Safety Data Sheet

1. Identification

Product Identifier: Base Eater Liquid Neutralizer
General Use: Base Eater is designed to neutralize a variety of caustics and bases.
Product Description: Blue liquid
Other Identifying Product Numbers: 86295-07
Restrictions on use: Keep away from children.

Manufacturer:	**Emergency Telephone**
Clift Industries, Inc.	CHEMTREC
PO Box 471578	800-424-9300
Charlotte, NC 28247	
704-752-0031	

2. Hazards Identification

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

Signal Word: Warning!

Hazard Statement:	H303+H313 +H333	Maybe harmful if swallowed, in contact with skin or if inhaled.
	H320	Causes eye irritation.
Precautionary Statements Prevention:	P264	Wash hands thoroughly after handling.
Precautionary Statements Response:	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	80-90
Citric Acid	77-92-9	10-20
Thymol Blue	3844-45-9	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.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:
Most Important Symptoms and Effects: No information available
INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED
Notes to physician: Treat symptomatically.

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.
Unsuitable Extinguishing Media: CAUTION: Use of water spray when fighting fire may be inefficient.
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

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES
Personal Precautions: Avoid contact with eyes.
Other Information: No other information.
ENVIRONMENTAL PRECAUTIONS
Environmental Precautions: Prevent entry into waterways, sewers, basements or confined areas.
METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP
Method for Containment: Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up: Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

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.
Incompatible Products: None known.

8. Exposure Controls/Personal Protection

CONTROL PARAMETERS
Exposure Guidelines: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	**ACGIH TLV**	**OSHA PEL**	**NIOSH IDLH**

Other Exposure Guidelines: None.
APPROPRIATE ENGINEERING CONTROLS
Engineering Measures: Showers, Eyewash stations, Ventilation systems
INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT
Eye/Face Protection: If splashes are likely to occur: Tight sealing safety goggles.
Skin and Body Protection: No special protective equipment required.
Respiratory Protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing is recommended.

9. Physical and Chemical Properties

Appearance: Blue liquid
Odor: Bland
pH: 3
Melting Point/Freezing Point: 32º F (0º C)
Initial Boiling Point and Range: 212º F (100º C)
Flash Point: None **Method**: Not available.
Evaporation Rate: Not available.
Flammable Limits: Not applicable.
Flammability: Not Applicable.
Explosive Properties: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Relative Density (H_2O =1): 1.05
Solubility in Water: Soluble
VOC (g/L): 0
Decomposition Temperature: Not available.
Viscosity: Not available.

10. Stability and Reactivity

Reactivity: This is a stable material
Conditions of Reactivity: Not available.
Incompatible Materials: Strong oxidants
Conditions to Avoid: None known.
Hazardous Decomposition: Not available.
Hazardous Polymerization: Will not occur.

11. Toxicological Information

INFORMATION ON LIKELY ROUTES OF EXPOSURE
Product Information:
Inhalation: Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye Contact: Does not classify as an Eye Irritant per Ocular Irritection testing.
Skin Contact: Does not classify as a Dermal Irritant per Dermal Irritection testing.
Ingestion: Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Component Information: None supplied.
DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE
Sensitization: No information available.
Mutagenic Effects: No information available.
Carcinogenicity: Contains no ingredient listed as a carcinogen.
Reproductive Toxicity: Contains no ingredient listed as a reproductive toxin.
STOT- single exposure: No information available.
STOT- repeated exposure: No information available.
Chronic Toxicity: No known effect based on information supplied.
Target Organ Effects: None known.
Aspiration Hazard: No information available.
NUMERICAL MEASURES OF TOXICITY
The following values are calculated based on chapter 3.1 of the GHS document.
ATEmix (oral): 20,000 mg/kg

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: 1/4/2019 Approval Date: 1/4/2019

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Safety Data Sheet

1. Identification

Product Identifier: Ultimate Acid Eater Liquid Neutralizer
General Use: Ultimate Acid Eater is designed to neutralize a variety of acids, except hydrofluoric acid.
Product Description: Red liquid
Other Identifying Product Numbers: 86295-07
Restrictions on use: Keep away from children.

Manufacturer:	**Emergency Telephone**
Clift Industries, Inc.	CHEMTREC
PO Box 471578	800-424-9300
Charlotte, NC 28247	
704-752-0031	

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

Signal Word: Warning!

Hazard Statement:	H303+H313 +H333	Maybe harmful if swallowed, in contact with skin or if inhaled.
	H320	Causes eye irritation.
Precautionary Statements Prevention:	P264	Wash hands thoroughly after handling.
Precautionary Statements Response:	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	80-90
Sodium carbonate	497-19-8	10-20
Thymol Blue	76-61-9	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.
MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:
Most Important Symptoms and Effects: No information available
INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED
Notes to physician: Treat symptomatically.

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.
Unsuitable Extinguishing Media: CAUTION: Use of water spray when fighting fire may be inefficient.
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

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES
Personal Precautions: Avoid contact with eyes.
Other Information: No other information.
ENVIRONMENTAL PRECAUTIONS
Environmental Precautions: Prevent entry into waterways, sewers, basements or confined areas.
METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP
Method for Containment: Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up: Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

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.
Incompatible Products: None known.

8. Exposure Controls/Personal Protection

CONTROL PARAMETERS
Exposure Guidelines: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	**ACGIH TLV**	**OSHA PEL**	**NIOSH IDLH**

Other Exposure Guidelines: None.
APPROPRIATE ENGINEERING CONTROLS
Engineering Measures: Showers, Eyewash stations, Ventilation systems
INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT
Eye/Face Protection: If splashes are likely to occur: Tight sealing safety goggles.
Skin and Body Protection: No special protective equipment required.
Respiratory Protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing is recommended.

9. Physical and Chemical Properties

Appearance: Orange liquid
Odor: Bland
pH: 9
Melting Point/Freezing Point: 32º F (0º C)
Initial Boiling Point and Range: 212º F (100º C)
Flash Point: None **Method**: Not available.
Evaporation Rate: Not available.
Flammable Limits: Not applicable.
Flammability: Not Applicable.
Explosive Properties: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Relative Density (H_2O =1): 1.079
Solubility in Water: Soluble
VOC (g/L): 0
Decomposition Temperature: Not available.
Viscosity: Not available.

10. Stability and Reactivity

Reactivity: This is a stable material
Conditions of Reactivity: Not available.
Incompatible Materials: Strong oxidants
Conditions to Avoid: None known.
Hazardous Decomposition: Not available.
Hazardous Polymerization: Will not occur.

11. Toxicological Information

INFORMATION ON LIKELY ROUTES OF EXPOSURE
Product Information:
Inhalation: Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye Contact: Does not classify as an Eye Irritant per Ocular Irritection testing.
Skin Contact: Does not classify as a Dermal Irritant per Dermal Irritection testing.
Ingestion: Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Component Information: None supplied.
DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE
Sensitization: No information available.
Mutagenic Effects: No information available.
Carcinogenicity: Contains no ingredient listed as a carcinogen.
Reproductive Toxicity: Contains no ingredient listed as a reproductive toxin.
STOT- single exposure: No information available.
STOT- repeated exposure: No information available.
Chronic Toxicity: No known effect based on information supplied.
Target Organ Effects: None known.
Aspiration Hazard: No information available.
NUMERICAL MEASURES OF TOXICITY
The following values are calculated based on chapter 3.1 of the GHS document.
ATEmix (oral): 20,000 mg/kg

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: 1/4/2019 Approval Date: 1/4/2019

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Safety Data Sheet

1. Identification

Product Identifier: HF Acid Eater Liquid Neutralizer
General Use: HF Acid Eater is designed to neutralize hydrofluoric acid.
Product Description: Beige liquid
Other Identifying Product Numbers: 86295-07
Restrictions on use: Keep away from children.

Manufacturer:	**Emergency Telephone**
Clift Industries, Inc.	CHEMTREC
PO Box 471578	800-424-9300
Charlotte, NC 28247	
704-752-0031	

2. Hazards Identification

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

Signal Word: Warning!

Hazard Statement:	H303+H313 +H333	Maybe harmful if swallowed, in contact with skin or if inhaled.
	H320	Causes eye irritation.
Precautionary Statements Prevention:	P264	Wash hands thoroughly after handling.
Precautionary Statements Response:	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	80-90
Calcium Hydroxide	1305-62-0	10-20
Thymol Blue	3844-45-9	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.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:
Most Important Symptoms and Effects: No information available
INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED
Notes to physician: Treat symptomatically.

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.
Unsuitable Extinguishing Media: CAUTION: Use of water spray when fighting fire may be inefficient.
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

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES
Personal Precautions: Avoid contact with eyes.
Other Information: No other information.
ENVIRONMENTAL PRECAUTIONS
Environmental Precautions: Prevent entry into waterways, sewers, basements or confined areas.
METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP
Method for Containment: Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up: Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

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.
Incompatible Products: None known.

8. Exposure Controls/Personal Protection

CONTROL PARAMETERS
Exposure Guidelines: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	**ACGIH TLV**	**OSHA PEL**	**NIOSH IDLH**

Other Exposure Guidelines: None.
APPROPRIATE ENGINEERING CONTROLS
Engineering Measures: Showers, Eyewash stations, Ventilation systems
INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT
Eye/Face Protection: If splashes are likely to occur: Tight sealing safety goggles.
Skin and Body Protection: No special protective equipment required.
Respiratory Protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing is recommended.

9. Physical and Chemical Properties

Appearance: Blue liquid
Odor: Bland
pH: 3
Melting Point/Freezing Point: 32º F (0º C)
Initial Boiling Point and Range: 212º F (100º C)
Flash Point: None **Method**: Not available.
Evaporation Rate: Not available.
Flammable Limits: Not applicable.
Flammability: Not Applicable.
Explosive Properties: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Relative Density (H_2O =1): 1.05
Solubility in Water: Soluble
VOC (g/L): 0
Decomposition Temperature: Not available.
Viscosity: Not available.

10. Stability and Reactivity

Reactivity: This is a stable material
Conditions of Reactivity: Not available.
Incompatible Materials: Strong oxidants
Conditions to Avoid: None known.
Hazardous Decomposition: Not available.
Hazardous Polymerization: Will not occur.

11. Toxicological Information

INFORMATION ON LIKELY ROUTES OF EXPOSURE
Product Information:
Inhalation: Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye Contact: Does not classify as an Eye Irritant per Ocular Irritection testing.
Skin Contact: Does not classify as a Dermal Irritant per Dermal Irritection testing.
Ingestion: Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Component Information: None supplied.
DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE
Sensitization: No information available.
Mutagenic Effects: No information available.
Carcinogenicity: Contains no ingredient listed as a carcinogen.
Reproductive Toxicity: Contains no ingredient listed as a reproductive toxin.
STOT- single exposure: No information available.
STOT- repeated exposure: No information available.
Chronic Toxicity: No known effect based on information supplied.
Target Organ Effects: None known.
Aspiration Hazard: No information available.
NUMERICAL MEASURES OF TOXICITY
The following values are calculated based on chapter 3.1 of the GHS document.
ATEmix (oral): 20,000 mg/kg

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: 1/4/2019 Approval Date: 1/4/2019

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Safety Data Sheet

1. Identification

Product Identifier: BioRem-2000 Surface Cleaner
General Use: Designed to remove remediate hydrocarbons on hard surfaces.
Product Description: Amber liquid
Other Identifying Product Numbers: 86295-07
Restrictions on use: Keep away from children.

Manufacturer:	**Emergency Telephone**
Clift Industries, Inc.	CHEMTREC
PO Box 471578	800-424-9300
Charlotte, NC 28247	
704-752-0031	

2. Hazards Identification

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

Signal Word: Warning!

Hazard Statement:	H303+H313 +H333	Maybe harmful if swallowed, in contact with skin or if inhaled.
	H320	Causes eye irritation.
Precautionary Statements Prevention:	P264	Wash hands thoroughly after handling.
Precautionary Statements Response:	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	80-90
Complex Microbial Culture	13637-2	1-2
Alkyl Polyglycoside	68515-73-1	10-20

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.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:
Most Important Symptoms and Effects: No information available
INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED
Notes to physician: Treat symptomatically.

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.
Unsuitable Extinguishing Media: CAUTION: Use of water spray when fighting fire may be inefficient.
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

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES
Personal Precautions: Avoid contact with eyes.
Other Information: No other information.
ENVIRONMENTAL PRECAUTIONS
Environmental Precautions: Prevent entry into waterways, sewers, basements or confined areas.
METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP
Method for Containment: Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up: Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

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.
Incompatible Products: None known.

8. Exposure Controls/Personal Protection

CONTROL PARAMETERS
Exposure Guidelines: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	**ACGIH TLV**	**OSHA PEL**	**NIOSH IDLH**

Other Exposure Guidelines: None.
APPROPRIATE ENGINEERING CONTROLS
Engineering Measures: Showers, Eyewash stations, Ventilation systems
INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT
Eye/Face Protection: If splashes are likely to occur: Tight sealing safety goggles.
Skin and Body Protection: No special protective equipment required.
Respiratory Protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing is recommended.

9. Physical and Chemical Properties

Appearance: Amber liquid
Odor: Bland
pH: 7
Melting Point/Freezing Point: 32º F (0º C)
Initial Boiling Point and Range: 212º F (100º C)
Flash Point: None **Method**: Not available.
Evaporation Rate: Not available.
Flammable Limits: Not applicable.
Flammability: Not Applicable.
Explosive Properties: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Relative Density (H_2O =1): 1.079
Solubility in Water: Soluble
VOC (g/L): 0
Decomposition Temperature: Not available.
Viscosity: Not available.

10. Stability and Reactivity

Reactivity: This is a stable material
Conditions of Reactivity: Not available.
Incompatible Materials: Strong oxidants
Conditions to Avoid: None known.
Hazardous Decomposition: Not available.
Hazardous Polymerization: Will not occur.

11. Toxicological Information

INFORMATION ON LIKELY ROUTES OF EXPOSURE
Product Information:
Inhalation: Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye Contact: Does not classify as an Eye Irritant per Ocular Irritection testing.
Skin Contact: Does not classify as a Dermal Irritant per Dermal Irritection testing.
Ingestion: Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Component Information: None supplied.
DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE
Sensitization: No information available.
Mutagenic Effects: No information available.
Carcinogenicity: Contains no ingredient listed as a carcinogen.
Reproductive Toxicity: Contains no ingredient listed as a reproductive toxin.
STOT- single exposure: No information available.
STOT- repeated exposure: No information available.
Chronic Toxicity: No known effect based on information supplied.
Target Organ Effects: None known.
Aspiration Hazard: No information available.
NUMERICAL MEASURES OF TOXICITY
The following values are calculated based on chapter 3.1 of the GHS document.
ATEmix (oral): 20,000 mg/kg

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: 1/4/2019 Approval Date: 1/4/2019

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Safety Data Sheet

1. Identification

Product Identifier: Halex
General Use: Designed to neutralize halogens.
Product Description: Clear liquid
Other Identifying Product Numbers: 86295-07
Restrictions on use: Keep away from children.

Manufacturer:	**Emergency Telephone**
Clift Industries, Inc.	CHEMTREC
PO Box 471578	800-424-9300
Charlotte, NC 28247	
704-752-0031	

2. Hazards Identification

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

Signal Word: Warning!

Hazard Statement:	H303+H313 +H333	Maybe harmful if swallowed, in contact with skin or if inhaled.
	H320	Causes eye irritation.
Precautionary Statements Prevention:	P264	Wash hands thoroughly after handling.
Precautionary Statements Response:	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
Sodium Biocarbonate	144-55-8	10-20
Alkyl Polyglycoside	68515-73-1	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.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:
Most Important Symptoms and Effects: No information available
INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED
Notes to physician: Treat symptomatically.

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.
Unsuitable Extinguishing Media: CAUTION: Use of water spray when fighting fire may be inefficient.
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

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES
Personal Precautions: Avoid contact with eyes.
Other Information: No other information.
ENVIRONMENTAL PRECAUTIONS
Environmental Precautions: Prevent entry into waterways, sewers, basements or confined areas.
METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP
Method for Containment: Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up: Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

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.
Incompatible Products: None known.

8. Exposure Controls/Personal Protection

CONTROL PARAMETERS
Exposure Guidelines: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	**ACGIH TLV**	**OSHA PEL**	**NIOSH IDLH**

Other Exposure Guidelines: None.
APPROPRIATE ENGINEERING CONTROLS
Engineering Measures: Showers, Eyewash stations, Ventilation systems
INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT
Eye/Face Protection: If splashes are likely to occur: Tight sealing safety goggles.
Skin and Body Protection: No special protective equipment required.
Respiratory Protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing is recommended.

9. Physical and Chemical Properties

Appearance: Clear liquid
Odor: Bland
pH: 7
Melting Point/Freezing Point: 32º F (0º C)
Initial Boiling Point and Range: 212º F (100º C)
Flash Point: None **Method**: Not available.
Evaporation Rate: Not available.
Flammable Limits: Not applicable.
Flammability: Not Applicable.
Explosive Properties: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Relative Density (H_2O =1): 1.08
Solubility in Water: Soluble
VOC (g/L): 0
Decomposition Temperature: Not available.
Viscosity: Not available.

10. Stability and Reactivity

Reactivity: This is a stable material
Conditions of Reactivity: Not available.
Incompatible Materials: Strong oxidants
Conditions to Avoid: None known.
Hazardous Decomposition: Not available.
Hazardous Polymerization: Will not occur.

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