SECTION 1: IDENTIFICATION

1.1. Product Identifier
Product Form: Mixture
Product Family: Alkaline aqueous solution of inorganic and organic corrosion inhibitors.
Product Name: VGAP-801
Product Description: Universal Add Pak Precharged with several different dye package variations
Synonyms: None

1.2. Intended Use of the Product
Inhibitor package for automotive antifreeze or additive package for automotive antifreeze/coolant.

1.3. Name, Address, and Telephone of the Responsible Party
Company
Additives Plus
3412 Pemberton Sq. Blvd.
Suite 2-317
Vicksburg, MS 39180
Tel: 303-916-0639 Fax: 601-714-1602
MSDS on-line: www.additivesplus.com

1.4. Emergency Telephone Number
Emergency Number : CHEMTREC 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture
Classification (GHS-US)
Acute Tox., Oral 4
Eye Damage/Irritation 2A
Skin Corrosion/Irritation 2
STOT, Single 3

2.2. Label Elements
GHS-US Labeling
Hazard Pictograms (GHS-US) :

Signal Word (GHS-US) : Warning
Hazard Statements (GHS-US) :
H302- Harmful if swallowed
H315- Causes skin irritation
H317- Causes serious eye irritation
H335- May cause respiratory irritation

Precautionary Statements (GHS-US) :
Prevention:
P264- Wash hands/affected area thoroughly after handling.
P270- Do not eat, drink or smoke when using this product.
P280- Wear protective gloves/clothing.
P261- Avoid breathing fumes, mist, vapors or spray.
P271- Use only in well-ventilated area.
Response:
P301+P312- If swallowed: Call a poison center if you feel unwell.
P330- Rinse mouth.
P302+P352- If on skin: Wash with plenty of water.
P321- Specific treatment (See label)
2.3. Other Hazards
Not Classified

2.4. Unknown Acute Toxicity (GHS-US)
None of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>% (w/w)</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deionized Water</td>
<td>(CAS No) 7732-18-5</td>
<td>Balance</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Sodium Nitrite</td>
<td>(CAS No) 7632-00-0</td>
<td>10-20%</td>
<td>Oxidizing solid, 3 Acute Tox., Oral, 3 Acute Tox., Aquatic, 1 Chronic Tox., Aquatic, 1</td>
</tr>
<tr>
<td>Proprietary Inhibitors</td>
<td>Not Classified</td>
<td>&lt; 10%</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>(CAS No) 1310-73-2</td>
<td>1%-7%</td>
<td>Skin corrosion/irritation, 1 Serious eye damage/irritation, 1 Acute Tox., Aquatic, 3</td>
</tr>
<tr>
<td>Silicic Acid, Disodium Salt; Sodium Metasilicate, Pentahydrate</td>
<td>(CAS No) 6834-92-0</td>
<td>1%-7%</td>
<td>Skin corrosion/irritation, 1B Eye damage/irritation, 1 STOT Single Exp., 3 Corrosive to metals, 1</td>
</tr>
<tr>
<td>Sodium Tetraborate Pentahydrate</td>
<td>(CAS No) 12179-04-3</td>
<td>5%-15%</td>
<td>Serious eye damage/irritation, 1 Reproductive Tox., 1B STOT Single Exp., 3</td>
</tr>
<tr>
<td>2-Phosphono-1, 2, 4-Butanetricarboxylic Acid</td>
<td>(CAS No) 37971-36-1</td>
<td>1%-10%</td>
<td>Corrosive to metals, 1</td>
</tr>
<tr>
<td>1H-Benzotriazole.6(OR7)-Methyl-,Sodium Salt(1:1)</td>
<td>(CAS No) 64665-57-2</td>
<td>1%-8%</td>
<td>Acute Tox., Oral, 4 Skin corrosion/irritation, 1 Serious eye damage/irritation, 1 Acute Tox., Aquatic, 3</td>
</tr>
</tbody>
</table>
SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures
General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).
Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
Skin Contact: Remove contaminated clothing. Drench affected area with water or soap and water for at least 15 minutes. Wash contaminated clothing before reuse. Obtain medical attention if irritation develops or persists.
Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.
Ingestion: Toxic if swallowed. Call a poison center if you feel unwell.

4.2. Most Important Symptoms and Effects Both Acute and Delayed
General: No known significant effects or critical hazards.
Inhalation: Causes respiratory irritation.
Skin Contact: Not classified.
Eye Contact: Direct contact with the eyes may irritate delicate eye tissue.
Ingestion: Ingestion is likely to cause gastrointestinal irritation or have adverse effects.
Chronic Symptoms: No known significant effects or critical hazards.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed
If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media
Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.
Unsuitable Extinguishing Media: None Noted

5.2. Special Hazards Arising From the Substance or Mixture
Fire Hazard: Not flammable
Explosion Hazard: Closed containers may rupture or explode due to steam pressure build-up when exposed to extreme heat. Water may be used to cool closed containers.
Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters
Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.
Firefighting Instructions: Use water spray or fog for cooling exposed containers.
Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
Hazardous Combustion Products: Under fire conditions, may produce fumes, smoke, oxides of carbon and hydrocarbons.
Other Information: Refer to Section 9 for flammability properties.
Reference to Other Sections
Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures
General Measures: Avoid all contact with skin, eyes, or clothing.

6.1.1. For Non-Emergency Personnel
Protective Equipment: Use appropriate personal protection equipment (PPE).

6.1.2. For Emergency Personnel
Protective Equipment: Equip cleanup crew with proper protection.  
Emergency Procedures: Stop leak if safe to do so.

6.2. Environmental Precautions
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and Material for Containment and Cleaning Up
For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections
See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling
Additional Hazards When Processed: Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities
Technical Measures: Comply with applicable regulations.
Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.
Incompatible Materials: Strong oxidizing agents, strong acids.

7.3. Specific End Use(s)
Inhibitor package for automotive antifreeze or additive package for automotive antifreeze/cooler.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters
For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Sodium Nitrile (CAS No) 7632-00-0  
10mg/m³ (TWA ACGIH)  
15mg/m³ (TWA OSHA)  
4mg/m³ (TWA DFG MAKS)

Sodium Hydroxide (CAS No) 1310-73-2  
2mg/m³ (PEL OSHA)  
2mg/m³ (ACGIH CEILING)  
2mg/m³ (NIOSH CEILING)

8.2. Exposure Controls
Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.


Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Where skin contact may occur, chemical-impervious gloves should be worn.

Eye Protection: Chemical goggles or safety glasses. Use chemical goggles or full face shield when the danger of splashing exists.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.
Consumer Exposure Controls: Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

- **Physical State**: Liquid
- **Appearance**: Slightly cloudy green liquid
- **Odor**: Amine odor
- **Odor Threshold**: Not available
- **pH**: 11.5-13.0
- **Evaporation Rate**: <1
- **Melting Point**: Not available
- **Boiling Point**: 175-330°F
- **Flash Point**: Not available
- **Auto-ignition Temperature**: Not available
- **Decomposition Temperature**: Not available
- **Flammability (solid, gas)**: Not available
- **Lower Flammable Limit**: Not available
- **Upper Flammable Limit**: Not available
- **Vapor Pressure**: 12-14 mm Hg
- **Relative Vapor Density at 20 °C**: >1
- **Relative Density**: Not available
- **Specific Gravity**: 1.280-1.350
- **Solubility**: 100%
- **Partition Coefficient: N-Octanol/Water**: Not available
- **Viscosity**: Not available
- **Viscosity, Kinematic**: Not available
- **Explosive Properties**: Product is not explosive
- **Explosion Data – Sensitivity to Mechanical Impact**: Not expected to present an explosion hazard due to mechanical impact
- **Explosion Data – Sensitivity to Static Discharge**: Not expected to present an explosion hazard due to static discharge

SECTION 10: STABILITY AND REACTIVITY

10.1. **Reactivity**: Hazardous reactions will not occur under normal conditions.
10.2. **Chemical Stability**: Stable under recommended handling and storage conditions (see section 7).
10.3. **Possibility of Hazardous Reactions**: Hazardous polymerization will not occur.
10.4. **Conditions to Avoid**: Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.
10.5. **Incompatible Materials**: Strong oxidizing agents, strong acids.
10.6. **Hazardous Decomposition Products**: If involved in a fire the following decomposition products may be generated: Carbon dioxide, carbon monoxide, nitrogen oxides, hydrogen cyanide (possible in reducing atmospheres).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. **Information on Toxicological Effects - Product**
- **Acute Toxicity**: Harmful if swallowed.
- **LD50 and LC50 Data**: Not available
- **Skin Corrosion/Irritation**: Causes skin irritation.
- **Eye Damage/Irritation**: Causes serious eye irritation.
- **Respiratory or Skin Sensitization**: Not classified
Germ Cell Mutagenicity: Not classified  
Teratogenicity: Not classified  
Carcinogenicity: Not classified  
Specific Target Organ Toxicity (Repeated Exposure): Not classified  
Reproductive Toxicity: Not classified  
Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.  
Aspiration Hazard: Not classified  
Symptoms/Injuries After Inhalation: Airborne concentrations of mist or spray may cause damage to the upper respiratory tract and even to lung tissue. Vapor/fumes are not generated at significant levels until temperature is elevated.  
Symptoms/Injuries After Skin Contact: Destructive to tissues contacted and produces irritation. The severity and extent of damage increases with length of contact time.  
Symptoms/Injuries After Eye Contact: Direct contact with the eyes may be irritating.  
Symptoms/Injuries After Ingestion: Swallowing can cause severe burns and tissue perforation of mucous membranes of the mouth, throat, esophagus and stomach.  
Chronic Symptoms: Not Classified  

11.2. Information on Toxicological Effects - Ingredient(s)  
LD50 and LC50 Data:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Route</th>
<th>LD50/LC50 Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Tetraborate Pentahydrate (CAS No) 12179-04-3</td>
<td>Oral/Rat</td>
<td>3305mg/kg</td>
</tr>
<tr>
<td>Sodium Nitrite (CAS No) 7632-00-0</td>
<td>Oral/Rat</td>
<td>85mg/kg</td>
</tr>
<tr>
<td>Silicic Acid, Disodium Salt; Sodium Metasilicate, Pentahydrate (CAS No) 6834-92-0</td>
<td>Oral/Rat</td>
<td>1152mg/kg</td>
</tr>
</tbody>
</table>

SECTION 12: ECOLOGICAL INFORMATION  
12.1. Toxicity  
Ecology - General: Not toxic to aquatic life.  
12.2. Persistence and Degradability  
Not available  
12.3. Bioaccumulative Potential  
Not available  
12.4. Mobility in Soil  
Not available  
12.5. Other Adverse Effects  
Other Information: Avoid release to the environment.  

SECTION 13: DISPOSAL CONSIDERATIONS  
13.1. Waste treatment methods  
Sewage Disposal Recommendations: Do not empty into drains; dispose of this material and its container in a safe way. Do not empty into drains. Do not dispose of waste into sewer.  
Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.  

SECTION 14: TRANSPORT INFORMATION  
14.1. In Accordance with DOT  
Shipping Name: Corrosive Liquids, Basic, Inorganic, N.O.S., Contains:(Potassium Hydroxide)  
Hazard Class: 8 (Corrosive Liquids, Basic, Inorganic, N.O.S.)  
DOT Identification No: UN 3266
Packing Group: III
Label: Danger: corrosive; causes burns and irritation to skin and eyes
DOT Class: 7D

14.2. In Accordance with IMDG
Not regulated for transport

14.3. In Accordance with IATA
Not regulated for transport

14.4. In Accordance with TDG
Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations
SARA Title III
Reportable

15.2. US State Regulations
None noted

15.3. Canadian Regulations

| WHMIS Classification | Not Classified |

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

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 07/26/2015
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Party Responsible for the Preparation of This Document
Additives Plus
3412 Pemberton Sq. Blvd.
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Vicksburg, MS 39180
Tel: 303-916-0639 Fax: 601-714-1602
MSDS on-line: www.additivesplus.com

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS 2