



KEIM Bio Cleaner

Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Keim Bio Cleaner

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

Use of the substance/mixture : Cleaner

1.3. Details of the supplier of the safety data sheet

Keim Mineral Coatings of America, Inc.
3935 Perimeter West, Suite 100
Charlotte, NC 28214
T 704-588-4811

1.4. Emergency telephone number

Emergency number : 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Irrit. 2 H315
Eye Irrit. 2A H319

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H315 - Causes skin irritation
H319 - Causes serious eye irritation

Precautionary statements (GHS-US) :

P264 - Wash thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302 + P352 - If on skin: Wash with plenty of 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
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

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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Name	Product identifier	%	Classification (GHS-US)
Water	(CAS No) 7732-18-5	80 - 90	Not classified
2-Butoxyethanol	(CAS No) 111-76-2	10 - 15	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311
Disodium EDTA	(CAS No) 139-33-3	5 - 10	Not classified
Cellulose, 2-hydroxyethyl ether	(CAS No) 9004-62-0	<1	Not classified
Sodium bicarbonate	(CAS No) 144-55-8	<1	Not classified
Sodium percarbonate	(CAS No) 4452-58-8	<1	Not classified

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Obtain medical attention if breathing difficulty persists.
- First-aid measures after skin contact : Rinse with plenty of water. Rinse shoes and launder clothing before reuse. Seek medical attention if irritation develops or persists.
- First-aid measures after eye contact : Remove contact lenses immediately. Flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
- First-aid measures after ingestion : Do not induce vomiting. Give water to victim to drink. Seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : No adverse effects expected under typical use conditions.
- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after eye contact : Causes eye irritation.
- Symptoms/injuries after ingestion : May cause stomach or intestinal upset if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use carbon dioxide, foam, dry chemical or water.
- Unsuitable extinguishing media : None.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not flammable.
- Explosion hazard : None known.

5.3. Advice for firefighters

- Protection during firefighting : Firefighters should wear full protective gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Stop the flow of material, if this is without risk.
- Methods for cleaning up : Confine spill and soak up with absorbent. Place in an approved container and dispose in accordance with local, state and federal regulations.

6.4. Reference to other sections

No additional information available

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with eyes and skin. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed. Store at ambient temperature.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Cellulose, 2-hydroxyethyl ether (9004-62-0)	
ACGIH	Not applicable
OSHA	Not applicable

Disodium EDTA (139-33-3)	
ACGIH	Not applicable
OSHA	Not applicable

2-Butoxyethanol (111-76-2)		
ACGIH	ACGIH TWA (ppm)	20 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	240 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	50 ppm

Water (7732-18-5)	
ACGIH	Not applicable
OSHA	Not applicable

Sodium bicarbonate (144-55-8)	
ACGIH	Not applicable
OSHA	Not applicable

Sodium percarbonate (4452-58-8)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Hand protection : Wear impervious gloves to minimize skin contact.
Eye protection : Face shield.
Skin and body protection : Wear suitable working clothes.
Respiratory protection : If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : Clear
Odor : Mild
Odor threshold : 10 ppm
pH : 6.9
Melting point : No data available
Freezing point : -9 °C
Boiling point : 98 °C
Flash point : No data available

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Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: 20.7 mm Hg
Specific gravity	: 1.011
Relative vapor density at 20 °C	: No data available
Solubility	: Complete
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Will not occur.

10.4. Conditions to avoid

None

10.5. Incompatible materials

Do not mix with bleach or chlorinated compounds.

10.6. Hazardous decomposition products

None

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Disodium EDTA (139-33-3)	
LD50 oral rat	2 g/kg
2-Butoxyethanol (111-76-2)	
LD50 oral rat	470 mg/kg
LD50 dermal rabbit	99 mg/kg
LC50 inhalation rat (ppm)	450 ppm/4h
ATE US (oral)	470.000 mg/kg body weight
ATE US (dermal)	220.000 mg/kg body weight
Water (7732-18-5)	
LD50 oral rat	> 90 ml/kg
Sodium bicarbonate (144-55-8)	
LD50 oral rat	4220 mg/kg
ATE US (oral)	4220.000 mg/kg

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Skin corrosion/irritation	: Causes skin irritation. pH: 6.9
Serious eye damage/irritation	: Causes serious eye irritation. pH: 6.9
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

2-Butoxyethanol (111-76-2)

IARC group	3 - Not classifiable
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Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Disodium EDTA (139-33-3)

LC50 fish 1	320 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [semi-static])
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2-Butoxyethanol (111-76-2)

LC50 fish 1	1490 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
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EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
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LC50 fish 2	2950 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
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Sodium bicarbonate (144-55-8)

LC50 fish 1	8250 - 9000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
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EC50 Daphnia 1	2350 mg/l (Exposure time: 48 h - Species: Daphnia magna)
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12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

2-Butoxyethanol (111-76-2)

Log Pow	0.81 (at 25 °C)
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international regulations.

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SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN2810 Toxic, liquids, organic, n.o.s. (Ethylene Glycol Monobutyl Ether), 6.1, III

UN-No.(DOT) : UN2810

DOT Proper Shipping Name : Toxic, liquids, organic, n.o.s.
(Ethylene Glycol Monobutyl Ether)

Department of Transportation (DOT) Hazard Classes : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132

Hazard labels (DOT) : 6.1 - Poison inhalation hazard



Packing group (DOT) : III - Minor Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203

DOT Packaging Bulk (49 CFR 173.xxx) : 241

DOT Symbols : G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102) : IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) : 153

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

SECTION 15: Regulatory information

15.1. US Federal regulations

Cellulose, 2-hydroxyethyl ether (9004-62-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Disodium EDTA (139-33-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

2-Butoxyethanol (111-76-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Sodium bicarbonate (144-55-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

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15.2. US State regulations

2-Butoxyethanol (111-76-2)

U.S. - Massachusetts - Right To Know List
U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Full text of H-phrases::

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 4	Flammable liquids Category 4
Skin Irrit. 2	Skin corrosion/irritation Category 2
H227	Combustible liquid
H302	Harmful if swallowed
H311	Toxic in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product