompatible products : Strong acids. Strong oxidizing agents.
- Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

BUG REMOVER	
No additional information available	
Tetrasodium ethylenediaminetetraacetate (64-02-8)	
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
USA - OSHA - Occupational Exposure Limits	
Local name	Ethanolamine
OSHA PEL (TWA) (mg/m ³)	6 mg/m ³
OSHA PEL (TWA) (ppm)	3 ppm
2-(2-butoxyethoxy)ethanol (112-34-5)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Diethylene glycol monobutyl ether
ACGIH TWA (ppm)	10 ppm
UNDECETH-5 (34398-01-1)	
No additional information available	

BUG REMOVER

Safety Data Sheet

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

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
Appearance : Clear, purple liquid.
Color : Purple
Odor : Grape
Odor threshold : No data available
pH : 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 – 1.02
Specific gravity / density : 8.49 lb/gal
Solubility : Soluble in water.
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

BUG REMOVER

Safety Data Sheet

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

Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information

VOC content : 7.2 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable liquid and vapor.

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 oxidizing agents.

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

Tetrasodium ethylenediaminetetraacetate (64-02-8)	
LD50 oral rat	> 2000 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 5000 mg/kg
LC50 inhalation rat (mg/l)	4.14 mg/l/4h Dust
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)
2-(2-butoxyethoxy)ethanol (112-34-5)	
LD50 oral rat	5660 mg/kg (Rat)
LD50 dermal rabbit	2764 mg/kg (Rabbit; Experimental value; OECD 402: Acute Dermal Toxicity)
UNDECETH-5 (34398-01-1)	
LD50 oral rat	> 1400 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Skin corrosion/irritation : Causes skin irritation.
pH: 11
Serious eye damage/irritation : Causes serious eye damage.
pH: 11
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity – single exposure : Not classified

BUG REMOVER

Safety Data Sheet

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

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 skin contact	: Causes skin irritation. Irritation.
Symptoms/injuries after eye contact	: Causes serious eye damage. Serious damage to eyes.
Symptoms/injuries after ingestion	: Burns.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Tetrasodium ethylenediaminetetraacetate (64-02-8)	
LC50 fish 1	121 mg/l (96 h, Lepomis macrochirus, Literature study, Soft water)
EC50 Daphnia 1	625 mg/l (24 h, Daphnia magna, Literature study)
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)
2-(2-butoxyethoxy)ethanol (112-34-5)	
LC50 fish 1	1300 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Lepomis macrochirus; Static system; Fresh water; Experimental value)
EC50 Daphnia 2	> 100 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
UNDECETH-5 (34398-01-1)	
LC50 fish 1	1 – 10 mg/l (96 hr.)
EC50 Daphnia 1	1 – 10 mg/l (48 hr.)
EC50 other aquatic organisms 1	1 – 10 mg/l (96 hr.)(Algae)

12.2. Persistence and degradability

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Persistence and degradability	Not established.
Tetrasodium ethylenediaminetetraacetate (64-02-8)	
Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	< 0.002 g O ₂ /g substance
Chemical oxygen demand (COD)	0.54 – 0.58 g O ₂ /g substance
Ethanolamine (141-43-5)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.8 g O ₂ /g substance
Chemical oxygen demand (COD)	1.34 g O ₂ /g substance
ThOD	2.49 g O ₂ /g substance
BOD (% of ThOD)	0.32
2-(2-butoxyethoxy)ethanol (112-34-5)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. No (test) data on mobility of the substance available. Photodegradation in the air.
Biochemical oxygen demand (BOD)	0.25 g O ₂ /g substance
Chemical oxygen demand (COD)	2.08 g O ₂ /g substance
ThOD	2.173 g O ₂ /g substance

BUG REMOVER

Safety Data Sheet

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

2-(2-butoxyethoxy)ethanol (112-34-5)	
BOD (% of ThOD)	0.11

12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
Tetrasodium ethylenediaminetetraacetate (64-02-8)	
Partition coefficient n-octanol/water (Log Pow)	-2.6
Bioaccumulative potential	Not bioaccumulative.
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.
2-(2-butoxyethoxy)ethanol (112-34-5)	
BCF fish 1	0.46 (BCF)
Partition coefficient n-octanol/water (Log Pow)	0.56 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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.
2-(2-butoxyethoxy)ethanol (112-34-5)	
Surface tension	0.034 N/m (25 °C)

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.
Additional information : Flammable vapors may accumulate in the container.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

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:

di(tetramethylammonium)(29H,31H-phthalocyanin-N29,N30,N31,N32)disulfonamide disulfonate, cuprate(2-)complex, derivates	CAS-No. 12222-04-7	< 0.1%
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BUG REMOVER

Safety Data Sheet

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

Contains chemical(s) subject to TSCA 12b export notification if product is shipped outside the U.S

Acetaldehyde	CAS-No. 75-07-0	< 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.

1,4-dioxane	CAS-No. 123-91-1	< 0.1%
Acetaldehyde	CAS-No. 75-07-0	< 0.1%
Ethylene oxide	CAS-No. 75-21-8	< 0.1%
Methyl alcohol	CAS-No. 67-56-1	< 1%
Diethanolamine	CAS-No. 111-42-2	< 0.1%

Sodium hydroxide (1310-73-2)

CERCLA RQ	1000 lb
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butyl glycoether (111-76-2)

SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
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1,4-dioxane (123-91-1)

Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	100 lb

Acetaldehyde (75-07-0)

Listed on EPA Hazardous Air Pollutant (HAPS)	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
CERCLA RQ	1000 lb

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

Tetrasodium ethylenediaminetetraacetate (64-02-8)

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
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Diethanolamine (111-42-2)

Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	100 lb

UNDECETH-5 (34398-01-1)

EPA TSCA Regulatory Flag	N - N - indicates a polymeric substance containing no free-radical initiator in its Inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used. P - P - indicates a commenced PMN substance. 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)).
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

tertiary-octylphenoxypoly(ethoxyethanol) (9036-19-5)

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)).
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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)	

BUG REMOVER

Safety Data Sheet

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

Acetaldehyde (75-07-0)

Listed as carcinogen on NTP (National Toxicology Program)


Ethylene oxide (75-21-8)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)

Diethanolamine (111-42-2)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

 **WARNING:** 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
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
butyl glycoether(111-76-2)	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
Acetaldehyde(75-07-0)	U.S. - New Jersey - Right to Know Hazardous Substance List
ETHYL BUTYRATE(105-54-4)	U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

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

Revision date : 05/14/2020

Other information : None.

BUG REMOVER

Safety Data Sheet

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

Full text of H-phrases:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 4	Flammable liquids Category 4
Skin Corr. 1	Skin corrosion/irritation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
H227	Combustible liquid
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H402	Harmful to aquatic life

SDS US (GHS HazCom 2012)

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