



# SAFETY DATA SHEET BBJ POWER Coil Clean®

BBJ Environmental Solutions  
"The standard of care for indoor air"

Sid Harvey parts 520-04, 520-01

SDS # Z1092

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifier

**Product name:** BBJ POWER Coil Clean

**Product code(s):** 520-04; 523-01; 525-01

**Synonym(s):** Aqueous ammonium bifluoride solution

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

**General use:** Cleaner for HVAC and refrigeration evaporator and condenser coil cleaner

**Uses advised against:** No uses advised against

### 1.3 Details of the supplier and of the safety data sheet

#### Manufacturer

Atlantic Chemical & Equipment  
3471 Atlanta Industrial Parkway, Suite 200  
Atlanta, GA 30331 USA  
Toll free: +1-800-929-2436

#### Distributor

BBJ Environmental  
PO Box 110301  
Stamford, CT 06911-0301 USA  
Toll free: +1-800-889-2251

### 1.4 Emergency telephone number: Chemtrec (24 hours) +1-800-424-9300

## SECTION 2 - HAZARDS IDENTIFICATION

### 2.1 Classification of substance or mixture

**Product definition:** Mixture

**Classification in accordance with 29 CFR 1910 (OSHA HCS) and Regulation (EC) No 1272/2008**

Acute Toxicity, Inhalation - Category 5 [H333]

Acute Toxicity, Dermal - Category 3 [H311]

Acute Toxicity, Oral - Category 3 [H301]

Skin Corrosive - Category 1B [H314]

### 2.2 Label elements

**Hazard symbol(s):**



GHS06

GHS05

**Signal word:**

Danger

**Hazard statement(s):**

H333 - May be harmful if inhaled

H311 - Toxic in contact with skin

H301 - Toxic if swallowed

H314 - Causes severe skin burns and eye damage

**Precautionary statements:**

**[Prevention]**

P260 - Do not breathe mist, vapor or spray.

P264 - Wash hands and other skin areas exposed to material thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves, protective clothing, eye protection and face protection.

**[Response]**

P301 + P330 + P331 + P310 - IF SWALLOWED: Rinse mouth. Do not induce vomiting. Immediately call a POISON CENTER or doctor.

P303 + P361 + P353 - IF ON SKIN: Remove immediately all contaminated clothing. Rinse skin with water or shower.

P263 - Wash contaminated clothing before reuse.

P304 + 312: IF INHALED: Call a POISON CENTER or doctor.

P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately contact POISON CENTER or doctor.

P321 + P322 - Specific treatment: Contact POISON CENTER or doctor immediately. Refer to Section 4 of this SDS.

**[Storage]**

P405 - Store locked up.

**[Disposal]**

P501 - Dispose of contents and container in accordance with national and local regulations.

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Not applicable

### 3.2 Mixtures

% by Weight	Ingredient	CAS Number	EC Number	Index Number	GHS Classification
<5	Ammonium bifluoride	1341-49-7	215-676-4	009-009-00-4	H301, H314
<1	Cocamide diethanolamine	68603-42-9	271-657-0	-----	H315, H318

% by Weight	Ingredient	CAS Number	EC Number	Index Number	GHS Classification
≤2	Hydrofluoric acid	7664-39-3	231-634-8	009-003-00-1	H300, H310, H314, H330
<0.2	Diethanolamine	111-42-2	203-868-0	603-071-00-1	H302, H315, H318, H373

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

## SECTION 4 - FIRST AID MEASURES

***This product contains approximately 2% free hydrofluoric acid (HF). Solutions of 2% or less hydrofluoric acid can cause burns. First aid techniques for treatment of hydrofluoric acid exposures are unique. Even low levels of exposure to HF require a rapid response and the use of calcium (most commonly calcium gluconate solutions or gels) to scavenge and neutralize the fluoride ion. Effects may be delayed, so treatment should be given even if exposure is suspected.***

### 4.1 Description of first aid measures

**Inhalation:** Move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Do not use mouth-to-mouth method if the victim inhaled this product; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If unconscious, maintain an open airway. Loosen tight fitting clothing such as a collar, tie, belt or waistband. Get Immediate medical attention. Calcium gluconate 2.5% in normal saline may be given by nebulizer with oxygen. If unavailable, four calcium gluconate (500 mg) tablets should be given by mouth every two hours until the victim is admitted to the hospital.

**Eyes:** Immediately flush eyes with large amounts of water for at least 30 minutes, keeping eyelids apart and away from the eyeball. Remove contact lenses, if present and easy to do, after the first 2 minutes and continue rinsing. Immediately contact a doctor, preferably an ophthalmologist. If a doctor is not immediately available, apply one or two drops of 0.5% tetracaine hydrochloride solution or other topical ophthalmic anesthetic and continue irrigation. Do not use skin treatment preparations for burns for the eyes. Use no oils or greases unless instructed to do so by a doctor. Irrigate with 1% calcium gluconate in normal saline for one to two hours to prevent or lessen corneal damage.

**Skin:** Flush skin with large amounts of water while removing contaminated clothing using PVC gloves and continue rinsing for at least 30 minutes. Apply and continually massage calcium gluconate gel (2.5%) into the burn area with gloved fingers until the pain is relieved. Use of local pain killers (anesthetics) is not recommended as reduction in pain is an indicator of the effectiveness of the treatment. Seek immediate medical attention. For large or severe burns four calcium gluconate (500 mg) tablets should be given by mouth every two hours until the victim receives medical care. Wash contaminated clothing separately before reuse or discard. Destroy contaminated shoes and leather goods.

**Ingestion:** Get immediate medical assistance. Rinse mouth with water if the victim is conscious. Remove dentures if any. DO NOT induce vomiting. Give 3 - 4 glasses of water to drink if the victim is conscious and alert and able to swallow. Give four calcium gluconate (500 mg) tablets every two hours; if not available, give the victim milk or milk of magnesia. Never give anything by mouth to an unconscious or convulsing person. Do not leave the victim unattended. To prevent aspiration of swallowed material lay the victim on one side with the head lower than the waist.

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

#### Potential health symptoms and effects

**Eyes:** Causes serious burns to the eyes. Symptoms include pain, redness, swelling and tearing. May cause permanent eye damage, including blindness.

**Skin:** Causes skin irritation and burns. Skin exposures can cause symptoms ranging from minor skin irritation to painful redness and swelling. Effects of skin contact may not be immediate and contact may not be painful at first. Severe burns can occur if treatment is delayed after exposure. Burns may appear stable only to get much worse several hours after exposure. Dilute solutions may have a reduced effect. May be toxic if absorbed through the skin. May cause hypocalcemia and other toxic effects.

**Inhalation:** Harmful if inhaled. Causes irritation to the nose, throat and upper respiratory tract. Symptoms may include headache, chest pains and cough. Aspiration of product during vomiting may cause pulmonary edema and pneumonitis (fluid on the lungs and inflammation of the lungs). The onset of difficulties and other symptoms may be delayed.

**Ingestion:** Causes burns to the mouth, mucous membranes, throat, esophagus and stomach. May cause perforation of the stomach and esophagus. May be toxic if swallowed. Symptoms may include nausea, vomiting, abdominal pain and diarrhea, difficulty breathing, swelling of the throat, unconsciousness, coma and possible heart failure. Ingestion may also result in the fluoride ion binding with calcium to produce abnormally low levels of serum calcium (hypocalcaemia), which will impair many necessary physiological functions in the body (e.g. muscle contractions). Systemic toxicity is likely to occur unless medical treatment is immediate.

**Chronic:** Prolonged or repeated skin contact may lead to necrosis of the skin. Chronic fluoride poisoning can cause severe bone changes, loss of weight, anemia and dental defects. Repeated or prolonged exposures may cause sore throat, nosebleeds and chronic bronchitis. Chronic inhalation may cause hypocalcemia with nervous problems (tetany) and cardiac arrhythmia (reduced calcium levels, spasms and irregular heart beat).

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

#### Advice to doctor and hospital personnel

**First aid and medical treatment must be specific for Hydrofluoric Acid Solutions.** The damage caused by this product is far more extensive than that caused by solutions of hydrochloric or other acids. Hydrofluoric Acid penetrates deeply and rapidly below fat layers, binding and depleting tissue calcium. Failure to start or provide correct medical treatment may be fatal.

## SECTION 5 - FIRE FIGHTING MEASURES

### 5.1 Extinguishable media

**Suitable methods of extinction:** Use media extinguishing media suitable for surrounding material.

**Unsuitable methods of extinction:** None known

### 5.2 Special hazards arising from the substance or mixture

**Unusual fire and explosion hazards:** Solution may release hydrogen fluoride when heated. Releases ammonia when solution is mixed with alkalis. Potential sources of ignition should be removed from the area. Closed containers may rupture due to the buildup of pressure when exposed to extreme heat.

**Hazardous decomposition products:** May react with some metals to form potential flammable and toxic gases. During a fire the water contained in this product may evaporate leaving a residue that may combust, producing corrosive fumes of fluorides as well as carbon monoxide and other unidentifiable organic compounds. Symptoms may not be immediately apparent or may be delayed. Obtain medical attention immediately.

**Explosion hazards:** Release of hydrogen gas during a fire can form explosive mixtures with air, especially in confined spaces.

### 5.3 Advice for firefighters

Wear full protective equipment including self-contained breathing apparatus, a full acid resistant suit, PVC gloves and enclosed footwear. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. Water contaminated by this material must be contained from being discharged to any waterway, sewer or drain to prevent environmental contamination.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Evacuate non-essential personnel. Wear appropriate protective clothing designated in Section 8.2. Remove all sources of ignition. Good ventilation is necessary. Discharged material may produce hydrogen fluoride fumes. Spills should be cleaned up promptly to avoid damage to surrounding materials. Spills create a slip hazard.

### 6.2 Environmental precautions

Avoid dispersal of spilled material or runoff and prevent contact with soil and entry into drains, sewers or waterways.

### 6.3 Methods and materials for containment and cleaning up

Approach spill from upwind. Cover drains and contain spill. Avoid drainage to areas that cannot be treated. Cover with a large quantity of non-combustible, inert absorbent (e.g. sand, vermiculite, diatomaceous earth). DO NOT use combustible absorbent such as sawdust. Collect material using non-sparking tools and place into an approved container for proper disposal. Observe possible material restrictions (Sections 7.2, 10.5 and 13). Contaminated absorbent poses the same hazard as the spilt product. Dispose of via a licensed waste disposal contractor.

**Spills and releases may have to be reported to federal and/or local authorized. See Section 15 regarding reporting requirements.**

### 6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

## SECTION 7 - HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Wear all appropriate personal protective equipment specified in Section 8.2. Do not get in eyes or on skin or clothing. Do not breathe mist or vapor. If normal use of material presents a respiratory hazard, use only adequate ventilation or wear an appropriate respirator. Wash contaminated clothing separately before reuse or discard. Destroy contaminated shoes and leather goods such as belts and watch bands.

#### Advice on protection against fire and explosion

Keep away from heat and incompatible materials.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in original container in a dry, cool, well-ventilated area, away from incompatible materials (see Section 10.5) and food and drink. This material becomes cloudy at temperatures <4.4 °C (<40 °F). Transfer only to approved containers having correct labeling. DO NOT transfer to or store in glass containers. Keep container tightly closed. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Containers are hazardous when empty as they retain product residue. DO NOT reuse containers. Use appropriate containment to avoid environmental contamination. Ventilate enclosed areas. Do not take internally. Keep locked up and out of reach of children.

### 7.3 Specific end uses

Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

#### Occupational exposure limit values

CAS Number	Ingredient	OSHA	ACGIH	NIOSH
7664-39-3	Hydrofluoric Acid	3 ppm TWA	0.5 ppm TWA; 2 ppm, ceiling	3 ppm; 2.5 mg/m <sup>3</sup> TWA; 6 ppm; 5 mg/m <sup>3</sup> , ceiling; 30 ppm IDLH
111-42-2	Diethanolamine	-----	1 mg/m <sup>3</sup> TWA	3 ppm; 15 mg/m <sup>3</sup> TWA

### 8.2 Exposure controls

**Engineering measures:** Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. Refer to Section 7.1.

**Individual protection measures:** Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

**Hygiene measures:** Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking, smoking or using the lavatory.

**Eye/face protection:** Wear protective chemical splash goggles and full face shield during use. Refer to 29 CFR 1910.133, ANSI Z87.1 or European Standard EN 166.

**Hand protection:** Wear gloves recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period.

**Other protective equipment:** Wear protective clothing. Wear protective boots if the situation requires.

**Respiratory protection:** Always use an approved respirator when vapor/aerosols are generated. Where risk assessment shows air-purifying

respirators are appropriate use a half-mask respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Environmental exposure controls:** Do not empty into drains.

*PPE must not be considered a long-term solution to exposure control. PPE usage must be accompanied by employer programs to properly select, maintain, clean fit and use. Consult a competent industrial hygiene resource to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.*



Splash  
Goggles \*



Gloves



Protective  
Apron

\*It is recommended that a full face shield be worn in addition to splash goggles when using this product.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	Clear, colorless to pale yellow liquid
Odor	Mild
Odor Threshold	No data available
Molecular Weight	Not applicable
Chemical Formula	Not applicable
pH	5.4 - 5.6
Freezing/Melting Point, Range	0 °C (32 °F)
Initial Boiling Point	100 °C (212 °F)
Evaporation Rate	No data available
Flammability (solid, gas)	Not applicable
Flash Point	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Lower Explosive Limit (LEL)	No data available
Upper Explosive Limit (UEL)	No data available
Vapor Pressure	17 mm Hg
Vapor Density	>1 (Air = 1)
Specific Gravity	1.00 - 1.05
Viscosity	No data available
Solubility in Water	Dispersible
Partition Coefficient: n-octanol/water	No data available
Oxidizing Properties	Not applicable
Explosive Properties	Not applicable
Volatiles by Weight @ 21 °C	>85%

### 9.2 Other data

No data available

## SECTION 10 - STABILITY AND REACTIVITY

### 10.1 Reactivity

No special reactivity has been reported during normal handling and use.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

May generate hydrogen fluoride when heated. Releases ammonia when in contact with alkalis.

### 10.4 Conditions to avoid

Extreme temperatures. Contact with incompatible materials. DO NOT mix with other cleaning agents or household chemicals, including ammonia, acids, alkalis, bleaches or chlorine containing cleaners. DO NOT transfer product to or store product in glass containers.

### 10.5 Incompatible materials

Strong oxidizing agents, strong alkalis, strong bases, strong reducing agents, metals and metal powders, sulfides, cyanides

### 10.6 Hazardous decomposition products

Thermal decomposition products include hydrogen fluoride gas, hydrogen gas, oxides of carbon, ammonia and nitrogen oxides.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute oral toxicity

Hydrofluoric Acid solutions can be fatal if swallowed.

#### Acute inhalation toxicity

No data available

#### Acute dermal toxicity

No data available

#### Skin irritation

Causes severe skin irritation and serious burns. Symptoms may be delayed.

**Eye irritation**  
Causes severe burns and eye damage

**Sensitization**

No data available

**Genotoxicity in vitro**

No data available

**Mutagenicity**

No data available

**Specific organ toxicity - single exposure**

No data available

**Specific organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**11.2 Further information**

Diethanolamine (CAS #111-42-2): IARC Group 2B Carcinogen - *Possibly carcinogenic to humans*. Not identified as a probable, possible, potential or confirmed carcinogen by ACGIH, NTP or OSHA.

Cocoamide DEA (CAS #68603-42-9): IARC Group 2B Carcinogen - *Possibly carcinogenic to humans*. Not identified as a probable, possible, potential or confirmed carcinogen by ACGIH, NTP or OSHA.

No data is available regarding the mutagenicity or teratogenicity of this product, nor is there any available data that indicated that it causes adverse developmental or fertility effects.

Handle in accordance with good industrial hygiene and safety practice. Product should be handled with care.

## SECTION 12 - ECOLOGICAL INFORMATION

**12.1 Toxicity**

Large discharges of this product to the environment may decrease the pH of aquatic systems to value that may be harmful to aquatic life and soil micro-organisms.

**12.2 Persistence and degradability**

The organic components of this product are biodegradable. Inorganic substances are not biodegradable. Methods for the determination of biodegradability are not applicable to inorganic substances.

**12.3 Bioaccumulation potential**

This product is not expected to bioaccumulate

**12.4 Mobility in soil, water**

No data available

**12.5 Results of PBT and vPvB assessment**

No data available

**12.6 Other adverse effects**

**Additional ecological information**

Do not allow material to run into surface waters, wastewater or soil.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## SECTION 13 - DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Methods of disposal:** The generation of waste should be avoided or minimized whenever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**RCRA P-Series:** No listings above the reportable threshold (de minimis)

**RCRA P-Series:** No listings above the reportable threshold (de minimis)

## SECTION 14 - TRANSPORT INFORMATION

**Note:** Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

**US DOT (Domestic Ground Transportation)**

**Proper Shipping Name:** Corrosive liquid, n.o.s. (Hydrofluoric Acid, Ammonium Bifluoride)

**Hazard Class:** 8

**UN/NA:** UN1760

**Packing Group:** III

**NAERG:** Guide #154

**Packaging Authorization:** Non-Bulk: 49 CFR 173.203; Bulk: 173.241

**Packaging Exceptions:** 49 CFR 173.154

**IMO/IMDG (Water Transportation)**

**Proper Shipping Name:** Corrosive liquid, n.o.s. (Hydrofluoric Acid, Ammonium Bifluoride)

**Hazard Class:** 8



<b>UN/NA:</b>	UN1760
<b>Packing Group:</b>	III
<b>Marine Pollutant:</b>	No
<b>EMS Number:</b>	F-A, S-B

**ICAO/IATA (Air Transportation)**

<b>Proper Shipping Name:</b>	Corrosive liquid, n.o.s. (Hydrofluoric Acid, Ammonium Bifluoride)
<b>Hazard Class:</b>	8
<b>UN/NA:</b>	UN1760
<b>Packing Group:</b>	III
<b>Quantity Limitations:</b>	49 CFR 173.27 and 175.75 - Cargo Aircraft Only: 60 l; Passenger Aircraft: 5 l

**RID/ADR (Rail Transportation)**

<b>Proper Shipping Name:</b>	Corrosive liquid, n.o.s. (Hydrofluoric Acid, Ammonium Bifluoride)
<b>Hazard Class:</b>	8
<b>UN/NA:</b>	UN1760
<b>Packing Group:</b>	III

## SECTION 15 - REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for substance or mixture

#### U. S. Federal Regulations

**OSHA Hazard Communication Standard:** This material is classified as hazardous in accordance with OSHA 29 CFR 1910-1200.

**OSHA Process Safety Management Standard:** Hydrofluoric Acid (CAS # 7664-39-3) is regulated under OSHA PSM Standard 29 CFR 1910.119.

**EPA Risk Management Planning Standard:** Hydrofluoric Acid (CAS #7664-39-3) is regulated under EPA RMP Standard (RMP) 40 CFR Part 68.

**EPA Federal Insecticide, Fungicide and Rodenticide Act:** This product is not a registered Pesticide under the FIFRA, 40 CFR Part 150.

**Toxic Substance Control Act (TSCA) Inventory:** All components of this product are listed on the TSCA Inventory. This product is subject to TSCA 12(b) Export Notification.

**Drug Enforcement Administration (DEA) List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.4(f)(2) and Chemical Code Number**  
Not listed

**Drug Enforcement Administration (DEA) Lists 1 & 2, Exempt Chemical Mixtures (21 CFR 1310.12(c)) and Code Number**  
Not listed

**Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards (CFATS) Chemicals**

Hydrofluoric Acid (CAS #7664-39-3)

**Superfund Amendments and Reauthorization Act (SARA)**

**SARA Section 311/312 Hazard Categories:** Acute Health Hazard, Chronic Health Hazard

**SARA 313 Information:** Hydrofluoric Acid (CAS #7664-39-3) is subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

**SARA 302/304 Extremely Hazardous Substance:** Hydrofluoric Acid is subject to reporting requirements of these sections of Title III of SARA.

**SARA 302/304 Emergency Planning & Notification:** Hydrofluoric Acid is subject to reporting requirements of these sections of Title III of SARA.

**Comprehensive Response Compensation and Liability Act (CERCLA):** This product contains the following CERCLA reportable substances:

Ammonium Bifluoride (CAS #1341-49-7), RQ - 45.36 kg (100 lbs)

Hydrofluoric Acid (CAS #7664-39-3), RQ - 45.36 kg (100 lbs)

**Clean Air Act (CAA)**

Hydrofluoric Acid (CAS #7664-39-3), as 100% HF, is listed as a Hazardous Air Pollutant (HAP) as designated in CAA Section 112 (b).

Hydrofluoric Acid (CAS #7664-39-3), as 100% HF, is found on the CAA Section 112 (b) list of Accidental Release Prevention Substances.

This product does not contain any Class 1 or Class 2 Ozone depleters.

**Clean Water Act (CWA)**

Hydrofluoric Acid (CAS #7664-39-3) is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### U.S. State Regulations

**California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986**

Cocamide DEA (CAS #68603-42-9) and Diethanolamine (CAS # 111-42-2) are known to the State of California to cause cancer.

**Other U.S. State Inventories**

Hydrofluoric Acid (CAS #7664-39-3) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants List(s): CA, DE, ID, IL, ME, MA, MN, NC, NJ, NY, PA, RI, WA, WI.

Diethanolamine (CAS #111-42-2) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants List(s): CA, MA, MN, NJ, PA, RI.

#### Canada

**WHMIS Hazard Classification**

May be harmful if inhaled

Toxic in contact with skin

Toxic if swallowed

Causes severe skin burns and eye damage

**Canadian National Pollutant Release Inventory (NPRI):** Hydrofluoric Acid and Diethanolamine are listed on the NPRI.

**European Economic Community**

**WGK, Germany (Water danger/protection):** 1 (low hazard to waters)

## Global Chemical Inventory Lists

Country	Inventory Name	Inventory Listing*
Canada:	Domestic Substance List (DSL)	Yes
Canada:	Non-Domestic Substance List (NDSL)	No
Europe:	Inventory of New and Existing Chemicals (EINECS)	Yes
United States:	Toxic Substance Control Act (TSCA)	Yes
Australia:	Australian Inventory of Chemical Substances (AICS)	Yes
New Zealand:	New Zealand Inventory of Chemicals (NZIoC)	Yes
China:	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan:	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea:	Existing Chemicals List (ECL)	Yes
Philippines:	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Yes

\*Yes - All components of this product are in compliance with the inventory requirements administered by the governing country.

No - One or more components of this product are not on the inventory and are not exempt from listing.

## 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

## SECTION 16 - OTHER INFORMATION

### Hazardous Material Information System (HMIS)

Health	* 3
Flammability	0
Physical Hazard	1
Personal Protection	D

D = face shield, splash goggles, gloves and an apron

#### HMIS Hazard Rating Legend

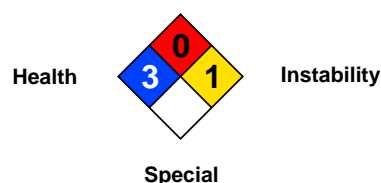
0 = Minimal 1 = Slight 2 = Moderate 3 = Serious  
4 = Severe \* = Chronic Health Hazard

#### NFPA Hazard Rating Legend

0 = Insignificant 1 = Slight 2 = Moderate  
3 = High 4 = Extreme

### National Fire Protection Association (NFPA)

#### Flammability



### Full text of GHS Hazard Phrases referenced in Section 3 (not covered in Section 2)

H300 - Fatal if swallowed  
H302 - Harmful if swallowed  
H310 - Fatal in contact with skin  
H315 - Causes skin irritation  
H318 - Causes serious eye damage  
H330 - Fatal if inhaled  
H373 - May cause damage to organs through prolonged or repeated exposure

### Abbreviation Key

ACGIH	American Conference of Governmental Industrial Hygienists
ADR	Accord Dangereux Routier (European regulations concerning the international transport of dangerous goods by road)
CAS	Chemical Abstract Services
CFR	Code of Federal Regulations
DOT	Department of Transportation
EMS Guide	Emergency Response Procedures for Ships Carrying Dangerous Goods
EPA	Environmental Protection Agency
ERG	Emergency Response Guide Book
FDA	Food and Drug Administration
GHS	Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
HCS	Hazard Communication Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IDLH	Immediately Dangerous to Life and Health
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
mppcf	Millions of Particles Per Cubic Foot
NA	North America
NAERG	North American Emergency Response Guide Book
NIOSH	National Institute for Occupational Safety
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PBT	Persistent, Bioaccumulating and Toxic
PEL	Permissible exposure limit
PMCC	Pensky-Martens Closed Cup
ppm	Parts Per Million
RCRA	Resource Conservation and Recovery Act
RID	Dangerous Goods by Rail
RQ	Reportable Quantity
TCC/Tag	Tagliabue Closed Cup

<b>TLV</b>	Threshold Limit Value
<b>TSCA</b>	Toxic Substance Control Act
<b>TWA</b>	Time-weighted Average
<b>UN</b>	United Nations
<b>VOC</b>	Volatile Organic Compounds
<b>vPvB</b>	Very Persistent and Very Bioaccumulating
<b>WHMIS</b>	Workplace Hazardous Materials Information System

BBJ Environmental Solutions assumes no legal responsibility or liability from the described product's use. All chemicals possess unknown potential hazards. The information herein should be used only to supplement the end user's existing knowledge. Read directions for proper use. This SDS was written for the product as packaged. Cleaning Contractors shall comply with all applicable OSHA regulations.

Revision Date: 28 June 2019, Version 4

Superseded SDS: 26 November 2017, Version 3