

# Safety Data Sheet

## 1. Product and Company Identification

**Product Identifier:** Halex**General Use:** Halex is designed to neutralize a variety of halogens.**Product Description:** Clear liquid**Manufacturer:**Clift Industries, Inc.  
PO Box 471578  
Charlotte, NC 28247  
704-752-0031**Emergency Telephone**CHEMTREC  
800-424-9300

## 2. Hazards Identification

**Classification:** Acute toxicity, Oral, Dermal, Inhalation Category 5  
Eye Irritation, Category 2B**Signal Word:** Warning!**Hazard Statement:** H303+H313 Maybe harmful if swallowed, in contact with skin or if inhaled.  
+H333  
H320 Causes eye irritation.**Precautionary Statements Prevention:** P264 Wash hands thoroughly after handling.**Precautionary Statements Response:** P304 + 340 **IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathingP301+330+331 **IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting.P303+352 **IF ON SKIN:** Wash with plenty of soap and water.P305+351+338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing.

## 3. Composition/Information on Ingredients

Ingredients	CAS No.	Weight %
Aqua	7732-18-5	70-90
Neutralizer	Proprietary	10-15
Rinsing Agent	Proprietary	5-10

## 4. First Aid Measures

**Eye Contact:** Flush eyes for fifteen minutes with water. If irritation persists, contact a physician.**Skin Contact:** Wash with soap and water. If irritation persists, contact a physician.**Inhalation:** Not normally required. Move to fresh air. If symptoms persist, get medical attention.**Ingestion:** Not normally required. Contact a physician if ingested.

## 5. Fire Fighting Measures

**Extinguishing Media:** Unused form: Water spray, dry chemical or carbon dioxide. Used form: That which is compatible to liquid (s) absorbed.**Special Fire Fighting Procedures:** None required.**Hazardous Combustion Products:** Carbon monoxide and/or carbon dioxide.**Unusual Hazards:** None expected. Refer to absorbed liquid(s) MSDS(s). Extreme heat may cause pressure to build up inside drum.

## 6. Accidental Release Measures

**Spill or Leak Procedures:** If material is unused, collect and recover for reuse. Wear protective equipment. Not a listed hazardous waste.

## 7. Handling and Storage

**Handling Precautions:** Avoid contact with skin and eyes. Do not swallow. Wash hands thoroughly after handling.**Storage Precautions:** Store in cool, dry area. Prevent product from freezing. Keep out of the reach of children. Shelf life: 3 years as long as the product is kept in a clean, dry environment away from direct sunlight and/or excessive heat.**General:** Refer to absorbed liquid(s) MSDS(s). Follow label directions carefully. Make sure all containers are labeled properly. The container can be hazardous when empty. Follow label cautions even after the container is empty. Do not re-use empty containers for food, clothing or products for human or animal consumption, or where skin contact can occur.

## 8. Exposure Controls/Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.**PERSONAL PROTECTION****Eyes:** Safety goggles or glass with side shields**Respirator:** NIOSH/MSHA approved respirator when ventilation is inadequate.**Gloves:** Impervious gloves.**Other:** Maintain eyewash and safety shower in work area.**OSHA HAZARDOUS COMPONENTS****(29 CFR 1910.1200):**EXPOSURE LIMIT 8 hrs. TWA (ppm)  
OSHA PEL ACGIH TLV

None

## 9. Physical/Chemical Characteristics

**Appearance:** Clear liquid**Odor:** Bland**pH:** 7**Melting Point/Freezing Point:** 32° F (0° C)**Initial Boiling Point and Range:** 212° F (100° C)**Flash Point:** None **Method:** Not available.**Evaporation Rate:** Not established.**Flammable Limits:** Not applicable.**Conditions of Flammability:** Non-flammable.**Explosive Properties:** Not established.**Vapor Pressure:** Not available.**Vapor Density:** Not established.**Relative Density (H<sub>2</sub>O =1):** 1.079**Solubility in Water:** Soluble**VOC (g/L):** 0

## 10. Stability and Reactivity Data

**General:** This is a stable material  
**Conditions of Reactivity:** Reacts with sodium hypochlorite or calcium hypochlorite.**Incompatible Materials:** Strong oxidants**Conditions to Avoid:** Excessive heat or flame.**Hazardous Decomposition:** Not established.**Hazardous Polymerization:** Will not occur.

## 11. Toxicological Data

**LD50:** Not established.**LC50:** Not established.**Carcinogenicity:** IRAC: None

National Toxicology Program: None

OSHA: None

California Prop 65: No listed ingredient

**Reproduction Toxicity:** Not available**Teratogenicity:** Not available**Mutagenicity:** Not available**Synergistic Products:** Not available

## 12. Ecological Data

No data available

## 13. Disposal Considerations

**Waste Disposal Method:** Observe all federal, state and local regulations.

## 14. Transport Information

**D.O.T. (Department of Transportation):****Proper Shipping Name:** Non-hazardous liquid**Hazard Class:** Not regulated**Identification Number:** Not applicable

## 15. Regulatory Information

**CERCLA (Comprehensive Environmental Response Compensation and Liability Act):** No Reportable Quantity**OSHA Hazard Communication Standard, 28 CFR 1910.1200:** No hazardous ingredient.**SARA Title III (Superfund Amendments and Reauthorization Act):** No listed ingredient.**TSCA (Toxic Substances Control Act):** All ingredients are listed.

## 16. OTHER INFORMATION:

**NFPA Hazard Rating:** Health – 1

None → Extreme Fire – 0

0 → 4

Reactivity – 0

PPE – B

Reason for Issue: GHS changes to Sections 2 &amp; 3.

Prepared by: J. Pickett

Approved by: C. Matthews

Approval Date of Issue: 1/4/2018

Approval Date: 1/4/2018

The information provided in this MSDS is believed to be reliable and accurate. However, the information is provided without any warranty or guarantee, express or implied, regarding its correctness. We do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of the use of this information. The buyer assumes all responsibility of using and handling the product in accordance with the federal, state and local regulations.

# Safety Data Sheet

## 1. Product and Company Identification

**Product Identifier:** Base Eater**General Use:** Base Eater is designed to neutralize a variety of caustics and bases.**Product Description:** Blue liquid**Manufacturer:**  
Clift Industries, Inc.  
PO Box 471578  
Charlotte, NC 28247  
704-752-0031**Emergency Telephone**  
CHEMTREC  
800-424-9300

## 2. Hazards Identification

**Classification:** Acute toxicity, Oral, Dermal, Inhalation Category 5  
Eye Irritation, Category 2B**Signal Word:** Warning!**Hazard Statement:** H303+H313 Maybe harmful if swallowed, in contact with skin or if inhaled.  
+H333  
H320 Causes eye irritation.**Precautionary Statements Prevention:** P264 Wash hands thoroughly after handling.**Precautionary Statements Response:** P304 + 340 **IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathingP301+330+331 **IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting.P303+352 **IF ON SKIN:** Wash with plenty of soap and water.P305+351+338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing.

## 3. Composition/Information on Ingredients

Ingredients	CAS No.	Weight %
Aqua	7732-18-5	70-90
Neutralizer	Proprietary	5-20
pH dye Indicator	3844-45-9	1

## 4. First Aid Measures

**Eye Contact:** Flush eyes for fifteen minutes with water. If irritation persists, contact a physician.**Skin Contact:** Wash with soap and water. If irritation persists, contact a physician.**Inhalation:** Not normally required. Move to fresh air. If symptoms persist, get medical attention.**Ingestion:** Not normally required. Contact a physician if ingested.

## 5. Fire Fighting Measures

**Extinguishing Media:** Unused form: Water spray, dry chemical or carbon dioxide. Used form: That which is compatible to liquid (s) absorbed.**Special Fire Fighting Procedures:** None required.**Hazardous Combustion Products:** Carbon monoxide and/or carbon dioxide.**Unusual Hazards:** None expected. Refer to absorbed liquid(s) MSDS(s). Extreme heat may cause pressure to build up inside drum.

## 6. Accidental Release Measures

**Spill or Leak Procedures:** If material is unused, collect and recover for reuse. Wear protective equipment. Not a listed hazardous waste.

## 7. Handling and Storage

**Handling Precautions:** Avoid contact with skin and eyes. Do not swallow. Wash hands thoroughly after handling.**Storage Precautions:** Store in cool, dry area. Prevent product from freezing. Keep out of the reach of children. Shelf life: 3 years as long as the product is kept in a clean, dry environment away from direct sunlight and/or excessive heat.**General:** Refer to absorbed liquid(s) MSDS(s). Follow label directions carefully. Make sure all containers are labeled properly. The container can be hazardous when empty. Follow label cautions even after the container is empty. Do not re-use empty containers for food, clothing or products for human or animal consumption, or where skin contact can occur.

## 8. Exposure Controls/Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.**PERSONAL PROTECTION****Eyes:** Safety goggles or glass with side shields**Respirator:** NIOSH/MSHA approved respirator when ventilation is inadequate.**Gloves:** Impervious gloves.**Other:** Maintain eyewash and safety shower in work area.**OSHA HAZARDOUS COMPONENTS****(29 CFR 1910.1200):**EXPOSURE LIMIT 8 hrs. TWA (ppm)  
OSHA PEL ACGIH TLV

None

## 9. Physical/Chemical Characteristics

**Appearance:** Blue liquid**Odor:** Bland**pH:** 3**Melting Point/Freezing Point:** 32° F (0° C)**Initial Boiling Point and Range:** 212° F (100° C)**Flash Point:** None **Method:** Not available.**Evaporation Rate:** Not established.**Flammable Limits:** Not applicable.**Conditions of Flammability:** Non-flammable.**Explosive Properties:** Not established.**Vapor Pressure:** Not available.**Vapor Density:** Not established.**Relative Density (H<sub>2</sub>O =1):** 1.079**Solubility in Water:** Soluble**VOC (g/L):** 0

## 10. Stability and Reactivity Data

**General:** This is a stable material  
**Conditions of Reactivity:** Reacts with sodium hypochlorite or calcium hypochlorite.  
**Incompatible Materials:** Strong oxidants  
**Conditions to Avoid:** Excessive heat or flame.  
**Hazardous Decomposition:** Not established.  
**Hazardous Polymerization:** Will not occur.

## 11. Toxicological Data

**LD50:** Not established.**LC50:** Not established.**Carcinogenicity:** IRAC: None

National Toxicology Program: None

OSHA: None

California Prop 65: No listed ingredient

**Reproduction Toxicity:** Not available**Teratogenicity:** Not available**Mutagenicity:** Not available**Synergistic Products:** Not available

## 12. Ecological Data

No data available

## 13. Disposal Considerations

**Waste Disposal Method:** Observe all federal, state and local regulations.

## 14. Transport Information

**D.O.T. (Department of Transportation):****Proper Shipping Name:** Non-hazardous liquid**Hazard Class:** Not regulated**Identification Number:** Not applicable

## 15. Regulatory Information

**CERCLA (Comprehensive Environmental Response Compensation and Liability Act):** No Reportable Quantity**OSHA Hazard Communication Standard, 28 CFR 1910.1200:** No hazardous ingredient.**SARA Title III (Superfund Amendments and Reauthorization Act):** No listed ingredient.**TSCA (Toxic Substances Control Act):** All ingredients are listed.

## 16. OTHER INFORMATION:

**NFPA Hazard Rating:** Health – 1  
None → Extreme Fire – 0  
0 → 4 Reactivity – 0  
PPE – B

Reason for Issue: GHS changes to Sections 2 &amp; 3.

Prepared by: J. Pickett

Approved by: C. Matthews

Approval Date of Issue: 1/4/2018

Approval Date: 1/4/2018

The information provided in this MSDS is believed to be reliable and accurate. However, the information is provided without any warranty or guarantee, express or implied, regarding its correctness. We do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of the use of this information. The buyer assumes all responsibility of using and handling the product in accordance with the federal, state and local regulations.

# Safety Data Sheet

## 1. Product and Company Identification

**Product Identifier:** HF Acid Eater**General Use:** HF Acid Eater is designed to safely neutralize hydrofluoric acid spills into organic salts and water.**Product Description:** Beige liquid**Manufacturer:** Clift Industries, Inc.  
PO Box 471578  
Charlotte, NC 28247  
704-752-0031**Emergency Telephone:** CHEMTREC  
800-424-9300

## 2. Hazards Identification

**Classification:** Acute toxicity, Oral, Dermal, Inhalation Category 5  
Eye Irritation, Category 2B**Signal Word:** Warning!**Hazard Statement:** H303+H313 Maybe harmful if swallowed, in contact with skin or if inhaled.  
+H333  
H320 Causes eye irritation.**Precautionary Statements Prevention:** P264 Wash hands thoroughly after handling.**Precautionary Statements Response:** P304 + 340 **IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathingP301+330+331 **IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting.P303+352 **IF ON SKIN:** Wash with plenty of soap and water.P305+351+338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing.

## 3. Composition/Information on Ingredients

Ingredients	CAS No.	Weight %
Aqua	7732-18-5	30-50
Neutralizer	Proprietary	20-30

## 4. First Aid Measures

**Eye Contact:** Flush eyes for fifteen minutes with water. If irritation persists, contact a physician.**Skin Contact:** Wash with soap and water. If irritation persists, contact a physician.**Inhalation:** Not normally required. Move to fresh air. If symptoms persist, get medical attention.**Ingestion:** Not normally required. Contact a physician if ingested.

## 5. Fire Fighting Measures

**Extinguishing Media:** Product is water-based and will not support flames.**Special Fire Fighting Procedures:** Water may be used to cool fire-exposed containers. Wear self-contained breathing apparatus with full facepiece.**Hazardous Combustion Products:** Not established**Unusual Hazards:** None expected. Refer to absorbed liquid(s) MSDS(s). Extreme heat may cause pressure to build up inside drum.

## 6. Accidental Release Measures

**Spill or Leak Procedures:** Wear protective equipment. Contain, retrieve spill materials (absorb, pump, vacuum). Not a listed hazardous waste.

## 7. Handling and Storage

**Handling Precautions:** Avoid contact with skin and eyes. Do not swallow. Wash hands thoroughly after handling.**Storage Precautions:** Store in cool, dry area. Prevent product from freezing. Keep out of the reach of children. Shelf life: 3 years as long as the product is kept in a clean, dry environment away from direct sunlight and/or excessive heat.**General:** Refer to absorbed liquid(s) MSDS(s). Follow label directions carefully. Make sure all containers are labeled properly. The container can be hazardous when empty. Follow label cautions even after the container is empty. Do not re-use empty containers for food, clothing or products for human or animal consumption, or where skin contact can occur.

## 8. Exposure Controls/Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.**PERSONAL PROTECTION****Eyes:** Safety goggles or glass with side shields**Respirator:** NIOSH/MSHA approved respirator when ventilation is inadequate.**Gloves:** Impervious gloves.**Other:** Maintain eyewash and safety shower in work area.**OSHA HAZARDOUS COMPONENTS****(29 CFR 1910.1200):**EXPOSURE LIMIT 8 hrs. TWA (ppm)  
OSHA PEL ACGIH TLV

None

## 9. Physical/Chemical Characteristics

**Appearance:** Beige liquid**Odor:** Bland**pH:** 8**Melting Point/Freezing Point:** 32° F (0° C)**Initial Boiling Point and Range:** 212° F (100° C)**Flash Point:** >300° F **Method:** Not available.**Evaporation Rate:** Not established.**Flammable Limits:** Not applicable.**Conditions of Flammability:** Non-flammable.**Explosive Properties:** Not established.**Vapor Pressure:** Not available.**Vapor Density:** Not established.**Relative Density (H<sub>2</sub>O =1):** 1.0791**Solubility in Water:** Complete**VOC (g/L):** 0

## 10. Stability and Reactivity Data

**General:** This is a stable material  
**Conditions of Reactivity:** Reacts with sodium hypochlorite or calcium hypochlorite.  
**Incompatible Materials:** Strong oxidants  
**Conditions to Avoid:** Excessive heat or flame.  
**Hazardous Decomposition:** Not established.  
**Hazardous Polymerization:** Will not occur.

## 11. Toxicological Data

**LD50:** Not established.**LC50:** Not established.**Carcinogenicity:** IRAC: None

National Toxicology Program: None

OSHA: None

California Prop 65: No listed ingredient

**Reproduction Toxicity:** Not available**Teratogenicity:** Not available**Mutagenicity:** Not available**Synergistic Products:** Not available

## 12. Ecological Data

No data available

## 13. Disposal Considerations

**Waste Disposal Method:** Observe all federal, state and local regulations.

## 14. Transport Information

**D.O.T. (Department of Transportation):****Proper Shipping Name:** Non-hazardous liquid**Hazard Class:** Not regulated**Identification Number:** Not applicable

## 15. Regulatory Information

**CERCLA (Comprehensive Environmental Response Compensation and Liability Act):** No Reportable Quantity**OSHA Hazard Communication Standard, 28 CFR 1910.1200:** No hazardous ingredient.**SARA Title III (Superfund Amendments and Reauthorization Act):** No listed ingredient.**TSCA (Toxic Substances Control Act):** All ingredients are listed.

## 16. OTHER INFORMATION:

**NFPA Hazard Rating:** Health – 1

None → Extreme Fire – 0

0 → 4 Reactivity – 0

PPE – B

Reason for Issue: GHS changes to Sections 2 &amp; 3.

Prepared by: J. Pickett

Approved by: C. Matthews

Approval Date of Issue: 1/4/2018

Approval Date: 1/4/2018

The information provided in this MSDS is believed to be reliable and accurate. However, the information is provided without any warranty or guarantee, express or implied, regarding its correctness. We do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of the use of this information. The buyer assumes all responsibility of using and handling the product in accordance with the federal, state and local regulations.

# Safety Data Sheet

## 1. Product and Company Identification

**Product Identifier:** Ultimate Acid Eater**General Use:** Ultimate Acid Eater is designed to neutralize a variety of acids, except hydrofluoric acid.**Product Description:** Red liquid**Manufacturer:**Clift Industries, Inc.  
PO Box 471578  
Charlotte, NC 28247  
704-752-0031**Emergency Telephone**CHEMTREC  
800-424-9300

## 2. Hazards Identification

**Classification:** Acute toxicity, Oral, Dermal, Inhalation Category 5  
Eye Irritation, Category 2B**Signal Word:** Warning!**Hazard Statement:** H303+H313 Maybe harmful if swallowed, in contact with skin or if inhaled.  
+H333  
H320 Causes eye irritation.**Precautionary Statements Prevention:** P264 Wash hands thoroughly after handling.**Precautionary Statements Response:** P304 + 340 **IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathingP301+330+331 **IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting.P303+352 **IF ON SKIN:** Wash with plenty of soap and water.P305+351+338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing.

## 3. Composition/Information on Ingredients

Ingredients	CAS No.	Weight %
Aqua	7732-18-5	70-90
Neutralizer	Proprietary	5-20
pH dye Indicator	3844-45-9	1

## 4. First Aid Measures

**Eye Contact:** Flush eyes for fifteen minutes with water. If irritation persists, contact a physician.**Skin Contact:** Wash with soap and water. If irritation persists, contact a physician.**Inhalation:** Not normally required. Move to fresh air. If symptoms persist, get medical attention.**Ingestion:** Not normally required. Contact a physician if ingested.

## 5. Fire Fighting Measures

**Extinguishing Media:** Unused form: Water spray, dry chemical or carbon dioxide. Used form: That which is compatible to liquid (s) absorbed.**Special Fire Fighting Procedures:** None required.**Hazardous Combustion Products:** Carbon monoxide and/or carbon dioxide.**Unusual Hazards:** None expected. Refer to absorbed liquid(s) MSDS(s). Extreme heat may cause pressure to build up inside drum.

## 6. Accidental Release Measures

**Spill or Leak Procedures:** If material is unused, collect and recover for reuse. Wear protective equipment. Not a listed hazardous waste.

## 7. Handling and Storage

**Handling Precautions:** Avoid contact with skin and eyes. Do not swallow. Wash hands thoroughly after handling.**Storage Precautions:** Store in cool, dry area. Prevent product from freezing. Keep out of the reach of children. Shelf life: 3 years as long as the product is kept in a clean, dry environment away from direct sunlight and/or excessive heat.**General:** Refer to absorbed liquid(s) MSDS(s). Follow label directions carefully. Make sure all containers are labeled properly. The container can be hazardous when empty. Follow label cautions even after the container is empty. Do not re-use empty containers for food, clothing or products for human or animal consumption, or where skin contact can occur.

## 8. Exposure Controls/Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.**PERSONAL PROTECTION****Eyes:** Safety goggles or glass with side shields**Respirator:** NIOSH/MSHA approved respirator when ventilation is inadequate.**Gloves:** Impervious gloves.**Other:** Maintain eyewash and safety shower in work area.**OSHA HAZARDOUS COMPONENTS****(29 CFR 1910.1200):**

EXPOSURE LIMIT 8 hrs. TWA (ppm)

OSHA PEL

ACGIH TLV

None

## 9. Physical/Chemical Characteristics

**Appearance:** Red liquid**Odor:** Bland**pH:** 10**Melting Point/Freezing Point:** 32° F (0° C)**Initial Boiling Point and Range:** 212° F (100° C)**Flash Point:** None **Method:** Not available.**Evaporation Rate:** Not established.**Flammable Limits:** Not applicable.**Conditions of Flammability:** Non-flammable.**Explosive Properties:** Not established.**Vapor Pressure:** Not available.**Vapor Density:** Not established.**Relative Density (H<sub>2</sub>O = 1):** 1.079**Solubility in Water:** Soluble**VOC (g/L):** 0

## 10. Stability and Reactivity Data

**General:** This is a stable material  
**Conditions of Reactivity:** Reacts with sodium hypochlorite or calcium hypochlorite.**Incompatible Materials:** Strong oxidants**Conditions to Avoid:** Excessive heat or flame.**Hazardous Decomposition:** Not established.**Hazardous Polymerization:** Will not occur.

## 11. Toxicological Data

**LD50:** Not established.**LC50:** Not established.**Carcinogenicity:** IRAC: None

National Toxicology Program: None

OSHA: None

California Prop 65: No listed ingredient

**Reproduction Toxicity:** Not available**Teratogenicity:** Not available**Mutagenicity:** Not available**Synergistic Products:** Not available

## 12. Ecological Data

No data available

## 13. Disposal Considerations

**Waste Disposal Method:** Observe all federal, state and local regulations.

## 14. Transport Information

**D.O.T. (Department of Transportation):****Proper Shipping Name:** Non-hazardous liquid**Hazard Class:** Not regulated**Identification Number:** Not applicable

## 15. Regulatory Information

**CERCLA (Comprehensive Environmental Response Compensation and Liability Act):** No Reportable Quantity**OSHA Hazard Communication Standard, 28 CFR 1910.1200:** No hazardous ingredient.**SARA Title III (Superfund Amendments and Reauthorization Act):** No listed ingredient.**TSCA (Toxic Substances Control Act):** All ingredients are listed.

## 16. OTHER INFORMATION:

**NFPA Hazard Rating:** Health – 1

None → Extreme

Fire – 0

0 → 4

Reactivity – 0

PPE – B

Reason for Issue: GHS changes to Sections 2 &amp; 3.

Prepared by: J. Pickett

Approved by: C. Matthews

Approval Date of Issue: 1/4/2018

Approval Date: 1/4/2018

The information provided in this MSDS is believed to be reliable and accurate. However, the information is provided without any warranty or guarantee, express or implied, regarding its correctness. We do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of the use of this information. The buyer assumes all responsibility of using and handling the product in accordance with the federal, state and local regulations.


# Safety Data Sheet

## 1. Product and Company Identification

**Product Identifier:** BioRem-2000 Surface Cleaner  
**General Use:** Designed to remediate oil, grease and other hydrocarbons on hard surfaces.  
**Product Description:** Amber liquid  
**Manufacturer:** Clift Industries, Inc.  
PO Box 471578  
Charlotte, NC 28247  
704-752-0031  
**Emergency Telephone:** CHEMTREC  
800-424-9300

## 2. Hazards Identification

**Classification:** Acute toxicity, Oral, Dermal, Inhalation Category 5  
Eye Irritation, Category 2B

**Signal Word:** Warning! 

**Hazard Statement:** H303+H313 Maybe harmful if swallowed, in contact with skin or if inhaled.  
+H333  
H320 Causes eye irritation.

**Precautionary Statements Prevention:** P264 Wash hands thoroughly after handling.

**Precautionary Statements Response:** P304 + 340 **IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P301+330+331 **IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting.  
P303+352 **IF ON SKIN:** Wash with plenty of soap and water.  
P305+351+338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing.

## 3. Composition/Information on Ingredients

Ingredients	CAS No.	Weight %
Aqua	7732-18-5	70-90
Microbes	Proprietary	1-5
Enzymes	Proprietary	1-5
Cleaning Aid	Proprietary	10-20
Nutrients	Proprietary	1-5

## 4. First Aid Measures

**Eye Contact:** Flush eyes for fifteen minutes with water. If irritation persists, contact a physician.

**Skin Contact:** Wash with soap and water. If irritation persists, contact a physician.

**Inhalation:** Not normally required. Move to fresh air. If symptoms persist, get medical attention.

**Ingestion:** Not normally required. Contact a physician if ingested.

## 5. Fire Fighting Measures

**Extinguishing Media:** Unused form: Water spray, dry chemical or carbon dioxide. Used form: That which is compatible to liquid (s) absorbed.

**Special Fire Fighting Procedures:** None required.

**Hazardous Combustion Products:** Carbon monoxide and/or carbon dioxide.

**Unusual Hazards:** None expected. Refer to absorbed liquid(s) MSDS(s). Extreme heat may cause pressure to build up inside drum.

## 6. Accidental Release Measures

**Spill or Leak Procedures:** If material is unused, collect and recover for reuse. Wear protective equipment. Not a listed hazardous waste.

## 7. Handling and Storage

**Handling Precautions:** Avoid contact with skin and eyes. Do not swallow. Wash hands thoroughly after handling.

**Storage Precautions:** Store in cool, dry area. Prevent product from freezing. Keep out of the reach of children. Shelf life: 3 years as long as the product is kept in a clean, dry environment away from direct sunlight and/or excessive heat.

**General:** Refer to absorbed liquid(s) MSDS(s). Follow label directions carefully. Make sure all containers are labeled properly. The container can be hazardous when empty. Follow label cautions even after the container is empty. Do not re-use empty containers for food, clothing or products for human or animal consumption, or where skin contact can occur.

## 8. Exposure Controls/Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

### PERSONAL PROTECTION

**Eyes:** Safety goggles or glass with side shields  
**Respirator:** NIOSH/MSHA approved respirator when ventilation is inadequate.  
**Gloves:** Impervious gloves.  
**Other:** Maintain eyewash and safety shower in work area.

### OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):

EXPOSURE LIMIT 8 hrs. TWA (ppm)  
OSHA PEL ACGIH TLV

None

## 9. Physical/Chemical Characteristics

**Appearance:** Amber liquid  
**Odor:** Bland  
**pH:** 7  
**Melting Point/Freezing Point:** 32° F (0° C)  
**Initial Boiling Point and Range:** 212° F (100° C)  
**Flash Point:** None **Method:** Not available.  
**Evaporation Rate:** Not established.  
**Flammable Limits:** Not applicable.  
**Conditions of Flammability:** Non-flammable.  
**Explosive Properties:** Not established.  
**Vapor Pressure:** Not available.  
**Vapor Density:** Not established.  
**Relative Density (H<sub>2</sub>O =1):** 1.079  
**Solubility in Water:** Soluble  
**VOC (g/L):** 0

## 10. Stability and Reactivity Data

**General:** This is a stable material  
**Conditions of Reactivity:** Reacts with sodium hypochlorite or calcium hypochlorite.  
**Incompatible Materials:** Strong oxidants  
**Conditions to Avoid:** Excessive heat or flame.  
**Hazardous Decomposition:** Not established.  
**Hazardous Polymerization:** Will not occur.

## 11. Toxicological Data

**LD50:** Not established.  
**LC50:** Not established.

**Carcinogenicity:** IRAC: None  
National Toxicology Program: None  
OSHA: None  
California Prop 65: No listed ingredient

**Reproduction Toxicity:** Not available  
**Teratogenicity:** Not available  
**Mutagenicity:** Not available  
**Synergistic Products:** Not available

## 12. Ecological Data

No data available

## 13. Disposal Considerations

**Waste Disposal Method:** Observe all federal, state and local regulations.

## 14. Transport Information

**D.O.T. (Department of Transportation):**  
**Proper Shipping Name:** Non-hazardous liquid  
**Hazard Class:** Not regulated  
**Identification Number:** Not applicable

## 15. Regulatory Information

**CERCLA (Comprehensive Environmental Response Compensation and Liability Act):** No Reportable Quantity

**OSHA Hazard Communication Standard, 28 CFR 1910.1200:** No hazardous ingredient.

**SARA Title III (Superfund Amendments and Reauthorization Act):** No listed ingredient.

**TSCA (Toxic Substances Control Act):** All ingredients are listed.

## 16. OTHER INFORMATION:

**NFPA Hazard Rating:** Health – 1  
None → Extreme Fire – 0  
0 → 4 Reactivity – 0  
PPE – B

Reason for Issue: GHS changes to Sections 2 & 3.

Prepared by: J. Pickett  
Approved by: C. Matthews  
Approval Date of Issue: 1/4/2018  
Approval Date: 1/4/2018

The information provided in this MSDS is believed to be reliable and accurate. However, the information is provided without any warranty or guarantee, express or implied, regarding its correctness. We do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of the use of this information. The buyer assumes all responsibility of using and handling the product in accordance with the federal, state and local regulations.