SAFETY DATA SHEET



BG Universal Cooling System Cleaner

1. Product and company identification

| Manufacturer | : BG Products Inc. 701 S. Wichita Street |
|--|--|
| | Wichita, KS, 67213, USA www.bgprod.com |
| Relevant identified uses o | of the substance or mixture and uses advised against |
| Identified uses | |
| Cleaning/washing agents a | nd additives |
| MSDS # | : 540 |
| Validation date | : 7/16/2015 |
| Responsible name | : Kolin Anglin, Environmental Coordinator 316-265-2686 msds@bgprod.com |
| In case of emergency | : (800) 424-9300 (CHEMTREC) |
| 2. Hazards ide | ntification |
| OSHA/HCS status | : This material is considered hazardous by the OSHA Hazard Communication Standard |
| | (29 CFR 1910.1200). |
| Classification of the substance or mixture | : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A |
| | Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 85.6% |
| GHS label elements | |
| Hazard pictograms | |
| Signal word | : Warning |
| Hazard statements | : Causes serious eye irritation. |
| Precautionary statement | <u>s</u> |
| Prevention | : Wear eye or face protection. Wash hands thoroughly after handling. |
| Response | : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention |
| Storage | : Not applicable. |
| Disposal | : Not applicable. |
| Hazards not otherwise classified | : None known. |

3. Composition/information on ingredients

| Substance/mixture | ÷ | Mixture |
|------------------------------|---|-----------------|
| Other means of | : | Not available. |
| identification | | |
| CAS number/other identifiers | | |
| CAS number | : | Not applicable. |
| Product code | ÷ | 540 |

3. Composition/information on ingredients

| Name | CAS number | % |
|---|------------|-----------|
| citric acid | 77-92-9 | 3 - 7 |
| xylene | 1330-20-7 | 3 - 7 |
| tetrasodium ethylene diamine tetraacetate | 64-02-8 | 3 - 7 |
| sodium 4(or 5)-methyl-1H-benzotriazolide | 64665-57-2 | 1 - 5 |
| sodium hydroxide | 1310-73-2 | 0.5 - 1.5 |

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.

4. First aid measures

| Description of necessary first aid measures | | | |
|---|---|--|--|
| Eye contact | : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. | | |
| Inhalation | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. | | |
| Skin contact | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse. | | |
| Ingestion | : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. | | |
| Most important symptoms/et | | | |
| Potential acute health effec | — | | |
| Eye contact | : Causes serious eye irritation. | | |
| Inhalation | : No known significant effects or critical hazards. | | |
| Skin contact | : No known significant effects or critical hazards. | | |
| Ingestion | : No known significant effects or critical hazards. | | |
| Over-exposure signs/symp | | | |
| Eye contact | : Adverse symptoms may include the following: pain or irritation watering redness | | |
| Inhalation | : No specific data. | | |
| Skin contact | : No specific data. | | |
| Ingestion | : No specific data. | | |
| Indication of immediate med | ical attention and special treatment needed, if necessary | | |
| | | | |

Date of issue/Date of revision

4. First aid measures

| Notes to physician | : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. | |
|--|--|--|
| Specific treatments | : No specific treatment. | |
| Protection of first-aiders | : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. | |
| See toxicological information (Section 44) | | |

See toxicological information (Section 11)

5. Fire-fighting measures

| Extinguishing media | |
|---|---|
| Suitable extinguishing media | : Use an extinguishing agent suitable for the surrounding fire. |
| Unsuitable extinguishing media | : None known. |
| Specific hazards arising from the chemical | : In a fire or if heated, a pressure increase will occur and the container may burst. |
| Hazardous thermal decomposition products | : Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides |
| Special protective actions for fire-fighters | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| Special protective equipment for fire-fighters | : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |

6. Accidental release measures

| Personal precautions, protective equipment and emergency procedures | | |
|---|---|--|
| For non-emergency personnel | : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. | |
| For emergency responders | : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". | |
| Environmental precautions | : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). | |
| Methods and materials for co | ntainment and cleaning up | |
| Small spill | : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. | |
| Large spill | : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. | |

7. Handling and storage

Precautions for safe handling

| Protective measures | : | Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. |
|--|---|--|
| Advice on general occupational hygiene | : | Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. |
| Conditions for safe storage, including any incompatibilities | : | Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. |

8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| | Ingredient name | | Exposure limits |
|--|-----------------------------------|--|--|
| Citric acid xylene tetrasodium ethylene diamine tetraacetate sodium 4(or 5)-methyl-1H-benzotriazolide sodium hydroxide | | | - - - - - |
| | ppropriate engineering ontrols | : Good general ventilation should be suffi contaminants. | cient to control worker exposure to airborne |
| | nvironmental exposure ontrols | they comply with the requirements of en | ess equipment should be checked to ensure vironmental protection legislation. In some ering modifications to the process equipment acceptable levels. |
| <u>lr</u> | ndividual protection measure | <u>S</u> | |
| | Hygiene measures | eating, smoking and using the lavatory a Appropriate techniques should be used | to remove potentially contaminated clothing. sing. Ensure that eyewash stations and safety |
| | Eye/face protection | gases or dusts. If contact is possible, th | oved standard should be used when a risk to avoid exposure to liquid splashes, mists, ne following protection should be worn, unless ee of protection: chemical splash goggles. |
| | <u>Skin protection</u> | | |
| | Hand protection | worn at all times when handling chemica necessary. Considering the parameters during use that the gloves are still retain noted that the time to breakthrough for a | omplying with an approved standard should be al products if a risk assessment indicates this is specified by the glove manufacturer, check ing their protective properties. It should be any glove material may be different for different ctures, consisting of several substances, the accurately estimated. |

8. Exposure controls/personal protection

| Body protection | : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
|------------------------|---|
| Other skin protection | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Respiratory protection | : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. |

9. Physical and chemical properties

| Physical state | : Liquid. |
|-----------------------------------|--|
| Flash point | : Open cup: >200°C (>392°F) |
| Auto-ignition temperature | : Not available. |
| Flammable limits | : Not available. |
| Color | : Green. |
| Odor | : Odorless. |
| рН | : 9.8 |
| Boiling/condensation point | : Not available. |
| Melting/freezing point | : -4.4°C (24.1°F) |
| Specific gravity | : 1.074 |
| Vapor pressure | : Not available. |
| Vapor density | : Not available. |
| Odor threshold | : Not available. |
| Evaporation rate | : Not available. |
| Solubility | : Easily soluble in the following materials: cold water and hot water. |
| | |

10. Stability and reactivity

| Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
|---------------------------------------|--|
| Chemical stability | : The product is stable. |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : No specific data. |
| Incompatible materials | : No specific data. |
| Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|------------------------------|----------------|----------------------|-------------|
| Citric acid | LD50 Oral | Rat | 3 g/kg | - |
| xylene | LC50 Inhalation Gas. | Rat | 5000 ppm | 4 hours |
| 5 | LD50 Oral | Rat | 4300 mg/kg | - |
| tetrasodium ethylene diamine tetraacetate | LD50 Oral | Rat | 10 g/kg | - |
| sodium 4(or 5)-methyl-1H- benzotriazolide | LD50 Oral | Rat | 640 mg/kg | - |
| ate of issue/Date of revision | : 7/16/2015 Date of previous | issue : No pre | evious validation Ve | rsion :1 5/ |

Section 11. Toxicological information

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|--|--------------------------|---------|-------|---------------------------|-------------|
| Citric acid | Eyes - Severe irritant | Rabbit | - | 24 hours 750 | - |
| | | | | Micrograms | |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 | - |
| | | | | milligrams | |
| | Skin - Moderate irritant | Rabbit | - | 0.5 Mililiters | - |
| xylene | Eyes - Mild irritant | Rabbit | - | 87 milligrams | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 5 | - |
| | | | | milligrams | |
| | Skin - Mild irritant | Rat | - | 8 hours 60 | - |
| | | | | microliters | |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 | - |
| | | | | milligrams | |
| | Skin - Moderate irritant | Rabbit | - | 100 Percent | - |
| tetrasodium ethylene diamine | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 | - |
| tetraacetate | | | | milligrams | |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 | - |
| | | 5 | | milligrams | |
| sodium 4(or 5)-methyl-1H- benzotriazolide | Skin - Severe irritant | Rabbit | - | 50 Percent | - |
| sodium hydroxide | Eyes - Severe irritant | Monkey | - | 24 hours 1 | - |
| | Even Mild imitant | Dabbit | | Percent | |
| | Eyes - Mild irritant | Rabbit | - | 400 Mierogramo | - |
| | Eyes - Severe irritant | Rabbit | | Micrograms 24 hours 50 | _ |
| | Eyes - Severe initalit | Rabbit | - | | - |
| | Eyes - Severe irritant | Rabbit | | Micrograms 1 Percent | |
| | Eyes - Severe irritant | Rabbit | - | 0.5 minutes 1 | - |
| | Lyes - Severe initant | Tabbit | - | milligrams | - |
| | Skin - Mild irritant | Human | _ | 24 hours 2 | _ |
| | | iuman | - | Percent | - |
| | Skin - Severe irritant | Rabbit | | 24 hours 500 | |
| | | | - | milligrams | |
| | | | | milligrams | |

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

| Product/ingredient name | OSHA | IARC | NTP |
|-------------------------|------|------|-----|
| xylene | - | 3 | - |

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Section 11. Toxicological information

| Specific target organ toxicit Not available. | (repeated exposure) | | | | |
|---|---|--|--|--|--|
| Aspiration hazard Not available. | | | | | |
| Information on the likely routes of exposure | : Not available. | | | | |
| Potential acute health effects | | | | | |
| Eye contact | : Causes serious eye irritation. | | | | |
| Inhalation | : No known significant eff | ects or critical hazards. | | | |
| Skin contact | : No known significant eff | ects or critical hazards. | | | |
| Ingestion | : No known significant eff | ects or critical hazards. | | | |
| Symptoms related to the phy | ical, chemical and toxico | logical characteristics | | | |
| Eye contact | : Adverse symptoms may pain or irritation watering redness | include the following: | | | |
| Inhalation | : No specific data. | | | | |
| Skin contact | : No specific data. | | | | |
| Ingestion | : No specific data. | | | | |
| Delayed and immediate effect | s and also chronic effect | <u>s from short and long term exposure</u> | | | |
| <u>Short term exposure</u> | | | | | |
| Potential immediate effects | : Not available. | | | | |
| Potential delayed effects | : Not available. | | | | |
| <u>Long term exposure</u> | | | | | |
| Potential immediate effects | : Not available. | | | | |
| Potential delayed effects | : Not available. | | | | |
| Potential chronic health eff | <u>:ts</u> | | | | |
| Not available. | | | | | |
| General | : No known significant eff | | | | |
| Carcinogenicity | : No known significant eff | | | | |
| Mutagenicity | : No known significant eff | ects or critical hazards. | | | |
| Teratogenicity | : No known significant eff | ects or critical hazards. | | | |
| Developmental effects | : No known significant eff | ects or critical hazards. | | | |
| Fertility effects | : No known significant eff | ects or critical hazards. | | | |
| Numerical measures of toxic | Y | | | | |
| Acute toxicity estimates | | | | | |
| Route | | ATE value | | | |
| Oral | | 2960.6 mg/kg | | | |
| Inhalation (gases) | | 22460 ppm | | | |
| | | | | | |

12. **Ecological information**

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|-------------------------------------|--|----------|
| Citric acid | Acute LC50 160000 µg/l Marine water | Crustaceans - Carcinus maenas - Adult | 48 hours |
| xylene | Acute LC50 8500 μg/l Marine water | Crustaceans - Palaemonetes pugio | 48 hours |
| | Acute LC50 13400 µg/l Fresh water | Fish - Pimephales promelas | 96 hours |
| tetrasodium ethylene diamine tetraacetate | Acute LC50 486000 µg/l Fresh water | Fish - Lepomis macrochirus | 96 hours |
| sodium hydroxide | Acute EC50 40.38 mg/l Fresh water | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours |
| | Acute LC50 125 ppm Fresh water | Fish - Gambusia affinis - Adult | 96 hours |

Persistence and degradability

| Not | avai | lab | le. |
|-----|------|-----|-----|
| | | | |

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|---|------------------|-------------------------|-------------------|
| Citric acid xylene tetrasodium ethylene diamine tetraacetate | | - 8.1 to 25.9 1.8 | low low low |
| <u>Mobility in soil</u> | | | |
| Soil/water partition | : Not available. | | |

coefficient (Koc)

Other adverse effects : No known significant effects or critical hazards.

13. **Disposal considerations**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Transport information 14.

BG Universal Cooling System Cleaner

Transport information 14.

| | DOT Classification | IMDG | ΙΑΤΑ |
|-------------------------------|--------------------|----------------|----------------|
| UN number | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name | - | - | - |
| Transport hazard class(es) | - | - | - |
| Packing group | - | - | - |
| Environmental hazards | No. | No. | No. |
| Additional information | | - | - |

upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL 73/78 and the IBC Code

Regulatory information 15.

| U.S. Federal regulations | : TSCA 4(a) proposed test rules: sodium 4(or 5)-methyl-1H-benzotriazolide |
|--|--|
| | TSCA 4(a) final test rules: acetaldehyde |
| | TSCA 8(a) PAIR: acetaldehyde |
| | TSCA 8(a) CDR Exempt/Partial exemption: Not determined |
| | United States inventory (TSCA 8b): Not determined. |
| | Clean Water Act (CWA) 307: ethylbenzene; toluene; acrylonitrile; arsenic |
| | Clean Water Act (CWA) 311: sodium hydroxide; xylene; ethylbenzene; toluene; potassium hydroxide; Formaldehyde, solution; acrylonitrile; acetaldehyde |
| Clean Air Act Section 112 (b) Hazardous Air | : Listed |

Pollutants (HAPs)

SARA 302/304

Composition/information on ingredients

| | | | SARA 30 | SARA 302 TPQ | | 04 RQ |
|------------------------|---|---------------|----------------|-----------------|------------|-----------|
| Name | | EHS | (lbs) | (gallons) | (lbs) | (gallons) |
| ethylene oxide | | Yes. | 1000 | - | 10 | - |
| Formaldehyde, solution | | Yes. | 500 | 73.9 | 100 | 14.8 |
| acrylamide | | Yes. | 1000 / | - | 5000 | - |
| | | | 10000 | | | |
| acrylonitrile | | Yes. | 10000 | 1488 | 100 | 14.9 |
| SARA 304 RQ | : 1111111111.1 lbs | s / 504444444 | .4 kg [1240783 | 27.8 gal / 4696 | 87564.7 L] | |
| <u>SARA 311/312</u> | | | | | | |
| Classification | : Immediate (acute Delayed (chronic) | | | | | |

15. Regulatory information

Composition/information on ingredients

| Name | Fire hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|---|-------------|----------------------------------|----------|--|--|
| citric acid | No. | No. | No. | Yes. | No. |
| sodium hydroxide | No. | No. | No. | Yes. | Yes. |
| xylene | Yes. | No. | No. | Yes. | Yes. |
| sodium 4(or 5)-methyl-1H-benzotriazolide | No. | No. | No. | Yes. | No. |
| tetrasodium ethylene diamine tetraacetate | No. | No. | No. | Yes. | Yes. |

SARA 313

| | Product name | CAS number |
|---------------------------------|--------------|-----------------------|
| Form R - Reporting requirements | 5 | 1330-20-7 100-41-4 |
| Supplier notification | 5 | 1330-20-7 100-41-4 |

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

| State regulations | |
|-------------------|--|
| Massachusetts | : The following components are listed: SODIUM HYDROXIDE; XYLENE |
| New York | : The following components are listed: Sodium hydroxide; Xylene (mixed) |
| New Jersey | The following components are listed: SODIUM HYDROXIDE; CAUSTIC SODA; XYLENES; BENZENE, DIMETHYL- |
| Pennsylvania | : The following components are listed: SODIUM HYDROXIDE (NA(OH)); BENZENE, DIMETHYL- |

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer. **WARNING:** This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

| Ingredient name | Cancer | Reproductive | No significant risk level | Maximum acceptable dosage level |
|------------------------|--------|--------------|--|---------------------------------------|
| ethylbenzene | Yes. | No. | 41 μg/day (ingestion) 54 μg/day (inhalation) | No. |
| toluene | No. | Yes. | No. | 7000 μg/day (ingestion) |
| ethylene oxide | Yes. | Yes. | Yes. | Yes. |
| Formaldehyde, solution | Yes. | No. | Yes. | No. |
| acrylamide | Yes. | Yes. | Yes. | Yes. |
| acrylonitrile | Yes. | No. | Yes. | No. |
| acetaldehyde | Yes. | No. | 90 µg/day (inhalation) | No. |
| arsenic | Yes. | No. | 0.06 μg/day (inhalation) | No. |
| 1,4-dioxane | Yes. | No. | Yes. | No. |

United States inventory : Not determined. (TSCA 8b)

<u>Canada</u>

WHMIS (Canada)

: Class D-2A: Material causing other toxic effects (Very toxic). Class E: Corrosive material

15. Regulatory information

Canadian lists

Canadian NPRI

- **CEPA Toxic substances**
- The following components are listed: Xylene (all isomers)None of the components are listed.

Canada inventory

: Not determined.

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

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

| National inventory | |
|--------------------|-------------------|
| Australia | : Not determined. |
| Canada | : Not determined. |
| China | : Not determined. |
| Europe | : Not determined. |
| Japan | : Not determined. |
| Malaysia | : Not determined. |
| New Zealand | : Not determined. |
| Philippines | : Not determined. |
| Republic of Korea | : Not determined. |
| Taiwan | : Not determined. |

16. Other information

| Health | |
|------------------|---|
| Flammability | 1 |
| Physical hazards | |
| | |

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

BG Universal Cooling System Cleaner

16. Other information



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

| <u>Instory</u> | |
|--------------------------------|---|
| Date of printing | : 7/16/2015 |
| Date of issue/Date of revision | : 7/16/2015 |
| Date of previous issue | : No previous validation |
| Version | : 1 |
| Key to abbreviations | : ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations |
| References | : Not available. |

Indicates information that has changed from previously issued version.

Notice to reader

History

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.