SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product form: Mixture
Product name: DefendAL Enviro Automotive Antifreeze Concentrate

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture: Antifreeze, Coolant.

1.3. Details of the supplier of the safety data sheet
KOST USA, Inc.
1000 Tennessee Ave.
Cincinnati, 45229 - USA
T 1-800-661-9391 - F 1-513-492-5555
sales@kostusa.com - www.kostusa.com

1.4. Emergency telephone number
Emergency number: 1-800-424-9300
CHEMTREC (24 HOURS)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
GHS-US classification
Skin Sens. 1 H317
Repr. 1B H360
Full text of H-phrases: see section 16

2.2. Label elements
GHS-US labelling
Hazard pictograms (GHS-US):

![GHS07]  ![GHS08]

Signal word (GHS-US): Danger.
Hazard statements (GHS-US): H317 - May cause an allergic skin reaction
H360 - May damage fertility or the unborn child
Precautionary statements (GHS-US): P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P261 - Avoid breathing mist/vapours/spray
P272 - Avoid breathing mist/vapours/spray
P321 - Specific treatment (see Section 4 on this label)
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P405 - Store locked up
P501 - Dispose of contents/container in accordance with local and national regulations

2.3. Other hazards
No additional information available

2.4. Unknown acute toxicity (GHS-US)
0.22 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist)).

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixture
Components with health hazards above the applicable thresholds are shown. Exact concentrations withheld as trade secret.
### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

**First-aid measures general**
- Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid measures after inhalation**
- If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

**First-aid measures after skin contact**
- Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**First-aid measures after eye contact**
- Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**First-aid measures after ingestion**
- Rinse mouth. Call a POISON CENTER/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects, both acute and delayed

- **Symptoms/injuries**
  - May damage fertility or the unborn child.

- **Symptoms/injuries after skin contact**
  - May cause an allergic skin reaction.

#### 4.3. Indication of any immediate medical attention and special treatment needed

All treatments should be based on observed signs and symptoms of distress in the patient.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media**

**Unsuitable extinguishing media**
- None known.

#### 5.2. Special hazards arising from the substance or mixture

**Fire hazard**
- No specific fire or explosion hazard.

**Reactivity**
- No dangerous reactions known.

#### 5.3. Advice for firefighters

**Firefighting instructions**
- Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter drains or water courses.

**Protection during firefighting**
- Do not enter fire area without proper protective equipment, including respiratory protection. Wear fire/flame resistant/retardant clothing. Wear a self contained breathing apparatus.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

**General measures**
- Avoid all eyes and skin contact and do not breathe vapour and mist.

**6.1.1. For non-emergency personnel**

**Protective equipment**
- Wear suitable gloves resistant to chemical penetration.

**Emergency procedures**
- Ventilate area.

**6.1.2. For emergency responders**

**Protective equipment**
- Wear suitable gloves. Where excessive vapour, mist, or dust may result, use approved respiratory protection equipment.

**Emergency procedures**
- Ventilate area.
6.2. Environmental precautions
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
For containment: Absorb and/or contain spill with inert material, then place in suitable container.
Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Take up in non-combustible absorbent material and shove into container for disposal.

6.4. Reference to other sections
Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage
7.1. Precautions for safe handling
Precautions for safe handling: Avoid breathing mist, spray, vapours. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.
Hygiene measures: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. 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
Storage conditions: Keep container closed when not in use. Keep only in the original container in a cool well ventilated place.
Incompatible materials: Heat sources. Direct sunlight.

7.3. Specific end use(s)
Antifreeze. Coolant.

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
<table>
<thead>
<tr>
<th>Substance</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>propylene glycol (57-55-6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>OSHA</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>sodium nitrite (7632-00-0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>ACGIH TWA (mg/m³)</td>
<td>10 mg/m³ as dust</td>
</tr>
<tr>
<td>OSHA</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>disodium tetraborate, anhydrous (1330-43-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>ACGIH TWA (mg/m³)</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td>ACGIH</td>
<td>ACGIH STEL (mg/m³)</td>
<td>6 mg/m³</td>
</tr>
<tr>
<td>ACGIH</td>
<td>Remark (ACGIH)</td>
<td>Varies URT irr</td>
</tr>
<tr>
<td>Disodium metasilicate (6834-92-0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>OSHA</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>sodium mercaptobenzothiazole (2492-26-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>OSHA</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>sodium tolyltriazole (64665-57-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>OSHA</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls
Appropriate engineering controls: Avoid creating mist or spray. Avoid splashing. Either local exhaust or general room ventilation is usually required.
Personal protective equipment: Avoid all unnecessary exposure.
Hand protection: Wear suitable gloves. Nitrile rubber gloves.
Eye protection: In case of splashing or aerosol production: protective goggles.
Skin and body protection: Wear suitable protective clothing. Impervious clothing.
Respiratory protection: In case of inadequate ventilation wear respiratory protection. Use an approved respirator equipped with oil/mist cartridges.

Consumer exposure controls: Avoid contact during pregnancy/while nursing.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Free &amp; clear</td>
</tr>
<tr>
<td>Colour</td>
<td>green</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>10.2 – 10.8</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting / freezing point</td>
<td>-50 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>180 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Self ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>&lt; 0.1 mm Hg @ 20 °C</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>&gt; 1</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.045 @ 20 °C</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water.</td>
</tr>
<tr>
<td></td>
<td>Water: Solubility in water of component(s) of the mixture:</td>
</tr>
<tr>
<td></td>
<td>• sodium nitrate: 847 g/l</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**9.2. Other information**

No additional information available.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reactions known.

#### 10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

#### 10.4. Conditions to avoid

Avoid excessive heat or cold. Keep away from sources of ignition.

#### 10.5. Incompatible materials


#### 10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

**Acute toxicity**: Not classified

**propylene glycol (57-55-6)**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>22000 mg/kg bodyweight</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>20800 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>22000.000 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>20800.000 mg/kg bodyweight</td>
</tr>
</tbody>
</table>
DefendAL Enviro Automotive Antifreeze Concentrate
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**sodium nitrite (7632-00-0)**

| LD50 oral rat | 180 mg/kg |
| ATE US (oral) | 180.000 mg/kg bodyweight |

**disodium tetraborate, anhydrous (1330-43-4)**

| LD50 oral rat | 3450 mg/kg male |
| LD50 dermal rabbit | > 2000 mg/kg no deaths occurred |
| LC50 inhalation rat (mg/l) | > 2.03 mg/l 5h - no deaths occurred |
| ATE US (oral) | 3450.000 mg/kg bodyweight |

**Disodium metasilicate (6834-92-0)**

| LD50 oral rat | 1250 ml/kg |

**sodium mercaptobenzothiazole (2492-26-4)**

| LD50 oral rat | 2100 mg/kg male |
| LD50 dermal rabbit | > 7940 mg/kg New Zealand White Rabbit |
| ATE US (oral) | 2100.000 mg/kg bodyweight |

**sodium tolyltriazole (64665-57-2)**

| LD50 oral rat | 735 mg/kg bodyweight |
| LD50 dermal rabbit | > 2000 mg/kg bodyweight |
| ATE US (oral) | 735.000 mg/kg bodyweight |

Skin corrosion/irritation: Not classified
Serious eye damage/irritation: Not classified
Respiratory or skin sensitisation: May cause an allergic skin reaction.
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive toxicity: May damage fertility or the unborn child.
Specific target organ toxicity (single exposure): Not classified
Specific target organ toxicity (repeated exposure): Not classified

**disodium tetraborate, anhydrous (1330-43-4)**

| LOAEL (oral,rat,90 days) | 58.5 mg/kg bodyweight/day |
| NOAEL (oral,rat,90 days) | 17.5 mg/kg bodyweight/day |

**propylene glycol (57-55-6)**

| LC50 fishes 1 | 51400 mg/l 96h fathead minnow |
| EC50 Daphnia 1 | 43500 mg/l 48h |
| EC50 other aquatic organisms 1 | 27300 mg/l 48h |

**sodium nitrite (7632-00-0)**

| LC50 fishes 1 | 0.11 mg/l |

**Disodium metasilicate (6834-92-0)**

| LC50 fishes 1 | 74 mg/l 96h Limanda limanda |

**sodium mercaptobenzothiazole (2492-26-4)**

| LC50 fishes 1 | 2320 mg/l Gambusia affinis |
| EC50 Daphnia 1 | 1700 mg/l |
| LC50 fish 2 | 210 mg/l Brachydanio rerio |

**sodium tolyltriazole (64665-57-2)**

| LC50 fishes 1 | 1.87 mg/l 96h |

**SECTION 12: Ecological information**

**12.1. Toxicity**

**propylene glycol (57-55-6)**

| LC50 fishes 1 | 51400 mg/l 96h fathead minnow |
| EC50 Daphnia 1 | 43500 mg/l 48h |
| EC50 other aquatic organisms 1 | 27300 mg/l 48h |

**sodium nitrite (7632-00-0)**

| LC50 fishes 1 | 0.11 mg/l |

**Disodium metasilicate (6834-92-0)**

| LC50 fishes 1 | 74 mg/l 96h Limanda limanda |

**sodium mercaptobenzothiazole (2492-26-4)**

| LC50 fishes 1 | 2320 mg/l Gambusia affinis |
| EC50 Daphnia 1 | 1700 mg/l |
| LC50 fish 2 | 210 mg/l Brachydanio rerio |

**sodium tolyltriazole (64665-57-2)**

| LC50 fishes 1 | 1.87 mg/l 96h |

**12.2. Persistence and degradability**

**sodium tolyltriazole (64665-57-2)**

| Biodegradation | 4 % O2 consumption; 28 days |
12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Compound</th>
<th>Log Kow</th>
</tr>
</thead>
<tbody>
<tr>
<td>propylene glycol (57-55-6)</td>
<td>-0.78</td>
</tr>
<tr>
<td>Disodium metasilicate (6834-92-0)</td>
<td>Not expected to bioaccumulate.</td>
</tr>
<tr>
<td>sodium mercaptobenzothiazole (2492-26-4)</td>
<td>2.42</td>
</tr>
<tr>
<td>sodium tolyltriazole (64665-57-2)</td>
<td>1.083</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer: No known ozone damage caused by this product.
Effect on the global warming: No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations: Do not dispose of waste into sewer.
Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with DOT

Not considered a dangerous good for transport regulations

Additional information

Other information: No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

<table>
<thead>
<tr>
<th>Compound</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>propylene glycol (57-55-6)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td>sodium nitrite (7632-00-0)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td>Disodium tetraborate, anhydrous (1330-43-4)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td>Disodium metasilicate (6834-92-0)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td>sodium mercaptobenzothiazole (2492-26-4)</td>
<td>Not listed on SARA Section 313 (Specific toxic chemical listings)</td>
</tr>
<tr>
<td>sodium tolyltriazole (64665-57-2)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
</tbody>
</table>
15.2. International regulations

**CANADA**

<table>
<thead>
<tr>
<th>WHMIS Classification</th>
<th>Class D Division 2 Subdivision B - Toxic material causing other toxic effects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DefendAL Enviro Automotive Antifreeze Concentrate</strong></td>
<td></td>
</tr>
</tbody>
</table>

**propylene glycol (57-55-6)**  
Listed on the Canadian DSL (Domestic Substances List) inventory.

**sodium nitrite (7632-00-0)**  
Listed on the Canadian DSL (Domestic Substances List) inventory.

**Disodium tetraborate, anhydrous (1330-43-4)**  
Listed on the Canadian DSL (Domestic Substances List) inventory.

**Disodium metasilicate (6834-92-0)**  
Listed on the Canadian DSL (Domestic Substances List) inventory.

**sodium mercaptobenzothiazole (2492-26-4)**  
Listed on the Canadian DSL (Domestic Substances List) inventory.

**sodium tolyltriazole (64665-57-2)**  
Listed on the Canadian DSL (Domestic Substances List) inventory.

**EU-Regulations**

<table>
<thead>
<tr>
<th>propylene glycol (57-55-6)</th>
<th>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium nitrite (7632-00-0)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.</td>
</tr>
<tr>
<td>Disodium tetraborate, anhydrous (1330-43-4)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.</td>
</tr>
<tr>
<td>Disodium metasilicate (6834-92-0)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.</td>
</tr>
<tr>
<td>sodium mercaptobenzothiazole (2492-26-4)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.</td>
</tr>
<tr>
<td>sodium tolyltriazole (64665-57-2)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.</td>
</tr>
</tbody>
</table>

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**
Not classified

**Classification according to Directive 67/548/EEC or 1999/45/EC**
Not classified
15.2.2. National regulations

**Propylene glycol (57-55-6)**
- Listed on Inventory of Chemicals and Chemical Substances (PICCS)
- Listed on Inventory of Existing Chemical Substances (IECSC)
- Listed on KECI (Chemical Inventory of Korea)
- Listed on New Zealand - Inventory of Chemicals (NZIoC)
- Listed on Taiwan National Chemical Inventory
- Listed on the AICS (the Australian Inventory of Chemical Substances).
- Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.

**Sodium nitrite (7632-00-0)**
- Listed on Inventory of Existing Chemical Substances (IECSC)
- Listed on KECI (Chemical Inventory of Korea)
- Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
- Listed on Inventory of Chemicals and Chemical Substances (PICCS)
- Listed on New Zealand - Inventory of Chemicals (NZIoC)
- Listed on the AICS (the Australian Inventory of Chemical Substances).

**Disodium tetraborate, anhydrous (1330-43-4)**
- Listed on Inventory of Existing Chemical Substances (IECSC)
- Listed on KECI (Chemical Inventory of Korea)
- Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
- Listed on Inventory of Chemicals and Chemical Substances (PICCS)
- Listed on New Zealand - Inventory of Chemicals (NZIoC)
- Listed on the AICS (the Australian Inventory of Chemical Substances).

**Disodium metasilicate (6834-92-0)**
- Listed on New Zealand - Inventory of Chemicals (NZIoC)
- Listed on KECI (Chemical Inventory of Korea)
- Water hazard class (WGK)
- Listed on Inventory of Existing Chemical Substances (IECSC)
- Listed on the Chinese Catalog of Hazardous Chemicals.
- Listed on the AICS (the Australian Inventory of Chemical Substances).
- Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
- Listed on Inventory of Chemicals and Chemical Substances (PICCS)

**Sodium mercaptobenzothiazole (2492-26-4)**
- Listed on New Zealand - Inventory of Chemicals (NZIoC)
- Listed on KECI (Chemical Inventory of Korea)
- Water hazard class (WGK)
- Listed on Inventory of Existing Chemical Substances (IECSC)
- Listed on the Chinese Catalog of Hazardous Chemicals.
- Listed on the AICS (the Australian Inventory of Chemical Substances).
- Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
- Listed on Inventory of Chemicals and Chemical Substances (PICCS)

**Sodium tolyltriazole (64665-57-2)**
- Listed on New Zealand - Inventory of Chemicals (NZIoC)
- Listed on KECI (Chemical Inventory of Korea)
- Water hazard class (WGK)
- Listed on Inventory of Existing Chemical Substances (IECSC)
- Listed on the Chinese Catalog of Hazardous Chemicals.
- Listed on the AICS (the Australian Inventory of Chemical Substances).

15.3. US State regulations

**Sodium nitrite (7632-00-0)**
- U.S. - Pennsylvania - List of Hazardous Substances
- U.S. - New York - Right to Know List of Hazardous Chemicals
- U.S. - New Jersey - Right to Know Hazardous Substance List
- U.S. - Massachusetts - Right To Know List

**SECTION 16: Other information**

Disclaimer:
Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).
End-use applications NOT supported by Kost USA, Inc. for monopropylene glycol. These limitations include products restricted by law, applications in which may raise unacceptable risks, and other applications which Kost USA, Inc. has decided not to, including minimizing unnecessary risk and liabilities to the company. Kost USA, Inc. does not knowingly market these products into these non-supported applications. This list is not all-inclusive, and Kost USA, Inc. reserves the right to modify the same at any time.

- The use of production of tobacco and in the manufacture of tobacco products (including but not limited to additives, humectants, filters, inks, and paper)
- The use for the generation of artificial smoke / theatrical fogs / mist. This includes applications such as artificial / e-cigarettes.
- The use as ingredient in fuel for warming foods (Stermo™-like application) or in fuel for heating an enclosed space where human exposure is possible.
- The use in the manufacture of munitions.
- The use in aircraft deicers.
- KOST USA propylene containing products can not be upgraded to or substituted for USP monopropylene glycol, nor used in any pharmaceutical or other application such as cosmetics and personal or animal health care.
- The use as a non-reacted component in a formulation for direct internal or external human / animal contact, including, but not limited to ingestion, inhalation, and skin contact and in medical / veterinary devices and medical / veterinary. Examples of some such applications are uses as a direct component in foods, beverages, pharmaceuticals, cosmetics, personal care products or children's products.
- The use for consumer or hospital usage for deodorizing or air "purifying" purposes by spraying as an aerosol.
- The use as a non-reacted component in adhesives, plasticizers, and softening agents for packaging having direct contact with food or beverage.
- The use as a non-reacted component in the formulation of glues, pastes, ice / heat packs or other items where the potential for significant human contact and/or ingestion exists (including but not limited to children's school glue/paste or arts/craft glue/paste, toys, children products).

For more information contact your Kost USA, Inc. representative.

Indication of changes : Original Document.

Data sources :
- ACGIH 2000.

Abbreviations and acronyms :
- ACGIH (American Conference of Goverment Industrial Hygienists).
- ATE: Acute Toxicity Estimate.
- CAS (Chemical Abstracts Service) number.
- CLP: Classification, Labelling, Packaging.
- EC50: Environmental Concentration associated with a response by 50% of the test population.
- GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
- LD50: Lethal Dose for 50% of the test population.
- OSHA: Occupational Safety & Health Administration.
- STEL: Short Term Exposure Limits.
- TSCA: Toxic Substances Control Act.
- TWA: Time Weight Average.

Other information : None.
DefendAL Enviro Automotive Antifreeze Concentrate Safety Data Sheet

Full text of H-phrases:

| Acute Tox. 3 (Oral) | Acute toxicity (oral) Category 3 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral) Category 4 |
| Aquatic Acute 1     | Hazardous to the aquatic environment - Acute Hazard Category 1 |
| Aquatic Chronic 1   | Hazardous to the aquatic environment - Chronic Hazard Category 1 |
| Aquatic Chronic 2   | Hazardous to the aquatic environment - Chronic Hazard Category 2 |
| Eye Dam. 1          | Serious eye damage/eye irritation Category 1 |
| Eye Irrit. 2A       | Serious eye damage/eye irritation Category 2A |
| Ox. Sol. 3          | Oxidising solids Category 3 |
| Repr. 1B            | Reproductive toxicity Category 1B |
| Skin Corr. 1B       | Skin corrosion/irritation Category 1B |
| Skin Sens. 1        | Skin sensitisation Category 1 |
| STOT SE 3           | Specific target organ toxicity (single exposure) Category 3 |
| H272                | May intensify fire; oxidizer |
| H301                | Toxic if swallowed |
| H302                | Harmful if swallowed |
| H314                | Causes severe skin burns and eye damage |
| H317                | May cause an allergic skin reaction |
| H318                | Causes serious eye damage |
| H319                | Causes serious eye irritation |
| H335                | May cause respiratory irritation |
| H360                | May damage fertility or the unborn child |
| H400                | Very toxic to aquatic life |
| H410                | Very toxic to aquatic life with long lasting effects |
| H411                | Toxic to aquatic life with long lasting effects |

NFPA health hazard: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard: 1 - Must be preheated before ignition can occur.

NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and not reactive with water.

SDS US (GHS HazCom 2012)

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10/30/2014 EN (English) SDS ID: 2-9029 10/10