

VGAP-700 Plus

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Version: 100008.003

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Family: Alkaline aqueous solution of inorganic and organic corrosion inhibitors.

Product Name: VGAP-700 Plus

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
Skin Corrosion/ Irritation	1
STOT, Single	3

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :



Signal Word (GHS-US) :

Danger

Hazard Statements (GHS-US) :

H302 – Harmful if swallowed
H314 – Causes severe skin burns and eye damage
H335 – May cause respiratory Irritation.

Precautionary Statements (GHS-US) :

Prevention
P264 – Wash hands thoroughly after handling
P270 – Do not eat, drink, or smoke when using this product.
P260 – Do not breathe dust or mist.
P280 – Wear protective gloves, clothing, eye protection, face protection.
P271 – Use only outdoors or in a well-ventilated area.

Response

P301 + P312 – IF SWALLOWED: Call a POISON CENTER if you feel unwell.
P330 - Rinse Mouth
P301 + P330 + P331 – IF SWALLOWED: Rinse Mouth. Do not induce vomiting.
P303 + P361 + P353 – IF ON SKIN (or hair) take off immediately all contaminated clothing. Rinse skin with water/shower.
P363 – Wash all contaminated clothing before reuse.
P304 + P340 – IF INHALED: remove person to fresh air and keep comfortable for breathing.

VGAP-700 Plus

Safety Data Sheet

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

Version: 100008.003

Precautionary Statements (GHS-US) : P310 – Immediately call a POISON CENTER.
P321 – Specific treatment refer to Safety Data Sheet or label.
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do so. Continue Rinsing.
P312 – Call a doctor if you feel unwell.

Storage

P405 – Store locked up
P403 + P233 – Store in well ventilated place. Keep container tightly closed.

Disposal

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

None known

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
Potassium hydroxide	(CAS No) 1310-58-3	2-7%	Acute Tox Oral, 3 Skin Corrosion Irritation, 1 Eye Damage/ Irritation, 1 Aquatic, Acute, 3 Aquatic, Chronic, 3
Monoethanolamine	(CAS No) 141-43-5	15-28%	Acute Tox, Oral, 4 Acute Tox, Dermal, 4 Acute Tox, Inhalation, 4 Skin Corrosion/ Irritation, 1B Eye Damage/ Irritation, 1 STOT Single, 3
Sodium Tetraborate Pentahydrate	(CAS No) 12179-04-3	1 – 5%	Eye Damage/ Irritation, 1 Reproductive Tox, 1B STOT, Single, 3
Sodium Tolytriazole	(CAS No) 64665-57-2	1 – 5%	Acute Tox Oral, 4 Skin Corrosion/ Irritation, 1 Eye Damage/ Irritation, 1 Aquatic Acute, 3
Silicic Acid, Potassium Salt	(CAS No) 1312-76-1	1 – 5%	Skin Corrosion/Irritation, 1 Eye Damage/ Irritation, 1
Proprietary Inhibitors	Not Classified	< 2 %	Not classified

*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].

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

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

VGAP-700 Plus

Safety Data Sheet

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

Version: 100008.003

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. Do not induce vomiting, immediately seek medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: No known significant effects or critical hazards.

Inhalation: Inhalation of harmful levels of vapors is unlikely due to the relatively low vapor pressure and the relatively low concentrations of ingredients. Can cause respiratory irritation.

Skin Contact: Destructive to tissues contacted and produces severe burns. The severity of damage and extent of irreversibility increases with length of contact time.

Eye Contact: Direct contact with the eyes is likely irritating.

Ingestion: Ingestion is likely to cause mouth, throat and gastrointestinal irritation or have adverse effects. Sodium nitrite can cause cyanosis, headache, dizziness, nausea and methemoglobinemia.

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

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

VGAP-700 Plus

Safety Data Sheet

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

Version: 100008.003

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.

Chemical Name	CAS No	Value	Regulatory Agency
Potassium hydroxide	(CAS No) 1310-58-3	2 mg 2mg	ACGIH Ceiling NIOSH TWA
Monoethanolamine	(CAS No) 141-43-5	6 mg/ 3 ppm 6 ppm 3 ppm 15 mg / 6 ppm 8 mg/ 3 ppm	OSHA PEL ACGIH STEL ACGIH TWA NIOSH STEL NIOSH TWA
Sodium Tetraborate Pentahydrate	(CAS No) 12179-04-3	1 mg 10 mg	NIOSH TWA OSHA TWA

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

VGAP-700 Plus

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Version: 100008.003

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 translucent liquid
Odor	: Amine odor
Odor Threshold	: Not available
pH	: 12.5-13.8
Evaporation Rate	: <1
Melting Point	: Not available
Boiling Point	: 200-220°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	: 12-14mm Hg
Relative Vapor Density at 20 °C	: <1
Relative Density	: Not available
Specific Gravity	: 1.030-1.100
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:** Incompatible materials.
- 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 severe skin burns.

Eye Damage/Irritation: Causes severe eye damage.

VGAP-700 Plus

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Version: 100008.003

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 irritation to the upper respiratory tract

Symptoms/Injuries After Skin Contact: Destructive to tissues contacted and produces severe burns. The severity of damage and extent of irreversibility increases with length of contact time.

Symptoms/Injuries After Eye Contact: Direct contact with the eyes is destructive to eye tissue.

Symptoms/Injuries After Ingestion: Swallowing can cause irritation of the mouth, throat, esophagus and stomach.

Chronic Symptoms: Not Classified

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Chemical Name	CAS No	Type	Value
Potassium hydroxide	(CAS No) 1310-58-3	Oral / Rat	273 mg/kg
Monoethanolamine	(CAS No) 141-43-5	Oral / Guinea Pig Dermal / Mouse	620 mg 700 mg/kg
Sodium Tetraborate Pentahydrate	(CAS No) 12179-04-3	Oral/ Rat Inhalation / Rat Dermal / Rabbit	3305 mg/kg >2mg/l > 2000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Toxic to aquatic life.

Chemical Name	CAS No	Type	Value
Potassium hydroxide	(CAS No) 1310-58-3	Fish	80 mg/l 96 hours
Monoethanolamine	(CAS No) 141-43-5	Fish	114 – 196 mg/l 96 hours
Sodium Tetraborate Pentahydrate	(CAS No) 12179-04-3	Fish Daphnia Algae	125 mg/l 96 hours 133 mg/l 48 hours 40 mg/l 27 hours

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.

VGAP-700 Plus

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Version: 100008.003



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: II

Label: Danger: corrosive; causes burns and irritation to skin and eyes

DOT Class: 55

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	Class E Corrosive
----------------------	-------------------

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