Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Version: VGAP801.003



SECTION 1: IDENTIFICATION

Product Identifier 1.1.

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 **Emergency Telephone Number**

Emergency Number : CHEMTREC 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture 2.1.

Classification (GHS-US)

Acute Tox., Oral 4 Eye Damage/Irritation 2A Skin Corrosion/Irritation 2 3 STOT, Single

Label Elements 2.2.

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 eve 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)

1/7 07/26/2015 EN (English US)

Safety Data Sheet

Additives Plus Reinventing Corrosion Inhibition

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Version: VGAP801.003

P332+P313- If skin irritation occurs get medical advice/attention.

P362+P364-Take off contaminated clothing and wash.

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 advice/attention.

P304+P340-If inhaled: Remove person to fresh air and keep comfortable for breathing.

P312-Call a poison center if you feel unwell.

Storage:

P403+P233-Store in a well-ventilated place. Keep container tightly closed.

P405-Store locked up.

Disposal:

P507-Dispose of contents/container in accordance with local, regional, national and international regulations.

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

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

07/26/2015 EN (English US) 2/7

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Version: VGAP801.003



Sodium Nitrate	(CAS No) 7631-99-4	1%-5%	Oxidizing Solid, 3
			Mildly irritating to eyes, 2B

^{*}The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

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).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

07/26/2015 EN (English US) 3/7

^{*}More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Version: VGAP801.003

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/coolant.

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 Nitrite (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.

Personal Protective Equipment: Protective Eyewear. Impervious Gloves. Protective Clothing.









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.

07/26/2015 EN (English US) 4/7



Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Version: VGAP801.003



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 odorOdor Threshold: Not availablepH: 11.5-13.0

Evaporation Rate : <1

Melting Point Not available **Boiling Point** 175-330°F Flash Point Not available Not available **Auto-ignition Temperature Decomposition Temperature** Not available Flammability (solid, gas) Not available **Lower Flammable Limit** Not available **Upper Flammable Limit** Not available Vapor Pressure 12-14mm 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

07/26/2015 EN (English US) 5/7

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Version: VGAP801.003



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.

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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

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Sodium Tetraborate Pentahydrate (CAS No) 12179-04-3									
Oral/Rat 3305mg/kg									
Sodium Nitrite (CAS No) 7632-00-0									
Oral/Rat	85mg/kg								
Silicic Acid, Disodium Salt; Sodium Metasilicate, Pentahydrate (CAS No) 6834-92-0									
Oral/Rat	1152mg/kg								

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

07/26/2015 EN (English US) 6/7

Safety Data Sheet

Additives Plus
Reinventing Corrosion Inhibition

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Version: VGAP801.003

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

WHIVIIS Classification					Not Class	siriea							

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.

Suite 2-317

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

07/26/2015 EN (English US) 7/7