

# SAFETY DATA SHEET

## 1. Identification

**Product number** 1000000641  
**Product identifier** **MAXIM AMMONIATED GLASS CLEANER GC521**  
**Company information** MIDLAB  
140 PRIVATE BRAND WAY  
ATHENS, TN 37303 United States  
**Company phone** General Assistance 1-800-467-6294  
**Emergency telephone US** 1-866-836-8855  
**Emergency telephone outside US** 1-952-852-4646  
**Version #** 01  
**Recommended use** Cleaner  
**Recommended restrictions** None known.

## 2. Hazard(s) identification

**Physical hazards** Flammable aerosols Category 1  
**Health hazards** Not classified.  
**Environmental hazards** Not classified.  
**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger  
**Hazard statement** Extremely flammable aerosol.  
**Precautionary statement**  
**Prevention** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.  
**Response** Wash hands after handling.  
**Storage** Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  
**Disposal** Dispose of waste and residues in accordance with local authority requirements.  
**Hazard(s) not otherwise classified (HNOC)** None known.  
**Supplemental information** Not applicable.

## 3. Composition/information on ingredients

### Mixtures

| Chemical name                            | Common name and synonyms | CAS number | %        |
|------------------------------------------|--------------------------|------------|----------|
| 2-Butoxyethanol                          |                          | 111-76-2   | 2.5 - 10 |
| Butane                                   |                          | 106-97-8   | 2.5 - 10 |
| Propane                                  |                          | 74-98-6    | 1 - 2.5  |
| Sodium Nitrite                           |                          | 7632-00-0  | 0.1 - 1  |
| Other components below reportable levels |                          |            | 90 - 100 |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

**Composition comments** The full text for all R-phrases is displayed in Section 16 of the SDS.

## 4. First-aid measures

|                                                                               |                                                                                                                                                                                   |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                                                             | Move to fresh air. Call a physician if symptoms develop or persist.                                                                                                               |
| <b>Skin contact</b>                                                           | Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.                                          |
| <b>Eye contact</b>                                                            | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists. |
| <b>Ingestion</b>                                                              | In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.                                                                                    |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Direct contact with eyes may cause temporary irritation.                                                                                                                          |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically.                                                                                                                    |
| <b>General information</b>                                                    | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.                                                                  |

## 5. Fire-fighting measures

|                                                                      |                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Suitable extinguishing media</b>                                  | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).                                                                                                                                                                                                   |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.                                                                                                                                                                                                     |
| <b>Specific hazards arising from the chemical</b>                    | Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.                                                                                                                            |
| <b>Special protective equipment and precautions for firefighters</b> | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.                                                                                                           |
| <b>Fire-fighting equipment/instructions</b>                          | Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. |
| <b>Specific methods</b>                                              | Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. In the event of fire and/or explosion do not breathe fumes.                                                       |
| <b>General fire hazards</b>                                          | Extremely flammable aerosol.                                                                                                                                                                                                                                               |

## 6. Accidental release measures

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.                                                                                                                 |
| <b>Methods and materials for containment and cleaning up</b>               | Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS. |
| <b>Environmental precautions</b>                                           | Avoid discharge into drains, water courses or onto the ground.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

## 7. Handling and storage

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Precautions for safe handling</b> | Do not handle or store near an open flame, heat or other sources of ignition. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not re-use empty containers. Do not get this material in contact with skin. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Conditions for safe storage, including any incompatibilities**

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS). Level 1 Aerosol (NFPA 30B)

**8. Exposure controls/personal protection**

**Occupational exposure limits**

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components                     | Type | Value                            |
|--------------------------------|------|----------------------------------|
| 2-Butoxyethanol (CAS 111-76-2) | PEL  | 240 mg/m3                        |
| Propane (CAS 74-98-6)          | PEL  | 50 ppm<br>1800 mg/m3<br>1000 ppm |

**US. ACGIH Threshold Limit Values**

| Components                     | Type | Value    |
|--------------------------------|------|----------|
| 2-Butoxyethanol (CAS 111-76-2) | TWA  | 20 ppm   |
| Butane (CAS 106-97-8)          | STEL | 1000 ppm |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components                     | Type | Value                          |
|--------------------------------|------|--------------------------------|
| 2-Butoxyethanol (CAS 111-76-2) | TWA  | 24 mg/m3                       |
| Butane (CAS 106-97-8)          | TWA  | 5 ppm<br>1900 mg/m3<br>800 ppm |
| Propane (CAS 74-98-6)          | TWA  | 1800 mg/m3<br>1000 ppm         |

**Biological limit values**

**ACGIH Biological Exposure Indices**

| Components                     | Value    | Determinant                              | Specimen            | Sampling Time |
|--------------------------------|----------|------------------------------------------|---------------------|---------------|
| 2-Butoxyethanol (CAS 111-76-2) | 200 mg/g | Butoxyacetic acid (BAA), with hydrolysis | Creatinine in urine | *             |

\* - For sampling details, please see the source document.

**Exposure guidelines**

**US - California OELs: Skin designation**

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

**US - Minnesota Haz Subs: Skin designation applies**

2-Butoxyethanol (CAS 111-76-2) Skin designation applies.

**US - Tennessee OELs: Skin designation**

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

**Appropriate engineering controls**

Explosion-proof general and local exhaust ventilation.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Wear protective gloves.

**Skin protection**

**Other** Wear appropriate chemical resistant clothing.

|                                       |                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Respiratory protection</b>         | If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator. |
| <b>Thermal hazards</b>                | Wear appropriate thermal protective clothing, when necessary.                                                                                                                                                                                                                                                                                                               |
| <b>General hygiene considerations</b> | When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.                                                                                                                              |

## 9. Physical and chemical properties

### Appearance

|                                                |                                            |
|------------------------------------------------|--------------------------------------------|
| <b>Physical state</b>                          | Liquid.                                    |
| <b>Form</b>                                    | Aerosol.                                   |
| <b>Color</b>                                   | Not available.                             |
| <b>Odor</b>                                    | Not available.                             |
| <b>Odor threshold</b>                          | Not available.                             |
| <b>pH</b>                                      | Not available.                             |
| <b>Melting point/freezing point</b>            | Not available.                             |
| <b>Initial boiling point and boiling range</b> | 199.26 °F (92.92 °C) estimated             |
| <b>Flash point</b>                             | -156.0 °F (-104.4 °C) Propellant estimated |
| <b>Evaporation rate</b>                        | Not available.                             |
| <b>Flammability (solid, gas)</b>               | Not available.                             |

### Upper/lower flammability or explosive limits

|                                       |                             |
|---------------------------------------|-----------------------------|
| <b>Flammability limit - lower (%)</b> | Not available.              |
| <b>Flammability limit - upper (%)</b> | Not available.              |
| <b>Explosive limit - lower (%)</b>    | Not available.              |
| <b>Explosive limit - upper (%)</b>    | Not available.              |
| <b>Vapor pressure</b>                 | 50 - 70 psig @20C estimated |
| <b>Vapor density</b>                  | Not available.              |
| <b>Relative density</b>               | 0.97 g/cm3 estimated        |

### Solubility(ies)

|                                                |                |
|------------------------------------------------|----------------|
| <b>Solubility (water)</b>                      | Not available. |
| <b>Partition coefficient (n-octanol/water)</b> | Not available. |
| <b>Auto-ignition temperature</b>               | Not available. |
| <b>Decomposition temperature</b>               | Not available. |
| <b>Viscosity</b>                               | Not available. |

### Other information

|                                      |                        |
|--------------------------------------|------------------------|
| <b>Density</b>                       | 0.97 g/cm3 estimated   |
| <b>Flammability class</b>            | Flammable IB estimated |
| <b>Heat of combustion (NFPA 30B)</b> | 3.64 kJ/g estimated    |
| <b>Percent volatile</b>              | 99.56 % estimated      |
| <b>Specific gravity</b>              | 0.97 estimated         |

## 10. Stability and reactivity

|                                           |                                                                                                      |
|-------------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport.        |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.                                                          |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use. Hazardous polymerization does not occur. |

|                                         |                                                                                                                                                                                                            |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Conditions to avoid</b>              | Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials. Fire or intense heat may cause violent rupture of packages. |
| <b>Incompatible materials</b>           | Strong oxidizing agents.                                                                                                                                                                                   |
| <b>Hazardous decomposition products</b> | No hazardous decomposition products are known.                                                                                                                                                             |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |                                                                                                                                                          |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ingestion</b>    | Expected to be a low ingestion hazard.                                                                                                                   |
| <b>Inhalation</b>   | Prolonged inhalation may be harmful.                                                                                                                     |
| <b>Skin contact</b> | 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans. |

**Eye contact** Direct contact with eyes may cause temporary irritation.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

**Acute toxicity** Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

| Product                                                  | Species           | Test Results                                                                                                                                            |                                                                           |
|----------------------------------------------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| 19 OZ MAXIM AMMONIATED GLASS CLEANER GC521 (CAS Mixture) |                   |                                                                                                                                                         |                                                                           |
| <b>Acute</b>                                             |                   |                                                                                                                                                         |                                                                           |
| <i>Dermal</i>                                            |                   |                                                                                                                                                         |                                                                           |
| LD50                                                     | Guinea pig        | 8238.4121 ml/kg, 24 Hours estimated<br>261.48 ml/kg, 4 Days estimated                                                                                   |                                                                           |
|                                                          | Rabbit            | 6667.4365 mg/kg, 24 Hours estimated<br>2537.3945 ml/kg, 24 Hours estimated                                                                              |                                                                           |
|                                                          | Rat               | 71638.3672 mg/kg, 24 Hours estimated                                                                                                                    |                                                                           |
|                                                          | <i>Inhalation</i> | Cat                                                                                                                                                     | 1500 % estimated                                                          |
|                                                          |                   | Cat                                                                                                                                                     | 10394.3047 mg/l, 4.5 Hours estimated<br>5315.8086 mg/l, 6 Hours estimated |
| Mouse                                                    |                   | 20616.666 mg/l, 120 Minutes estimated<br>9666.5449 mg/l, 134 Minutes estimated<br>866.6667 %, 120 Minutes estimated<br>266.6667 mm/l, 2 Hours estimated |                                                                           |
| LD100                                                    | Rabbit            | 14327.6738 ppm, 7 Hours estimated                                                                                                                       |                                                                           |
|                                                          | Rat               | 15004.373 ppm, 4 Hours estimated<br>6366.167 mg/l, 4 Hours estimated<br>6366.167 mg/l, 6 Hours estimated                                                |                                                                           |
|                                                          | LD50              | Rabbit                                                                                                                                                  | 1594 mg/l/4h<br>24894.334 mg/kg estimated                                 |
|                                                          |                   | Dog                                                                                                                                                     | 24894.334 mg/kg estimated                                                 |
| Guinea pig                                               |                   | 42983.0234 mg/kg estimated                                                                                                                              |                                                                           |
| Rat                                                      |                   | 14238.2783 mg/kg estimated<br>3158.5481 ml/kg estimated                                                                                                 |                                                                           |

| Components                     | Species    | Test Results                                                          |
|--------------------------------|------------|-----------------------------------------------------------------------|
| 2-Butoxyethanol (CAS 111-76-2) |            |                                                                       |
| <b>Acute</b>                   |            |                                                                       |
| <i>Dermal</i>                  |            |                                                                       |
| LD50                           | Guinea pig | 230 ml/kg, 24 Hours<br>7.3 ml/kg, 4 Days                              |
|                                | Rabbit     | 450 ml/kg, 24 Hours<br>435 mg/kg, 24 Hours<br>220 mg/kg<br>0.63 ml/kg |
|                                | Rat        | > 2000 mg/kg, 24 Hours                                                |
| <i>Inhalation</i>              |            |                                                                       |
| LC50                           | Rabbit     | 400 ppm, 7 Hours                                                      |
|                                | Rat        | 450 ppm, 4 Hours<br>2.21 mg/l/4h                                      |
| <i>Oral</i>                    |            |                                                                       |
| LD100                          | Rabbit     | 695 mg/kg                                                             |
| LD50                           | Dog        | > 695 mg/kg                                                           |
|                                | Guinea pig | 1200 mg/kg                                                            |
|                                | Rat        | 530 - 2800 mg/kg<br>470 mg/kg                                         |
| Butane (CAS 106-97-8)          |            |                                                                       |
| <b>Acute</b>                   |            |                                                                       |
| <i>Inhalation</i>              |            |                                                                       |
| LC50                           | Mouse      | 1237 mg/l, 120 Minutes<br>52 %, 120 Minutes                           |
|                                | Rat        | 1355 mg/l                                                             |
| Propane (CAS 74-98-6)          |            |                                                                       |
| <b>Acute</b>                   |            |                                                                       |
| <i>Inhalation</i>              |            |                                                                       |
| LC50                           | Mouse      | 1237 mg/l, 120 Minutes<br>52 %, 120 Minutes                           |
|                                | Rat        | 1355 mg/l<br>658 mg/l/4h                                              |
| Sodium Nitrite (CAS 7632-00-0) |            |                                                                       |
| <b>Acute</b>                   |            |                                                                       |
| <i>Oral</i>                    |            |                                                                       |
| LD50                           | Rat        | 180 mg/kg                                                             |

\* Estimates for product may be based on additional component data not shown.

|                                          |                                                                                                                  |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Skin corrosion/irritation</b>         | Prolonged skin contact may cause temporary irritation.                                                           |
| <b>Serious eye damage/eye irritation</b> | Direct contact with eyes may cause temporary irritation.                                                         |
| <b>Respiratory or skin sensitization</b> |                                                                                                                  |
| <b>Respiratory sensitization</b>         | Not a respiratory sensitizer.                                                                                    |
| <b>Skin sensitization</b>                | This product is not expected to cause skin sensitization.                                                        |
| <b>Germ cell mutagenicity</b>            | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| <b>Carcinogenicity</b>                   | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.                                  |

**IARC Monographs. Overall Evaluation of Carcinogenicity**

2-Butoxyethanol (CAS 111-76-2) 3 Not classifiable as to carcinogenicity to humans.

## OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

|                                                           |                                                                                                                                                                                                                                               |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reproductive toxicity</b>                              | This product is not expected to cause reproductive or developmental effects.                                                                                                                                                                  |
| <b>Specific target organ toxicity - single exposure</b>   | Not classified.                                                                                                                                                                                                                               |
| <b>Specific target organ toxicity - repeated exposure</b> | Not classified.                                                                                                                                                                                                                               |
| <b>Aspiration hazard</b>                                  | Not an aspiration hazard. Not likely, due to the form of the product.                                                                                                                                                                         |
| <b>Chronic effects</b>                                    | Prolonged inhalation may be harmful. May be harmful if absorbed through skin.<br><br>2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans. |

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Product                                               | Species | Test Results                                        |                              |
|-------------------------------------------------------|---------|-----------------------------------------------------|------------------------------|
| 19 MAXIM AMMONIATED GLASS CLEANER GC521 (CAS Mixture) |         |                                                     |                              |
| <b>Aquatic</b>                                        |         |                                                     |                              |
| Crustacea                                             | EC50    | Daphnia                                             | 43620 mg/L, 48 Hours         |
| Fish                                                  | LC50    | Fish                                                | 1937 mg/L, 96 Hours          |
| <b>Components</b>                                     |         |                                                     |                              |
| 2-Butoxyethanol (CAS 111-76-2)                        |         |                                                     |                              |
| <b>Aquatic</b>                                        |         |                                                     |                              |
| Crustacea                                             | EC50    | Daphnia                                             | 1819 mg/L, 48 Hours          |
| Fish                                                  | LC50    | Inland silverside (Menidia beryllina)               | 1250 mg/l, 96 hours          |
| Sodium Nitrite (CAS 7632-00-0)                        |         |                                                     |                              |
| <b>Aquatic</b>                                        |         |                                                     |                              |
| Crustacea                                             | EC50    | Greasyback shrimp (Metapenaeus ensis)               | 16.14 - 26.61 mg/l, 48 hours |
| Fish                                                  | LC50    | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 0.15 - 0.25 mg/l, 96 hours   |

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** No data available.

### Partition coefficient n-octanol / water (log Kow)

|                 |      |
|-----------------|------|
| 2-Butoxyethanol | 0.83 |
| Butane          | 2.89 |
| Propane         | 2.36 |

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

**14. Transport information****DOT**

|                                     |                                                                                                                                                 |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UN number</b>                    | UN1950                                                                                                                                          |
| <b>UN proper shipping name</b>      | Aerosols, flammable                                                                                                                             |
| <b>Transport hazard class(es)</b>   |                                                                                                                                                 |
| <b>Class</b>                        | 2.1                                                                                                                                             |
| <b>Subsidiary risk</b>              | -                                                                                                                                               |
| <b>Label(s)</b>                     | None                                                                                                                                            |
| <b>Packing group</b>                | Not applicable.                                                                                                                                 |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling. |
| <b>Special provisions</b>           | N82                                                                                                                                             |
| <b>Packaging exceptions</b>         | 306                                                                                                                                             |
| <b>Packaging non bulk</b>           | None                                                                                                                                            |
| <b>Packaging bulk</b>               | None                                                                                                                                            |

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

**IATA**

|                                     |                                                                                                                                                 |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UN number</b>                    | UN1950                                                                                                                                          |
| <b>UN proper shipping name</b>      | Aerosols, flammable                                                                                                                             |
| <b>Transport hazard class(es)</b>   |                                                                                                                                                 |
| <b>Class</b>                        | 2.1                                                                                                                                             |
| <b>Subsidiary risk</b>              | -                                                                                                                                               |
| <b>Label(s)</b>                     | 2.1                                                                                                                                             |
| <b>Packing group</b>                | Not applicable.                                                                                                                                 |
| <b>Environmental hazards</b>        | No.                                                                                                                                             |
| <b>ERG Code</b>                     | 10L                                                                                                                                             |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling. |
| <b>Other information</b>            |                                                                                                                                                 |
| <b>Passenger and cargo aircraft</b> | Allowed.                                                                                                                                        |
| <b>Cargo aircraft only</b>          | Allowed.                                                                                                                                        |
| <b>Packaging Exceptions</b>         | LTD QTY                                                                                                                                         |

**IMDG**

|                                                                                 |                                                                                                                                                 |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UN number</b>                                                                | UN1950                                                                                                                                          |
| <b>UN proper shipping name</b>                                                  | AEROSOLS                                                                                                                                        |
| <b>Transport hazard class(es)</b>                                               |                                                                                                                                                 |
| <b>Class</b>                                                                    | 2.1                                                                                                                                             |
| <b>Subsidiary risk</b>                                                          | -                                                                                                                                               |
| <b>Label(s)</b>                                                                 | None                                                                                                                                            |
| <b>Packing group</b>                                                            | Not applicable.                                                                                                                                 |
| <b>Environmental hazards</b>                                                    |                                                                                                                                                 |
| <b>Marine pollutant</b>                                                         | No.                                                                                                                                             |
| <b>EmS</b>                                                                      | F-D, S-U                                                                                                                                        |
| <b>Special precautions for user</b>                                             | Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling. |
| <b>Packaging Exceptions</b>                                                     | LTD QTY                                                                                                                                         |
| <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | Not applicable.                                                                                                                                 |



DOT



IATA; IMDG



### 15. Regulatory information

#### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Sodium Nitrite (CAS 7632-00-0) Listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

| Chemical name     | CAS number | Reportable quantity | Threshold planning quantity | Threshold planning quantity, lower value | Threshold planning quantity, upper value |
|-------------------|------------|---------------------|-----------------------------|------------------------------------------|------------------------------------------|
| Anhydrous Ammonia | 7664-41-7  | 100                 | 500 lbs                     |                                          |                                          |

SARA 311/312 Hazardous chemical No

#### SARA 313 (TRI reporting)

| Chemical name  | CAS number | % by wt. |
|----------------|------------|----------|
| Sodium Nitrite | 7632-00-0  | 0.1 - 1  |

#### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Butane (CAS 106-97-8)  
Propane (CAS 74-98-6)

Safe Drinking Water Act (SDWA) Not regulated.

#### US state regulations

WARNING: This product contains a chemical known to the State of California to cause cancer.

**US. Massachusetts RTK - Substance List**

2-Butoxyethanol (CAS 111-76-2)  
 Butane (CAS 106-97-8)  
 Propane (CAS 74-98-6)  
 Sodium Nitrite (CAS 7632-00-0)

**US. New Jersey Worker and Community Right-to-Know Act**

2-Butoxyethanol (CAS 111-76-2)  
 Butane (CAS 106-97-8)  
 Propane (CAS 74-98-6)  
 Sodium Nitrite (CAS 7632-00-0)

**US. Pennsylvania Worker and Community Right-to-Know Law**

2-Butoxyethanol (CAS 111-76-2)  
 Butane (CAS 106-97-8)  
 Propane (CAS 74-98-6)  
 Sodium Nitrite (CAS 7632-00-0)

**US. Rhode Island RTK**

Butane (CAS 106-97-8)  
 Propane (CAS 74-98-6)  
 Sodium Nitrite (CAS 7632-00-0)

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

| Country(s) or region        | Inventory name                                                         | On inventory (yes/no)* |
|-----------------------------|------------------------------------------------------------------------|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | Yes                    |
| Canada                      | Domestic Substances List (DSL)                                         | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                    |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes                    |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)                                          | No                     |
| New Zealand                 | New Zealand Inventory                                                  | No                     |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | No                     |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 08-11-2014

**Version #** 01

**Disclaimer** The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Revision Information** Product and Company Identification: Alternate Trade Names  
 GHS: Classification