

NO-TOX2®

Material Safety Data Sheet

Date: May 5, 2009

NO-TOX2® is a registered trademark of TANNER SYTEMS, INC.

Prepared by Tanner Systems, Inc. for distribution in Canada

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: No-TOX2®
Synonyms: None
Chemical Family: None Known
Application: De-icants

Distributed By: **TANNER SYSTEMS, INC.**
625-19th Avenue N.E.
St. Joseph, MN 56374
U.S.A

Website : www.tannersystems.com
Email : info@tannersystems.com

Emergency Telephone Number (CHEMTREC): (800) 424-9300

Telephone number for non-emergency questions concerning MSDS: 320-363-1800

2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS

<u>Ingredients</u>	<u>Percent</u>	<u>LD50s and LC50s Route & Species:</u>
Ethanol 64-17-5	1-5	Inhalation LC50 Rat: 20000 ppm/10H Inhalation LC50 Mouse: 39 gm/m3/4H Oral LD50 Rat: 7060 mg/kg Oral LD50 Mouse: 3450 mg/kg
Methanol 67-56-1	0.1-1.0	Inhalation LC50 Rat: 64000 ppm/4H Oral LD50 Rat: 5628 mg/kg Oral LD50 Mouse: 7300 mg/kg Dermal LD50 Rabbit: 15800 mg/kg

NON-HAZARDOUS COMPONENTS

<u>Ingredients</u>	<u>Percent</u>	<u>LD50s and LC50s Route & Species:</u>
Propylene glycol 57-55-6	40-70	Oral LD50 Rat: 20 gm/kg Oral LD50 Mouse: 22 gm/kg Dermal LD50 Rabbit: 20800 mg/kg
Water 7732-18-5	15-40	Not available

3. HAZARDS IDENTIFICATION

POTENTIAL ACUTE HEALTH EFFECTS

Eye Contact: Causes eye irritation.

Skin Contact: Causes mild skin irritation.

Inhalation: Causes moderate respiratory irritation. Excessive inhalation causes headache, dizziness, nausea and incoordination.

Ingestion: Causes headache, dizziness, fatigue and central nervous system depression.

4. FIRST AID MEASURES

Eye Contact: Flush with copious amounts of water. Obtain medical attention.

Skin Contact: Flush skin immediately with plenty of water for at least 15 minutes. Get medical attention.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention.

Notes To Physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flash Point: (C): 64.9⁰ (F): 150⁰

Flash Point Method: Tag Closed Cup

Autoignition Temperature: (C): Not applicable (F): Not applicable

Flammable Limits in Air - Lower (%): Not applicable

Flammable Limits in Air - Upper (%): Not applicable

Extinguishing Media: Use DRY chemicals, CO₂, alcohol foam or water spray.

Special Exposure Hazards: Isolate and restrict area access. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure build-up which could result in container rupture. Use fine water spray or fog to control fire spread and cool adjacent structures or containers.

Special Protective Equipment: Fire fighters should wear full protective clothing, including self-contained breathing equipment.

NFPA RATINGS FOR THIS PRODUCT ARE: HEALTH 1, FLAMMABILITY 2, REACTIVITY 0

HMIS RATINGS FOR THIS PRODUCT ARE: HEALTH 1, FLAMMABILITY 2, REACTIVITY 0

6. ACCIDENTAL RELEASE MEASURES

Procedure for Clean Up: Contain spill by diking. Absorb with an inert dry material and place in an appropriate waste disposal container. Flush area with water to remove trace residue. Prevent spilled material from entering sewers, confined spaces, drains, or waterways. Restrict access to unprotected personnel.

Personal Precautionary Measures: Wear appropriate protective equipment.

Environmental Precautionary Measures: Prevent from entering sewers, waterways or low areas.

7. HANDLING AND STORAGE

Handling: Avoid breathing vapor. Avoid contact with eyes, skin and clothing. DO NOT handle or store near an open flame, heat, or other sources of ignition. DO NOT pressurize, cut, heat, or weld containers. Do not store near oxidizers, strong acids or strong alkalis. Ensure proper electrical grounding procedures are in place.

Storage: Store in a cool, dry, well ventilated area, away from heat and ignition sources. Keep containers tightly closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use local exhaust ventilation designed for combustible atmospheres.

Respiratory Protection: If exposure exceeds occupational exposure limits, use an appropriate NIOSH-approved respirator. Use a NIOSH-approved chemical cartridge respirator with organic vapor cartridges or use a NIOSH-approved supplied-air respirator.

Gloves: Impervious gloves.

Skin Protection: Apron, coveralls and/or other resistant protective clothing.

Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.

Other Personal Protection Data: Ensure that eyewash stations and safety showers are proximal to the work-station location.

HAZARDOUS COMPONENTS

<u>Ingredients</u>	<u>Percent</u>	<u>ACGIH 2000 - Time Weighted Averages</u>	<u>OSHA - Vacated PELs - Time Weighted Averages</u>
Ethanol	1-5	1000 ppm TWA	1000 ppm TWA; 1900 mg/m TWA
Methanol 67-56-1	0.1-1.0	250 ppm STEL 200 ppm TWA	200 ppm TWA; 260 mg/m TWA 250 ppm STEL; 325 mg/m STEL

NON-HAZARDOUS COMPONENTS

<u>Ingredients</u>	<u>Percent</u>	<u>ACGIH 2000 - Time Weighted Averages</u>	<u>OSHA - Vacated PELs - Time Weighted Averages</u>
Propylene Glycol 57-55-6	40-70	Not available	Not available
Water 7732-18-5	15-40	Not available	Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	Pink
Odor:	Alcohol
pH:	Not Available
Specific Gravity:	1.02
Boiling Point:	C): 75 ⁰ F): 167 ⁰
Freezing Point:	C): Not Available (F): Not Available
Vapor Pressure:	Not Available
Vapor Density:	Not Available
% Volatile by Volume:	>99
Evaporation Rate:	2.1 (Methanol)
Solubility:	Soluble in water
VOCs (lbs/gallon):	Not Available
Viscosity:	Not Available
Molecular Weight:	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Hazardous Polymerization: Will not occur

Conditions to Avoid: Excessive heat, open flames and all ignition sources.

Materials to Avoid: Oxidizing agents

Hazardous Decomposition Products: Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

PRINCIPLE ROUTES OF EXPOSURE *****

Ingestion: Ingestion of this product would cause headache, dizziness, fatigue and central nervous system depression.

Skin Contact: Causes mild skin irritation.

Inhalation: Causes moderate respiratory irritation. Excessive inhalation causes headache, dizziness, nausea and incoordination.

Eye Contact: Causes eye irritation.

ACUTE TEST OF PRODUCT *****

Acute Oral LD50: Not Available

Acute Dermal LD50: Not Available

Acute Inhalation LC50: Not Available

CARCINOGENICITY *****

Hazardous Components:

<u>Ingredients</u>	<u>Percent</u>	<u>ACGIH 2000 - Carcinogens</u>
Ethanol 64-17-5	1-5	A4 - Not Classifiable as a Human Carcinogen
Methanol 67-56-1	0.1-1.0	Not listed

Non Hazardous Components:

<u>Ingredients</u>	<u>Percent</u>	<u>ACGIH 2000 - Carcinogens</u>
Propylene glycol 57-55-6	40-70	Not listed
Water 7732-18-5	15-40	Not listed

Genotoxicity: Not Available

Reproductive/Developmental Toxicity: Not Available

Teratogenicity: Not Available

Embryotoxicity: Not Available

Mutagenicity: Not Available

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

<u>Ingredients</u>	<u>Percent</u>	<u>Ecotoxicity - Fish Species Data</u>	<u>Acute Crustaceans Toxicity</u>	<u>Ecotoxicity - Freshwater Algae</u>
Ethanol 64-17-5	1-5	LC50(96 hr)rainbow trout(30 days old):12900-15300 mg/L: Flow-through, 24-24.3 C, pH 7.56-7.60, 40.9-43.7 mg/L CaCO3; LC50(24 hr)fingerling trout:11200 mg/L.;LC50 96 hr) fathead minnow: 14200 mg/	Not Available.	Not Available
Methanol 67-56-1	0.1-1.0	LC50 (96 hr) fathead minnow (28-29 days old):29400 mg/L:25 C, pH 7.63-7.69, 43.5 mg/L CaCo3.;LC50 (96 hr) rainbow trout(fingerling):13-68 mg/L;LC50(48 hr) trout:8000 mg/L.	Not Available.	Not Available
Propylene Glycol 57-55-6	40-70	LC50 (24 hr) goldfish :>5000 mg/L; LC50(48 hr)guppy:>10000 mg/L.	Not Available.	Not Available
Water 7732-18-5	15-40	Not Available	Not Available.	Not Available

13. DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.

Contaminated Packaging: Empty containers should be recycled or disposed of through an approved waste management facility.

14. TRANSPORT INFORMATION

DOT (U.S.A.): **DOT Shipping Name:** Combustible liquid, n.o.s. (Methanol)
Hazard Class: 3
UN/NA Number: NA1993
DOT Packing Group: III
DOT Reportable Quantity (lbs): Not applicable
Marine Pollutant: No

ICAO/IATA: **IATA Proper Shipping Name:** Not regulated
IATA Hazard Class: Not Applicable
UN/NA Number: Not applicable
Packing Group: Not Applicable
IATA Label: Not regulated

IMDG: **IMDG Proper Shipping Name:** Not regulated
Hazard Class: Not applicable
Packing Group: Not applicable
EMS No: Not applicable
MFAG Table No: Not applicable
Marine Pollutant: No
IMDG Flash Point (C): Not available
IMDG Label: Not regulated

TDG (CANADA) **TDG Proper Shipping Name:** Not Regulated
Hazard Class: Not applicable
UN Number: Not applicable
Packing Group: Not applicable
Marine Pollutant: No

15. REGULATORY INFORMATION

U.S. TSCA Inventory Status: Listed
Canadian DSL Inventory Status: Listed
Canadian NDSL Inventory Status: Not Listed

U.S. REGULATORY RULES *****

<u>ETHANOL 1-5</u>	<u>64-17-5</u>
<u>CERCLA/SARA - Section 302:</u>	Not Listed
<u>SARA (311, 312) Hazard Class:</u>	Not Listed
<u>CERCLA/SARA - Section 313:</u>	Not Listed
<u>METHANOL 0.1-1.0</u>	<u>67-56-1</u>
<u>CERCLA/SARA - Section 302:</u>	Not Listed
<u>SARA (311, 312) Hazard Class:</u>	Listed
<u>CERCLA/SARA - Section 313:</u>	Listed
<u>PROPYLENE GLYCOL 40-70</u>	<u>57-55-6</u>
<u>CERCLA/SARA - Section 302:</u>	Not Listed
<u>SARA (311, 312) Hazard Class:</u>	Not Listed
<u>CERCLA/SARA - Section 313:</u>	Not Listed
<u>WATER 15-40</u>	<u>7732-18-5</u>
<u>CERCLA/SARA - Section 302:</u>	Not Listed
<u>SARA (311, 312) Hazard Class:</u>	Not Listed
<u>CERCLA/SARA - Section 313:</u>	Not Listed

CALIFORNIA Proposition 65: Not Listed
MASSACHUSETTS Right to Know List: Listed
NEW JERSEY Right-to-Know List: Listed
PENNSYLVANIA Right to Know List: Listed

CANADA - WHMIS Classification: B3 COMBUSTIBLE LIQUIDS
D2B TOXIC MATERIALS



16. OTHER INFORMATION

ADDITIONAL INFORMATION: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and this MSDS contains all the information required by the CPR.

DISCLAIMER: NOTICE TO READER -- The information contained herein is based on the data available to us and is believed to be correct. However, TANNER SYSTEMS, INC. makes no warranty expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. TANNER SYSTEMS, INC. assumes no responsibility for injury from the use of the product described therein.

END OF MSDS

NO-TOX2®
03/01/2008