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

1.1. Product identifier
Trade name: NO-TOX2®
Product name: PROPYLENE GLYCOL/ALCOHOL
Product form: Mixture
Product code: NA1993

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture: De-icant for compressed airlines. Not for human or animal consumption.

1.3. Details of the supplier of the safety data sheet
Tanner Systems, Inc
625 - 19th Avenue N.E
P.O. Box 488
St. Joseph, MN 56374, U.S.A.
Telephone: FACTORY, 800-461-6454
Email: info@tannersystems.com
Website: www.tannersystems.com

1.4. Emergency telephone number
Emergency number: CHEMTREC, 800-424-9300 (24 Hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
GHS-US classification
Flam. Liq. 4 H227
Eye Irrit. 2B H320

2.2. Label elements
GHS-US labelling
Signal word (GHS-US): Warning
Hazard statements (GHS-US): H227 - Combustible liquid
H320 - Causes eye irritation
Precautionary statements (GHS-US): P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
P264 - Wash hands, forearms and face thoroughly after handling
P280 - Wear eye protection, protective gloves, protective clothing
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical advice/attention
P370+P378 - In case of fire: Use dry extinguishing powder, carbon dioxide (CO2) to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste

2.3. Other hazards
Other hazards not contributing to the classification: None under normal conditions.

2.4. Unknown acute toxicity (GHS US)
No data available

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-Propylene glycol</td>
<td>(CAS No) 57-55-6</td>
<td>40 - 70</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>(CAS No) 64-17-5</td>
<td>1 - 5</td>
</tr>
<tr>
<td>2-Amino-2-methyl-1-propanol</td>
<td>(CAS No) 124-66-5</td>
<td>0.5 - 1.5</td>
</tr>
<tr>
<td>Boric acid (H3BO3), compound with 2-aminooethanol</td>
<td>(CAS No) 26038-87-9</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>
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: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.

First-aid measures after skin contact: IF ON SKIN (or clothing): Remove affected clothing and thoroughly wash all exposed skin with mild soap water. If irritation develops or persists, seek medical attention.

First-aid measures after eye contact: IF IN EYES: Immediately flush with plenty of water. Remove contact lenses if present and easy to do so. If pain, blinking, or irritation develops or persists, seek medical attention. Continue rinsing.

First-aid measures after ingestion: IF SWALLOWED: Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention if you feel unwell.

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

Symptoms/injuries: Causes eye irritation.
Symptoms/injuries after inhalation: May cause respiratory irritation.
Symptoms/injuries after skin contact: May cause skin irritation.
Symptoms/injuries after eye contact: Causes eye irritation.
Symptoms/injuries after ingestion: May cause gastrointestinal irritation.

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

No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Dry chemical. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Combustible liquid.
Explosion hazard: Under fire conditions closed containers may rupture or explode.
Reactivity: No dangerous reactions known under normal conditions of use.

5.3. Advice for firefighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Evacuate area. Ventilate area. Keep upwind. Stop leak. No flames, no sparks. Eliminate all sources of ignition. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

6.1.1. For non-emergency personnel

Protective equipment: Wear Protective equipment as described in Section 8.
Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Prevent entry to sewers and public waters.

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). Exclude sources of ignition and ventilate the area.
NO-TOX2®
Safety Data Sheet
Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.4. Reference to other sections
No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with skin, eyes and clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapours. Use only in well-ventilated areas. Ensure proper electrical grounding procedures are in place. When opening drum give bung no more than one (1) turn and stop. Allow pressure to vent before proceeding.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Keep container closed when not in use. Store in a dry, cool and well-ventilated place. Keep away from ignition sources. Use only D.O.T. approved containers.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Compound</th>
<th>Remarks</th>
<th>OELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-Propylene glycol (57-55-6)</td>
<td></td>
<td>OELs not established</td>
</tr>
<tr>
<td>Ethyl alcohol (64-17-5)</td>
<td></td>
<td>1000 ppm</td>
</tr>
<tr>
<td>ACGIH STEL (ppm)</td>
<td></td>
<td>OELs not established</td>
</tr>
<tr>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td></td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td>OSHA PEL (TWA) (ppm)</td>
<td></td>
<td>1000 ppm</td>
</tr>
<tr>
<td>2-Amino-2-methyl-1-propanol (124-68-5)</td>
<td></td>
<td>OELs not established</td>
</tr>
<tr>
<td>Boric acid (H3BO3), compound with 2-aminoethanol (26038-87-9)</td>
<td>OELs not established</td>
<td></td>
</tr>
<tr>
<td>Boric acid (H3BO3), compound with 1-amino-2-propanol (26038-90-4)</td>
<td>OELs not established</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls
Appropriate engineering controls: Provide ventilation designed for combustible atmospheres. Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment: Gloves. Protective goggles.

Hand protection: Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection: Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection: Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

Respiratory protection: Use NIOSH-approved dust/particulate respirator. Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.
**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>Color</td>
<td>Pink</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight alcohol</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>75 °C (167°F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>64.9 °C (150°F) [Method: TCC]</td>
</tr>
<tr>
<td>Auto-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>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density @ 20°C (69°F)</td>
<td>1.02</td>
</tr>
<tr>
<td>Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>100 %</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</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 under normal conditions of use.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid


10.5. Incompatible materials

 Oxidizing agents.

10.6. Hazardous decomposition products

 Carbon dioxide. Carbon monoxide.

**SECTION 11: Toxicological information**

11.1. Information on toxicological effects

Acute toxicity : Not classified

**1,2-Propylene glycol (57-55-6)**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>20000 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>20800 mg/kg</td>
</tr>
<tr>
<td>ATE CLP (oral)</td>
<td>20000.000 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE CLP (dermal)</td>
<td>20800.000 mg/kg bodyweight</td>
</tr>
</tbody>
</table>
**Ethyl alcohol (64-17-5)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>124.7 mg/l/4h</td>
</tr>
</tbody>
</table>

**2-Amino-2-methyl-1-propanol (124-68-5)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>2900 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**: Not classified

**Serious eye damage/irritation**: Causes eye irritation.

**Respiratory or skin sensitisation**: Not classified

**Germ cell mutagenicity**: Not classified

**Carcinogenicity**: Not classified

**Ethyl alcohol (64-17-5)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
<td>1 - Carcinogenic to humans</td>
</tr>
</tbody>
</table>

**Reproductive toxicity**: Not classified

**Specific target organ toxicity (single exposure)**: Not classified

**Specific target organ toxicity (repeated exposure)**: Not classified

**Aspiration hazard**: Not classified

**Symptoms/injuries after inhalation**: May cause respiratory irritation.

**Symptoms/injuries after skin contact**: May cause skin irritation.

**Symptoms/injuries after eye contact**: Causes eye irritation.

**Symptoms/injuries after ingestion**: May cause gastrointestinal irritation.

### SECTION 12: Ecological information

**12.1. Toxicity**

Ecology - general: No information available.

**2-Amino-2-methyl-1-propanol (124-68-5)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fishes 1</td>
<td>190 mg/l 96 hr Lepomis macrochirus</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>193 mg/l 48 hr Daphnia magna</td>
</tr>
<tr>
<td>ErC50 (algae)</td>
<td>520 mg/l 72 hr Desmodesmus subspicatus</td>
</tr>
</tbody>
</table>

**12.2. Persistence and degradability**

No additional information available

**12.3. Bioaccumulative potential**

No additional information available

**12.4. Mobility in soil**

No additional information available

**12.5. Other adverse effects**

No additional information available

### SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

Waste treatment methods: Do not discharge to public wastewater systems without permit of pollution control authorities.

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Refer to current EPA regulations. Do not allow the product to be released into the environment.

### SECTION 14: Transport information

**Ground (US DOT)**: NA1993 Combustible liquid, n.o.s., 3, III

**Water (IMDG)**: NA1993 Combustible liquid, n.o.s., 3, III

**Air (IATA)**: NA1993 Combustible liquid, n.o.s., 3, III
14.3 Additional Information

Other information: No supplementary information available.

Overland Transport

No additional information available

Transport by sea

DOT Vessel Stowage Location: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

Air transport

Not classified for transport by air

SECTION 15: Regulatory information

15.1. US Federal regulations

NO-TOX2®

All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory

<table>
<thead>
<tr>
<th>Methyl alcohol</th>
<th>CAS #: 67-56-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
<td></td>
</tr>
<tr>
<td>Section 302 (EHS) TPQ lb</td>
<td></td>
</tr>
<tr>
<td>Section 304 EHS RQ lb</td>
<td></td>
</tr>
<tr>
<td>CERCLA RQ lb</td>
<td></td>
</tr>
<tr>
<td>Section 313 Listed on US SARA Section 313</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C.I. Food Red 15</th>
<th>CAS #: 81-88-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
<td></td>
</tr>
<tr>
<td>Section 302 (EHS) TPQ lb</td>
<td></td>
</tr>
<tr>
<td>Section 304 EHS RQ lb</td>
<td></td>
</tr>
<tr>
<td>CERCLA RQ lb</td>
<td></td>
</tr>
<tr>
<td>Section 313 Listed on US SARA Section 313</td>
<td></td>
</tr>
</tbody>
</table>

15.2. International regulations

CANADA

Contains a substance not specified on the DSL (Domestic Substances List) or NDSL (Non-Domestic Substances List):

2-(methylamino)-2-methyl-propanol (CAS#: 27646-80-6) at < 0.1%

15.3. US State regulations

California Proposition 65

This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity

| Ethyl alcohol (64-17-5) | |
|------------------------|------------------------|------------------------|------------------------|------------------------|
| U.S. - California - Prop 65 - Carcinogens List | U.S. - California - Prop 65 - Developmental Toxicity | U.S. - California - Prop 65 - Reproductive Toxicity - Female | U.S. - California - Prop 65 - Reproductive Toxicity - Male | No significance risk level (NSRL) |
| No | Yes | No | No | |

| Methyl alcohol (67-56-1) | |
|------------------------|------------------------|------------------------|------------------------|------------------------|
| U.S. - California - Prop 65 - Carcinogens List | U.S. - California - Prop 65 - Developmental Toxicity | U.S. - California - Prop 65 - Reproductive Toxicity - Female | U.S. - California - Prop 65 - Reproductive Toxicity - Male | No significance risk level (NSRL) |
| No | Yes | No | No | |

| C.I. Food Red 15 (81-88-9) | |
|----------------------------|------------------------|------------------------|------------------------|------------------------|
| U.S. - California - Prop 65 - Carcinogens List | U.S. - California - Prop 65 - Developmental Toxicity | U.S. - California - Prop 65 - Reproductive Toxicity - Female | U.S. - California - Prop 65 - Reproductive Toxicity - Male | No significance risk level (NSRL) |
| Yes | No | No | No | |
### 1,2-Propylene glycol (57-55-6)
- U.S. - New Jersey - Right to Know Hazardous Substance List
- U.S. - Pennsylvania - RTK (Right to Know) List

### Ethyl alcohol (64-17-5)
- U.S. - Massachusetts - Right To Know List
- U.S. - New Jersey - Right to Know Hazardous Substance List
- U.S. - Pennsylvania - RTK (Right to Know) List

### Methyl alcohol (67-56-1)
- U.S. - Massachusetts - Right To Know List
- U.S. - New Jersey - Right to Know Hazardous Substance List
- U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

### 2-Amino-2-methyl-1-propanol (124-68-5)
- U.S. - Massachusetts - Right To Know List
- U.S. - New Jersey - Right to Know Hazardous Substance List
- U.S. - Pennsylvania - RTK (Right to Know) List

### C.I. Food Red 15 (81-88-9)
- U.S. - Massachusetts - Right To Know List
- U.S. - New Jersey - Right to Know Hazardous Substance List
- U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

### SECTION 16: Other information

**Indication of changes**
Revision 1.0: New SDS Created.

**Revision date**
06/15/2015

**Other information**
Author: NMR.

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

**NFPA fire hazard**
2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.

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

**HMIS III Rating**
- Health: 1
- Flammability: 2
- Physical: 0
- Personal Protection:

The above information is believed to be accurate and represents the best information currently available to us. Users should make their own investigations to determine the suitability of the information for their particular purposes. This document is intended as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Tanner Systems, Inc makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with the respect to the information set forth herein or the product to which the information refers. Accordingly, Tanner Systems, Inc will not be responsible for damages resulting from use of or reliance upon this information.