SAFETY DATA SHEET
BBJ Micro Coil Clean™
HVAC System Cleaner

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

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product Name: **BBJ Micro Coil Clean™**

Product Codes(s): 510-04

Synonyms: Aqueous cleaning solution

REACH Registration Number: Some materials in this product have been registered according to Regulation (EC) 1907/2006. The remaining substances in this product have been pre-registered according to Article 2 REACH Regulation (EC) No 1907/2006.

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

General Use: Alkaline coil cleaner

Uses advised against: No uses advised against

1.3 Details of the supplier and of the safety data sheet

Manufacturer

BBJ Environmental Solutions
6321 Pelican Creek Circle
Riverview, FL 33578 USA
+1-813-622-8550; Toll free: +1-800-889-2251

1.4 Emergency telephone number: Chemtrec (24 hours) +1-800-424-9300; International: +1-703-527-3887

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Product definition: Mixture

Classification (REGULATION (EC) No 1272/2008)

Skin Irritant (Category 2) [H315]
Eye Irritant (Category 2A) [H319]

2.2 Label Elements

Labeling (REGULATION (EC) No 1272/2008)

Hazard Symbols:

Signal Word: Warning

Hazard Statement(s):
H315 - Causes skin irritation
H319 - Causes serious eye irritation

Precautionary Statements:

[Prevention]
P264 - Wash hands or other skin areas contacting this product thoroughly after handling.
P280 - Wear protective gloves and eye protection.
P261 - Avoid breathing mist and spray.

[Response]
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P321 - Specific treatment: Refer to Section 4.2 of this SDS and seek medical attention.
P332 + P313 - If skin irritation occurs: Get medical attention.
P362 - Take off contaminated clothing and wash before reuse.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical attention.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

Chemical characterization (preparation)

% by Weight	Ingredient	CAS Number	EC Number	Index Number	EC Classification
>70	Water	7732-18-5	----------	----------	----------
3 - 8	C8-10 Alcohols, Ethoxylated	68439-46-3	215-181-3	----------	Xi, R41
3 - 5	Sodium Metasilicate	6834-92-0	229-912-9	014-010-00-8	C, R34; Xi, R37
<5	Tetrasodium ethylenediamine tetraacetate	64-02-8	200-573-9	607-428-00-2	Xn, R22; Xi, R41

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

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: If product mist causes respiratory irritation or distress, 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. Loosen tight clothing such as a collar, tie, belt or waistband. If symptoms persist, seek medical attention immediately.

Eyes: Immediately flush eyes with large amounts of water for 15 minutes. Remove contact lenses if present, after the first 5 minutes and continue rinsing, occasionally lifting upper and lower lids. Obtain immediate medical attention, preferably from an ophthalmologist.

Skin: Wash affected area with soap and water. Wash contaminated clothing and shoes thoroughly before reuse. Seek prompt medical attention if irritation persists, if rash develops or if you feel unwell.

Ingestion: Rinse mouth with water. Remove dentures if present. If conscious and alert drink 2 - 3 cupfuls of milk or water. Do not induce vomiting unless directed to do so by medical personnel. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on one side with the head lower than the waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to further dilute material. Never give anything by mouth to an unconscious person. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

Potential health symptoms and effects

Eyes: Causes moderate to severe eye irritation. Symptoms include redness, stinging, tearing and swelling.

Skin: May cause mild to moderate irritation. Repeated and prolonged use may result in drying or cracking of skin or dermatitis.

Inhalation: Inhalation of mist or spray may cause mild irritation of the respiratory tract.

Ingestion: May be harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting, abdominal cramps and diarrhea.

Chronic: No information available.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishable media

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

Unsuitable methods of extinction: None known

5.2 Special hazards arising from the substance or mixture

Closed containers may explode due to the build-up of pressure when exposed to extreme heat. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

5.3 Advice for firefighters

Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If possible, firefighters should control run-off water to prevent environmental contamination.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear appropriate protective clothing designated in Section 8. Ventilate the area.

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

Cover drains and contain spill. Cover with a large quantity of inert absorbent. Collect product using a shovel or broom and into place into an approved container for proper disposal. Observe possible material restrictions (Sections 7.2 and 10.5). Clean contaminated area with soap and water.

6.4 Reference to other sections

For indications about waste treatment, see Section 13.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling

Observe label precautions. Wear all appropriate protective equipment specified in Section 8. Keep containers closed when not in use.

Advice on protection against fire and explosion

Keep away from heat, sparks and flame. Solutions containing glycol ethers in water can form flammable vapors with air if heated sufficiently.

7.2 Conditions for safe storage, including any incompatibilities

Keep in cool, dry, ventilated storage areas in closed containers. Transfer only to approved containers having correct labeling. Containers that have been opened should be carefully resealed and kept upright to prevent leakage. Do not take internally. Keep 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

Contains no substances with occupational exposure values.

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 See 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 or using the lavatory.

Eye/face protection: Wear protective goggles or safety glasses with unperforated side shields during use. Refer to 29 CFR 1910.133, ANSI Z87.1 or European Standard EN 166.

Hand Protection: Wear rubber gloves or 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: Protective clothing. Protective boots, if the situation requires.

Respiratory Protection: None required with normal use. Always use an approved respirator when vapor/aerosols are generated. Where risk assessment shows air-purifying respirators are appropriate use a full-faced 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.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Clear yellow liquid
Odor	Mild
Odor Threshold	Not determined
Molecular Weight	Not applicable
Chemical Formula	Not applicable
pH	>12 @ 20 °C (68 °F)
Freezing/Melting Point	<0 °C (<32 °F)
Initial Boiling Point	100 °C (212 °F)
Evaporation Rate	Not determined
Flammability (solid, gas)	Not applicable
Flash Point	Not determined
Autoignition Temperature	Not determined
Decomposition Temperature	Not determined
Lower Explosive Limit (LEL)	Not determined
Upper Explosive Limit (UEL)	Not determined
Vapor Pressure	Not determined
Vapor Density	Not determined
Specific Gravity	1.020
Viscosity	Not determined
Solubility in Water	Complete
Partition Coefficient: n-octanol/water	Not determined
Volatiles by Volume @ 70 ºF	>80%

9.2 Other data

No data available

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

No special reactivity has been reported.

Hazardous polymerization will not occur.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None known

10.4 Conditions to avoid

Extreme temperatures. Contact with incompatible materials.

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Thermal decomposition products include oxides of carbon, oxides of nitrogen, oxides of sulfur

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity

LD50 - Rat: 1,900 mg/kg

Acute inhalation toxicity

LC50 - Rat: >2.013 mg/l

Acute dermal toxicity

LD50 - Rat: >2,000 mg/kg

Skin irritation
May cause mild skin irritation.

Eye irritation
Causes moderate to severe eye irritation.

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

The remaining components in this product are not listed as carcinogens by ACGIH, IARC, NTP or OSHA. No data is available regarding the mutagenicity and/or teratogenicity of this product, nor is there any available data that indicates that it causes adverse developmental and/or fertility effects.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity

This product is expected to have low acute toxicity to aquatic organisms.

12.2 Persistence and degradability

Product is expected to be readily biodegradable.

12.3 Bioaccumulation potential

Material is not expected to bioaccumulate.

12.4 Mobility

The components in this product are water soluble and highly mobile in soil.

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, sewers or soil.

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

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.

Hazardous waste: The classification of this product may meet the criteria for a hazardous waste.

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.

SEE BILL OF LADING FOR SHIPPING DATA

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: Components of this product are not regulated under OSHA PSM Standard 29 CFR 1910.119.

EPA Risk Management Planning Standard: Components of this product are not regulated under EPA RMP Standard (RMP) 40 CFR Part 68.

TSCA Status: All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory.

Superfund Amendments and Reauthorization Act (SARA)

SARA Section 311/312 Hazard Categories: Acute Health Hazard

SARA 313 Information: None of the chemicals in this product exceed the threshold (de minimis) reporting levels established by Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

SARA 302/304 Extremely Hazardous Substance
No components of the product exceed the threshold (de minimis) reporting levels established by of these sections of Title III of SARA.

SARA 302/304 Emergency Planning & Notification:
No components of the product exceed the threshold (de minimis) reporting levels established by of these sections of Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): This product contains the following CERCLA reportable substances:
Sodium Hydroxide (CAS #1310-73-2), RQ - 453.6 kg (1,000 lbs)

Clean Air Act (CAA)
This product does not contain any chemicals that are listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).
This product does not contain any Class 1 Ozone depletors.
This product does not contain any Class 2 Ozone depletors.

Clean Water Act (CWA)
Sodium Hydroxide (CAS #1310-73-2) is listed as Hazardous Substances 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:
This product contains no chemical(s) known to the state of California to cause cancer or other reproductive harm.

Other U.S. State Inventories
Sodium Hydroxide (CAS #1310-73-2) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/ Air Pollutants List(s): CA, DE, ID, MA, MN, NJ, PA, WA, WI.

Trisodium Nitrilotriacetate (CAS #5064-31-3) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants List(s): MA

Canada

WHMIS Hazard Symbol and Classification:

D2B - Eye irritation - toxic - other

Canadian Controlled Products Regulations (CPR): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations, and the SDS contains all the information required by the Controlled Products Regulations.

Canadian Ingredient Disclosure List (IDL): Sodium Metasilicate, Glycolic Acid, and Sodium Hydroxide are listed on the IDL.

Canadian National Pollutant Release Inventory (NPRI): None of the chemicals in this product are listed on the NPRI.

European Economic Community

Labeling (67/548/EEC to 1999/45/EC)

Xi - Irritant

Risk Phrases: R36/38 - Irritating to eyes and skin.

Safety Phrases: S2 - Keep out of the reach of children.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/39 - Wear suitable gloves and eye/face protection.

WGK, Germany (Water danger/protection): 2

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" indicates that all components of this product are in compliance with the inventory requirements administered by the governing country.
*"No" indicates that 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	2
Flammability	0
Physical Hazard	0
Personal Protection	B

HMIS Hazard Rating Legend

* = Chronic Health Hazard
0 = INSIGNIFICANT
1 = SLIGHT
2 = MODERATE
3 = HIGH
4 = EXTREME

SECTION 16 - OTHER INFORMATION

National Fire Protection Association (NFPA)

Flammability

Health **Instability**

Special

NFPA Hazard Rating Legend

* = Chronic Health Hazard	2 = MODERATE
0 = INSIGNIFICANT	3 = HIGH
1 = SLIGHT	4 = EXTREME

Full Text of Risk (R) – Phrases Referenced in Section 3.

R22 - Harmful if swallowed.
R34 - Causes burns.
R37 - Irritating to respiratory system.
R41 - Risk of serious damage to eyes.

BBJ Environmental Solutions assumes no legal responsibility or liability form 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

Preparation Date: 11 June 2013