



Safety Data Sheet

 Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

 Revision date: 06/15/2015
 Supersedes: 10/01/2014
 Version: 1.0

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

1.1. Product identifier

Use of the substance/mixture

Trade name	: NO-TOX2®	
Product name	: PROPYLENE GLYCOL/ALCOHO)L
Product form	: Mixture	
Product code	: NA1993	

1.2. Relevant identified uses of the substance or mixture and uses advised against

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

2.4. Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%
1,2-Propylene glycol	(CAS No) 57-55-6	40 - 70
Ethyl alcohol	(CAS No) 64-17-5	1 - 5
2-Amino-2-methyl-1-propanol	(CAS No) 124-68-5	0.5 - 1.5
Boric acid (H3BO3), compound with 2-aminoethanol	(CAS No) 26038-87-9	0.1 - 1

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SECTION 4: First 4.1. Description of First-aid measures gene First-aid measures after	acid (H3BO3), compound with aid measures	1-amino-2-propanol	(CAS No) 26038-90-4	0.1 - 1
SECTION 4: First 4.1. Description of First-aid measures gene First-aid measures after	aid measures			
4.1. Description of First-aid measures gene First-aid measures after				
4.1. Description of First-aid measures gene First-aid measures after				
First-aid measures after	of first aid measures		w mouth to on unconscious norson. If w	au faal unwall, aaak madiaal
First-aid measures after		advice (show the labe	I where possible).	
	Inhalation	medical attention if bro	e to fresh air and keep at rest in a position eathing is affected. If breathing is difficu	on comfortable for breathing. Get ilt, supply oxygen.
First-aid measures after	skin contact	: IF ON SKIN (or clothir mild soap water. If irrit	ng): Remove affected clothing and thoro ation develops or persists, seek medica	oughly wash all exposed skin with al attention.
First-aid measures after	eye contact	: IF IN EYES: Immediat to do so. If pain, blinki rinsing.	tely flush with plenty of water. Remove ng, or irritation develops or persists, se	contact lenses if present and eas ek medical attention. Continue
First-aid measures after	ingestion	: IF SWALLOWED: rins control center or medi	e mouth thoroughly. Do not induce von cal professional. Get medical attention	niting without advice from poison if you feel unwell.
4.2. Most importa	ant symptoms and effects	s, both acute and delay	ved	
Symptoms/injuries		: Causes eye irritation.		
Symptoms/injuries after	inhalation	: May cause respiratory	rirritation.	
Symptoms/injuries after	skin contact	: May cause skin irritati	on.	
Symptoms/injuries after	eye contact	: Causes eye irritation.		
Symptoms/injuries after	ingestion	: May cause gastrointee	stinal irritation.	
4.3. Indication of	any immediate medical a	attention and special tr	eatment needed	
No additional informatio	n available			
SECTION 5: Firefi	ghting measures			
5.1. Extinguishin	g media			
Suitable extinguishing n	nedia	: Dry chemical. Carbon	dioxide.	
5.2. Special haza	rds arising from the subs	stance or mixture		
Fire hazard		: Combustible liquid.		
Explosion hazard		: Under fire conditions of	closed containers may rupture or explor	de.
Reactivity		: No dangerous reaction	ns known under normal conditions of us	Se.
5.3. Advice for fir	efighters			
Firefighting instructions		: Use water spray or for chemical fire. Do not o	g for cooling exposed containers. Exerc dispose of fire-fighting water in the envir	ise caution when fighting any ronment.
Protection during firefight	nting	: Do not enter fire area	without proper protective equipment, in	cluding respiratory protection.
SECTION 6: Accid	lental release measi	ures		
6.1. Personal pre	cautions, protective equi	ipment and emergency	procedures	
General measures		: Evacuate area. Ventila sources of ignition. Sp respiratory equipment	ate area. Keep upwind. Stop leak. No fl bill should be handled by trained clean-t and full chemical protective gear (see	ames, no sparks. Eliminate all up crews properly equipped with Section 8).
6.1.1. For non-eme	rgency personnel			
Protective equipment		: Wear Protective equip	ment as described in Section 8.	
Emergency procedures		: Evacuate unnecessar	y personnel.	
6.1.2. For emergen	cv responders			
Protective equipment	.,	: Wear suitable protecti respirator, in case of e	ve clothing, gloves and eye or face pro- emergency.	tection. Approved supplied-air
6.2. Environment	al precautions			
Prevent entry to sewers	and public waters. Avoid r	release to the environme	nt. Notify authorities if liquid enters sew	vers or public waters.
6.3. Methods and	material for containmen	t and cleaning up		
For containment		: Contain any spills with streams. Small quanti shovel into container f	n dikes or absorbents to prevent migrati ties of liquid spill: take up in non-combu for disposal. Prevent entry to sewers an	on and entry into sewers or istible absorbent material and d public waters.
Methods for cleaning up		: Soak up spills with ine in a suitable container Exclude sources of ign	ert solids, such as clay or diatomaceous for disposal in accordance with the wa nition and ventilate the area.	earth as soon as possible. Place ste regulations (see Section 13).

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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

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

8.2. Exposure controls

Appropriate engineering controls

Personal protective equipment

 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.
 Gloves. Protective goggles.



- : 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.
- : Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles.
 - : Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.
- : Use NIOSH-approved dust/particulate respirator. Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

Hand protection

Eye protection

Skin and body protection Respiratory protection

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SECTION 9: Physical and chemical properties			
9.1 Information on basic physical and chemical properties			
Physical state			
Color	· Pink		
Odor	· Slight alcohol		
Odor Threshold	: No data available		
Н	: No data available		
Relative evaporation rate (butylacetate=1)	: No data available		
Melting point	: No data available		
Freezing point	: No data available		
Boiling point	: 75 °C (167°F)		
Flash point	: 64.9 °C (150°F) [Method: TCC]		
Auto-ignition temperature	: No data available		
Decomposition temperature	: No data available		
Flammability (solid, gas)	: No data available		
Vapour pressure	: No data available		
Relative vapour density at 20 °C	: No data available		
Relative density @ 20°C (69°F)	: 1.02		
Density	: No data available		
Solubility in water	: 100 %		
Log Pow	: No data available		
Log Kow	: No data available		
Viscosity, kinematic	: No data available		
Viscosity, dynamic	: No data available		
Explosive properties	: No data available		

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Oxidising properties

Explosive limits

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

Sparks. Heat. Open flame. Ignition sources.

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

: No data available

: No data available

20000 mg/kg
20800 mg/kg
20000.000 mg/kg bodyweight
20800.000 mg/kg bodyweight
2 2 2

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Ethyl alcohol (64-17-5)	
LC50 inhalation rat (mg/l)	124.7 mg/l/4h
2-Amino-2-methyl-1-propanol (124-68-5)	
LD50 oral rat	2900 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
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)	
IARC group	1 - Carcinogenic to humans
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)	
LC50 fishes 1	190 mg/l 96 hr Lepomis macrochirus
EC50 Daphnia 1	193 mg/l 48 hr Daphnia magna
ErC50 (algae)	520 mg/l 72 hr Desmodesmus subspicatus

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 consideration	IS
13.1. Waste treatment methods	
Waste treatment methods	: Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Refer to cur 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

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14.3 Additional Information

Other information

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				
Methyl alcohol	CAS #:	67-56-1		
Listed on the United S	States TSCA	Toxic Substances Control Act) inventory		
Section 302 (EHS) TPQ	Section 302 (EHS) TPQ Ib			
Section 304 EHS RQ		lb		
CERCLA RQ		5000 lb		
Section 313	Listed on US SARA Section 313			
C.I. Food Red 15	CAS #:	81-88-9		
Listed on the United States TSCA (Toxic Substances Control Act) inventory				
Section 302 (EHS) TPQ		lb		
Section 304 EHS RQ	lb			
CERCLA RQ	CERCLA RQ Ib			
Section 313		Listed on US SARA Section 313		

: No supplementary information available.

15.2. International regulations

CANADA

NO-TOX2®					
Contains a substance not specified on the DSL (Domestic Substances List) or NDSL (Non-Domestic Substances List):					
2-(methylamino)-2-methyl-propanol (27646-80-6) at < 0.1%					
2-(methylamino)-2-methyl-propanol CAS#: 27646-80-6 < 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 - Proposition 65 -	U.S California - Proposition 65 -	U.S California - Proposition 65 -	U.S California - Proposition 65 -	No significance risk level (NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity - Female	Reproductive Toxicity - Male	
No	Yes	No	No	
Methyl alcohol (67-56-1)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
No	Yes	No	No	
C.I. Food Red 15 (81-88-9)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	

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1,2-Propylene glycol (57-55-6)	
U.S New Jersey - Right to Know Hazardous Substance List	
Ethyl alcohol (64-17-5)	
U.S Massachusetts - Right To Know List	
U.S New Jersey - Right to Know Hazardous Substance 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 - KTK (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	· · · · · · · · · · · · · · · · · · ·	

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