SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier
Product Name: BBJ MMR II
Product Codes(s):  611-04; 620-12; 650-01; 655-01
EPA Registration No.: 1839-83-67212
Synonym(s): Aqueous disinfecting solution
REACH Registration Number: No data available

1.2 Relevant identified uses of the substance or mixture and uses advised against
General use: Industrial disinfectant/cleaner
Uses advised against: No uses advised against

1.3 Details of the supplier and of the safety data sheet
Distributor: Atlantic Chemical & Equipment
3471 Atlanta Industrial Parkway, Suite 200
Atlanta, GA 30331 USA
Toll free: +1-800-929-2436

Manufacturer: 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 28 CFR 1910 (OSHA HCS) and Regulation (EC) No 1272/2008
Acute Toxicity, Oral - Category 4 [H302]
Eye Damage - Category 1 [H318]

2.2 Label Elements
Hazard Symbol(s):

- GHS05
- GHS07

Signal Word: Danger

Hazard Statement(s):
- H302 - Harmful if swallowed
- H318 - Causes serious eye damage

Precautionary Statements:
[Prevention]
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 and eye protection.

[Response]
P301 + P330 + P312 - IF SWALLOWED: Rinse mouth. Do not induce vomiting. Call a POISON CENTER or doctor if you feel unwell.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor.

[Disposal]
P501 - Dispose of contents and containers in accordance with national/local regulations.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Not applicable

3.2 Mixtures

<table>
<thead>
<tr>
<th>% by Weight</th>
<th>Ingredient</th>
<th>CAS Number</th>
<th>EC Number</th>
<th>Index Number</th>
<th>GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;12</td>
<td>Diethylene glycol monobutyl ether</td>
<td>112-34-5</td>
<td>203-961-6</td>
<td>603-096-00-8</td>
<td>H319</td>
</tr>
<tr>
<td>&lt;7</td>
<td>Tetrasodium ethylenediamine tetraacetate</td>
<td>64-02-8</td>
<td>200-573-9</td>
<td>607-428-00-2</td>
<td>H302, H318</td>
</tr>
<tr>
<td>&lt;2</td>
<td>Sodium metasilicate</td>
<td>6834-92-0</td>
<td>201-069-1</td>
<td>014-010-00-8</td>
<td>H314, H335</td>
</tr>
<tr>
<td>&lt;2</td>
<td>Alcohols, C9-11, ethoxylated</td>
<td>68439-46-3</td>
<td>614-482-0</td>
<td>607-428-00-2</td>
<td>H302, H318, H401</td>
</tr>
<tr>
<td>&lt;2</td>
<td>Alkyl (C12 - C18) dimethyl ethylbenzyl ammonium chloride</td>
<td>85409-23-0</td>
<td>287-090-7</td>
<td>603-096-00-8</td>
<td>H302, H314, H400</td>
</tr>
</tbody>
</table>

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

4.1 Description of first aid measures
   Inhalation: If product vapor or 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.
   Eyes: Immediately flush eyes with large amounts of water for 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses, if present and easy to do, after the first 5 minutes and continue rinsing. Seek immediate medical attention, preferably from an ophthalmologist.
   Skin: Flush skin with large amounts of water while removing contaminated clothing and continue rinsing for at least 15 minutes. Wash contaminated clothing and shoes thoroughly before reuse. If irritation occurs or persists, seek medical attention.
   Ingestion: Rinse mouth with water. Remove dentures if present. If swallowed, give 2 - 3 glasses of water to drink if victim is conscious and alert. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Obtain medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed
   Potential health symptoms and effects
     Eyes: Causes severe eye irritation and serious eye damage. Symptoms may include redness, swelling, pain and tearing. Vapor or mist can cause eye irritation.
     Skin: May cause skin irritation with redness, itching, swelling and discomfort.
     Inhalation: Inhalation of vapor or mist may cause irritation of the nose and upper respiratory tract. Symptoms may include irritation of the nose and throat and coughing.
     Ingestion: Causes irritation of the gastrointestinal tract. Symptoms may include sore throat, nausea, vomiting and diarrhea.
   Chronic: Prolonged or repeated contact with mist or vapor may result in serious eye irritation, defatting of skin and dermatitis.

4.3 Indication of any immediate medical attention and special treatment needed
   Advice to doctor and hospital personnel
   Possible mucosal damage may contraindicate the use of gastric lavage.

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
   Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Closed containers may explode due to buildup 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 immediate medical attention.
   Explosion hazards: None known

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 buildup and possible autoignition or explosion when exposed to extreme heat. If possible, firefighters should control runoff water 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 and equipment designated in Section 8.2. Ventilate the area. Remove all sources of ignition. No smoking. Clean up spills immediately. 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 direction. Cover drains and contain spill. Cover with a large quantity of non-combustible, inert absorbent. Do not use combustible materials such as sawdust. Collect material and place in an approved container for disposal. Observe possible restrictions (Sections 7.2 and 10.5). Do not allow material or runoff from contaminated areas to enter floor drains or storm drains and ditches that lead to waterways. Dispose of via a licensed waste disposal contractor.

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
   Wear all appropriate personal protective equipment specified in Section 8.2. Do not get in eyes or on skin or clothing. Do not inhale mist or vapor. No smoking. If normal use of material presents a respiratory hazard, use only adequate ventilation or wear appropriate respiratory protection.
   Advice on protection against fire and explosion
   Keep away from heat and incompatible materials.

7.2 Conditions for safe storage, including any incompatibilities
   Wear all appropriate personal protective equipment specified in Section 8.2. Do not get in eyes or on skin or clothing. Do not inhale mist or vapor. Having correct labeling. Keep containers tightly closed when not in use. Protect containers against physical damage. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Containers of this material are hazardous when empty as they contain product residues. Use appropriate containment to avoid environmental contamination. Ventilate closed areas. Keep out of reach of children.
SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters
Contains no substances with occupational exposure limits.

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 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.

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.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, colorless liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Scented (Lemon/citrus)</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Chemical Formula</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>11.5 - 12.5 @ 20 °C</td>
</tr>
<tr>
<td>Freezing/Melting Point</td>
<td>&gt;0 °C (32 °F)</td>
</tr>
<tr>
<td>Initial Boiling Point</td>
<td>&gt;100 °C (&gt;212 °F)</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>0.3 (n-BuAc = 1) [estimated]</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt;83.9 °C (&gt;201 °F) PMCC</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower Explosive Limit (LEL)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper Explosive Limit (UEL)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.010 - 1.050</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Dispersible</td>
</tr>
<tr>
<td>Partition Coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOCs)</td>
<td>0%</td>
</tr>
</tbody>
</table>

9.2 Other data
No data available

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity
No special reactivity has been reported.

10.2 Chemical stability
Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.5 Incompatible materials
Strong oxidizing agents, acids, alkalis

10.6 Hazardous decomposition products
Thermal decomposition products include carbon oxides, nitrogen oxides, ammonia, low molecular weight hydrocarbons.

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity
Product is expected to have low oral toxicity.

Acute inhalation toxicity
Product is expected to have low inhalation toxicity.

Acute dermal toxicity
Product is expected to have low dermal toxicity.

Skin irritation
May cause skin

Eye irritation
Causes serious 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
No component of this product present at levels greater than or equal to the 0.1% threshold (de minimis) is identified as a probable, possible, potential or confirmed carcinogen by IARC, ACGIH, NTP or OSHA.

This product contains trace amounts (<0.1%) of Nitriloacetic Acid (NTA). NTA and its salts are classified as carcinogens by IARC (Group 2B - possibly carcinogenic to humans), by NTP (may be reasonably anticipated to be a carcinogen) and by OSHA (select carcinogen).

Reproductive effects have been reported for EDTA and its sodium salts. In some studies birth defects in laboratory animals were reported only at exaggerated doses that were toxic to the mother. These effects are likely associated with zinc deficiency due to chelation. Exposures having no effect on the mother should have no effect on the fetus.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity
This product contains substances that are very toxic to aquatic organisms and may cause long term effects in the aquatic environment. Quaternary ammonium compounds are highly toxic to fish and aquatic organisms.

12.2 Persistence and degradability
Organic substances in this product are expected to biodegrade.

12.3 Bioaccumulation potential
Chemicals in this product are not expected to bioaccumulate

12.4 Mobility
This product is expected to have high mobility 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 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 listing
**RCRA U-Series:** No listing

### 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.

**NOT REGULATED FOR TRANSPORT**

### 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.

**Toxic Substance Control Act (TSCA) Inventory:** All components of this product are listed on the TSCA Inventory. This product is not subject to TSCA 12(b) Export Notification.

**Drug Enforcement Administration (DEA) List 2, Essential Chemicals:** Contains no chemicals regulated under DEA 21 CFR 1310.02(b) and 1310.4(f)(2) and Chemical Code Number 40 CFR Part 730.5.

**Drug Enforcement Administration (DEA) Lists 1 & 2, Exempt Chemical Mixtures:** No listings

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

No listings

**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 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 these sections of Title III of SARA.

**Comprehensive Response Compensation and Liability Act (CERCLA):** Contains no chemicals regulated under CERCLA.

**Clean Air Act (CAA)**

Glycol Ethers (EDF-109) are listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).

This product does not contain any Class 1 Ozone depletors.

**Clean Water Act (CWA)**

Glycol Ethers (EDF-109) are 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) exceeding the de minimis (0.1%) reporting level that are known to the State of California to cause cancer or reproductive harm.

**Other U.S. State Inventories**

Glycol Ethers are listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollution lists: NJ, PA, WV, WI.

**Canada**

**WHMIS Hazard Classification**

Causes skin irritation and serious eye damage

Harmful if swallowed

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

**European Economic Community**

**WGK, Germany (Water danger/protection):** 2 (hazardous to waters)

**Global Chemical Inventory Lists**

<table>
<thead>
<tr>
<th>Country</th>
<th>Inventory Name</th>
<th>Inventory Listing*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Domestic Substance List (DSL).</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substance List (NDSL).</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>Inventory of New and Existing Chemicals (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>United States</td>
<td>Toxic Substance Control Act (TSCA)</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### 15.2 Chemical safety assessment
For this product a chemical safety assessment was not carried out.

#### SECTION 16 - OTHER INFORMATION

<table>
<thead>
<tr>
<th>Hazardous Material Information System (HMIS)</th>
<th>National Fire Protection Association (NFPA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="health_icon" alt="Health" /></td>
<td><img src="health_icon" alt="Health" /></td>
</tr>
<tr>
<td><img src="flammability_icon" alt="Flammability" /></td>
<td><img src="flammability_icon" alt="Flammability" /></td>
</tr>
<tr>
<td><img src="physical_hazard_icon" alt="Physical Hazard" /></td>
<td><img src="physical_hazard_icon" alt="Physical Hazard" /></td>
</tr>
<tr>
<td><img src="personal_protection_icon" alt="Personal Protection" /></td>
<td><img src="personal_protection_icon" alt="Personal Protection" /></td>
</tr>
</tbody>
</table>

**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

**Special**
- 1 = Health
- 1 = Flammability
- 0 = Instability

Full text of GHS Hazard Phrases referenced in Section 3 (not covered in Section 2)
- H314 - Causes severe skin burns and eye damage
- H319 - Causes serious eye irritation
- H335 - May cause respiratory irritation
- H400 - Very toxic to aquatic life
- H401 - Toxic to aquatic life

**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
- 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
- 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
- TLV: Threshold Limit Value
- TSCA: Toxic Substance Control Act
- TWA: Time-Weighted Average
- UN: United Nations
- VOC: Volatile Organic Compounds
- vPvB: Very Persistent and Very Bioaccumulating
- WHMIS: Workplace Hazardous Materials Information System
BBJ Environmental Solutions assumes no legal responsibility or liability for 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. Product may turn yellow, orange or brown if pH becomes alkaline; however, this should not affect the product's effectiveness. If frozen, crystals may remain in the container after thawing. Shake until dissolved before using. Cleaning Contractors shall comply with all applicable OSHA regulations.

Revision Date: 28 June 2019, Version 4
Supersedes SDS: 05 October 2017, Version 3