

Version 1.1	Revision Date: 07/21/2016	MSDS Number: 60000000431	Date of last issue: 05/23/2016 Date of first issue: 05/23/2016			
SECTION	1. IDENTIFICATION					
Prod	luct name	: NAPA® MAC'S	: NAPA® MAC'S WINDSHIELD DEICER DEICER			
Prod	luct code	: 7000				
Manufacturer or supplier's of Company name of supplier Address Telephone Emergency telephone num- ber		 Niteo Products Dallas TX 1916 1-844-696-483 	6			

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification Flammable aerosols	: Category 2
Acute toxicity (Oral)	: Category 3
Acute toxicity (Inhalation)	: Category 3
Acute toxicity (Dermal)	: Category 3
Specific target organ toxicity - single exposure	: Category 1 (Central nervous system, Eyes)
Specific target organ toxicity - repeated exposure (Oral)	: Category 2 (Kidney, Liver)
GHS Label element Hazard pictograms	
Signal word	: Danger Danger
Hazard statements	: H223 Flammable aerosol. H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled



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		Eyes). H373 May cause prolonged or rep H223 Flammabl H301 + H311 + if inhaled H370 Causes da Eyes). H373 May cause	amage to organs (Central nervous system, e damage to organs (Kidney, Liver) through beated exposure if swallowed. e aerosol. H331 Toxic if swallowed, in contact with skin or amage to organs (Central nervous system, e damage to organs (Kidney, Liver) through beated exposure if swallowed.
Preca	autionary statements	No smoking. P211 Do not spr P251 Pressurize use. P260 Do not bre P264 Wash skin P270 Do not eat P271 Use only of P280 Wear prote P280 Wear prote P210 Keep awa No smoking. P211 Do not spr P251 Pressurize use. P260 Do not bre P264 Wash skin P270 Do not eat P271 Use only of P280 Wear prote Response: P301 + P310 + I P0ISON CENTE P302 + P352 + I water. Call a PC unwell. P304 + P340 + I and keep comfo doctor/ physician P307 + P311 IF physician. P362 Take off c P301 + P310 + I P0ISON CENTE P302 + P352 + I water. Call a PC unwell. P304 + P340 + I and keep comfo doctor/ physician	exposed: Call a POISON CENTER or doctor/ ontaminated clothing and wash before reuse. P330 IF SWALLOWED: Immediately call a ER or doctor/ physician. Rinse mouth. P312 IF ON SKIN: Wash with plenty of soap and DISON CENTER or doctor/ physician if you feel P311 IF INHALED: Remove person to fresh air rtable for breathing. Call a POISON CENTER or



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		Storage: P403 + P233 Si tightly closed. P405 Store lock P410 + P412 Pl tures exceeding P403 + P233 Si tightly closed. P405 Store lock P405 Store lock P410 + P412 Pl tures exceeding Disposal: P501 Dispose of posal plant.	rotect from sunlight. Do not expose to tempera- g 50 °C/ 122 °F. tore in a well-ventilated place. Keep container ked up. rotect from sunlight. Do not expose to tempera-
	r hazards known.		

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture	:	Mixture
Substance name	:	Blend used in aerosol is R0262703

Hazardous components

Chemical Name	CAS-No.	Concentration (% w/w)
METHANOL	67-56-1	>= 50 - < 70
ETHYLENE GLYCOL	107-21-1	>= 5 - < 10
CARBON DIOXIDE	124-38-9	>= 1 - < 5
MORPHOLINE	110-91-8	>= 0.1 - < 1

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4. FIRST AID MEASURES

General advice	 Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	 If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician. Move to fresh air. Keep patient warm and at rest.
In case of skin contact	: Wash off with warm water and soap. Wash contaminated clothing before re-use.



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In ca	se of eye contact	Remove conta Protect unhar	
lf swa	allowed	Rinse mouth Do not give m Never give ar	attention immediately. with water. hilk or alcoholic beverages. hything by mouth to an unconscious person. bersist, call a physician.
	important symptoms effects, both acute and red	Causes dama May cause da exposure if sv Effects of acu fairly distinct s exposure, las nervous syste ing, and in se death). The s sure and is in characterized cyanosis, and pneumonia, c final stage occ by renal failur nitrogen and c anuria with ac aluria is found	owed, in contact with skin or if inhaled age to organs. amage to organs through prolonged or repeated vallowed. te ethylene glycol poisoning appear in three stages. The initial stage occurs shortly after ts 6-12 hours, and is characterized by central em effects (transient exhilaration, nausea, vomit- vere cases, coma, convulsions, and possible second stage lasts from 12-36 hours after expo- itiated by the onset of coma. This phase is by tachypnia, tachycardia, mild hypotension, in severe cases, pulmonary edema, broncho- ardiac enlargement, and congestive failure. The curs 24-72 post-exposure and is characterized e, ranging from a mild increase in blood urea creatinine followed by recovery, to complete cute tubular necrosis that can lead to death. Ox- d in most cases. The most significant laboratory viene glycol intoxication is severe metabolic aci-
Note	s to physician	metabolism o should be adr vere poisonin is 3 hours. If the patient thr higher whiske Fomepizole (4 alcohol dehyc antidote in the	contains ethylene glycol. Ethanol decreases the f ethylene glycol to toxic metabolites. Ethanol ninistered as soon as possible in cases of se- g since the elimination half-life of ethylene glycol medical care will be delayed several hours, give ree to four 1-ounce oral "shots" of 86-proof or ey before or during transport to the hospital. 4-methylpyrazole) is an effective antagonist of drogenase, and as such, may be used as an e treatment of ethylene glycol poisoning. Hemo- ively removes ethylene glycol and its metabolites of

SECTION 5. FIREFIGHTING MEASURES

: Water spray
Carbon dioxide (CO2)
Dry chemical
Alcohol-resistant foam



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_	Unsui media	itable extinguishing a	:	High volume wate	r jet
	Speci fightir	fic hazards during fire- ng	:	fire.	water stream as it may scatter and spread
	Haza ucts	rdous combustion prod-	:	Carbon oxides Aldehydes	
	Speci ods	fic extinguishing meth-	:	Product is compa	tible with standard fire-fighting agents.
	Furth	er information	:	cumstances and t Fire residues and be disposed of in	measures that are appropriate to local cir- he surrounding environment. contaminated fire extinguishing water must accordance with local regulations. to cool fully closed containers.
		al protective equipment efighters	:	In the event of fire	e, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- : tive equipment and emer- gency procedures	Use personal protective equipment. Remove all sources of ignition. Ensure adequate ventilation. Avoid breathing dust. Beware of vapours accumulating to form explosive concentra- tions. Vapours can accumulate in low areas. Evacuate personnel to safe areas. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Comply with all applicable local, state and federal regulations.
Environmental precautions :	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for : containment and cleaning up	Contain spillage, and then collect with non-combustible ab- sorbent material, (e.g. sand, earth, diatomaceous earth, ver- miculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on protection against	: Take necessary action to avoid static electricity discharge
fire and explosion	(which might cause ignition of organic vapours). Keep away
	from open flames, hot surfaces and sources of ignition. Use
	only explosion-proof equipment. Do not spray on a naked



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		flame or any inca	andescent material.
Advice on safe handling		 Open drum carefully as content may be under pressure. Provide sufficient air exchange and/or exhaust in work room Do not breathe vapours/dust. Do not smoke. Take precautionary measures against static discharges. Dispose of rinse water in accordance with local and national regulations. Container hazardous when empty. Smoking, eating and drinking should be prohibited in the ap- plication area. For personal protection see section 8. 	
Conditions for safe storage		 BEWARE: Aerosol is pressurized. Keep away from direct s exposure and temperatures over 50 °C. Do not open by for or throw into fire even after use. Do not spray on flames or red-hot objects. Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. No smoking. 	

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
METHANOL	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m3	NIOSH REL
		ST	250 ppm 325 mg/m3	NIOSH REL
		TWA	200 ppm 260 mg/m3	OSHA Z-1
		STEL	250 ppm 325 mg/m3	OSHA P0
		TWA	200 ppm 260 mg/m3	OSHA P0
ETHYLENE GLYCOL	107-21-1	C (Aerosol only)	100 mg/m3	ACGIH
		С	50 ppm 125 mg/m3	OSHA P0
CARBON DIOXIDE	124-38-9	TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH
		TWA	5,000 ppm 9,000 mg/m3	NIOSH REL
		ST	30,000 ppm 54,000 mg/m3	NIOSH REL
		TWA	5,000 ppm	OSHA Z-1



OSHA P0

NAPA® MAC'S WINDSHIELD DEICER

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					9,000 mg/m3	
				TWA	10,000 ppm 18,000 mg/m3	OSHA P0
				STEL	30,000 ppm 54,000 mg/m3	OSHA P0
	MORF	PHOLINE	110-91-8	TWA	20 ppm	ACGIH
				TWA	20 ppm 70 mg/m3	NIOSH REL
				ST	30 ppm 105 mg/m3	NIOSH REL
				TWA	20 ppm 70 mg/m3	OSHA Z-1
				TWA	20 ppm 70 mg/m3	OSHA P0

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sam- pling time	Permissible concentra- tion	Basis
METHANOL	67-56-1	Methanol	Urine	End of shift (As soon as possible after exposure ceases)	15 mg/l	ACGIH BEI

STEL

30 ppm 105 mg/m3

Engineering measures : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Respiratory protection	:	Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust). Use NIOSH approved respiratory protection.
Hand protection		
Remarks	:	Wear resistant gloves (consult your safety equipment suppli- er). The suitability for a specific workplace should be dis- cussed with the producers of the protective gloves. Discard gloves that show tears, pinholes, or signs of wear.
Eye protection	:	Not required under normal conditions of use. Wear splash- proof safety goggles if material could be misted or splashed into eyes.
Skin and body protection	:	Choose body protection according to the amount and con- centration of the dangerous substance at the work place. Wear as appropriate:



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Hygie	ene measures	: Handle in accor	•
			rith skin, eyes and clothing. fore breaks and immediately after handling

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: aerosol
Odour	: No data available
рН	: No data available
Melting point/freezing point	: No data available
Boiling point/boiling range	: 64.7 °C (1,013.25 hPa) Value for Component
Flash point	: 12 °C The value is calculated
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: 36 %(V) The value is calculated
Lower explosion limit	: 3.2 %(V) The value is calculated
Vapour pressure	: 169.3164 hPa (25 °C) Value for Component
Density	: 0.7972 g/cm3 (15.56 °C)
Solubility(ies) Water solubility	: No data available
Partition coefficient: n- octanol/water	: No data available
Viscosity Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Oxidizing properties	: No data available



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Heat	of combustion	: estimated 15.35 kJ/g		
SECTION	10. STABILITY AND RE	ACTIVITY		
Read	tivity	: No decomposition if stored and applied as directed.		
Chen	nical stability	: Stable under normal conditions.		
Poss tions	ibility of hazardous reac-	: Vapours may form explosive mixture with air.		
Cond	litions to avoid	: Heat, flames and sparks. Exposure to sunlight.		
Incompatible materials		 Aldehydes Alkali metals Alkaline earth metals Aluminium Lead Strong acids Strong bases Strong oxidizing agents Sulphur compounds Zinc Peroxides 		
	11. TOXICOLOGICAL I			

Inhalation Eye contact Skin contact	DI	exposure
Acute toxicity		
Toxic if swallowed, in contact w	/ith	skin or if inhaled
Product:		
Acute oral toxicity	:	Acute toxicity estimate: 159.13 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate: 0.8 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method
Acute dermal toxicity	:	Acute toxicity estimate: 479.17 mg/kg Method: Calculation method
Components: METHANOL: Acute oral toxicity	:	LDLo (Humans): 300 mg/kg



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		Assessment: The component/mixture is toxic after single in- gestion.		
Acute	inhalation toxicity	: Assessment: The component/mixture is toxic after short tern inhalation.		
Acute dermal toxicity		: LD50 (Rabbit): 12,800 mg/kg Assessment: The component/mixture is toxic after single con tact with skin.		
	CLENE GLYCOL: oral toxicity	: LD50 (Rat): 6,140 mg/kg		
		LD50 (Humans): estimated 1.56 g/kg Assessment: The component/mixture is moderately toxic aft single ingestion.		
Acute inhalation toxicity		: LC50 (Rat): 10.9 mg/l Exposure time: 1 h Test atmosphere: dust/mist Assessment: No adverse effect has been observed in acute inhalation toxicity tests.		
Acute	dermal toxicity	LD50 (Rabbit): 9,530 mg/kg		
MORI	PHOLINE:			
Acute	oral toxicity	: LD50 (Rat): ca. 1,900 mg/kg Method: OECD Test Guideline 401		
Acute	inhalation toxicity	: Assessment: The component/mixture is toxic after short tern inhalation.		
Acute	dermal toxicity	: LD50 (Rabbit): ca. 500 mg/kg		
	corrosion/irritation assified based on ava	ilable information.		
<u>Produ</u>	uct:			
		may cause skin dryness or cracking.		

Species: Rabbit Result: No skin irritation

ETHYLENE GLYCOL:

Result: Mild skin irritation

CARBON DIOXIDE:

Assessment: No skin irritation Result: No skin irritation

MORPHOLINE:

Result: Corrosive after 3 minutes or less of exposure



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Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: No eye irritation

Remarks: Unlikely to cause eye irritation or injury.

Components:

METHANOL: Species: Rabbit Result: Possibly irritating to eyes

ETHYLENE GLYCOL: Result: Possibly irritating to eyes

CARBON DIOXIDE: Result: No eye irritation

MORPHOLINE: Result: Irreversible effects on the eye

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information.

Components:

METHANOL: Test Type: Maximisation Test (GPMT) Species: Guinea pig Assessment: Does not cause skin sensitisation. Method: OECD Test Guideline 406

Germ cell mutagenicity

Not classified based on available information.

Components:

MORPHOLINE:

Genotoxicity in vitro : Test Type: unscheduled DNA synthesis assay Species: rat hepatocytes Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 482 Result: negative

> : Test Type: In vitro mammalian cell gene mutation test Species: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: positive



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Carcir	nogenicity			
Not cla	assified based on availa	able information.		
IARC			s product present at levels greater than or ntified as probable, possible or confirmed by IARC.	
OSHA		No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.		
NTP		No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinoge by NTP.		

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Causes damage to organs (Central nervous system, Eyes).

Components:

METHANOL:

Target Organs: Central nervous system, Eyes Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

STOT - repeated exposure

May cause damage to organs (Kidney, Liver) through prolonged or repeated exposure if swallowed.

Components:

ETHYLENE GLYCOL: Exposure routes: Ingestion Target Organs: Kidney, Liver Assessment: May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods



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Waste from residues		: Dispose of in accordance with all applicable local, state and federal regulations.		
Cont	aminated packaging	 Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum. 		

SECTION 14. TRANSPORT INFORMATION

Marine pollutant

IATA-DGR				
UN/ID No.	:	UN 1950		
Proper shipping name	:	Aerosols, flammable, containing substances in Division 6.1, Packing Group III		
Class	:	2.1		
Subsidiary risk	:	6.1		
Packing group	:	Not assigned by regulation		
Labels	:	Flammable Gas, Toxic		
Packing instruction (cargo aircraft)	:	203		
Packing instruction (passen- ger aircraft)	:	203		
IMDG-Code				
UN number	:	UN 1950		
Proper shipping name	:	AEROSOLS, FLAMMABLE, CONTAINING SUBSTANCES IN DIVISION 6.1, PACKING GROUP III		
	:	2.1 6.1 Not assigned by regulation 2.1 (6.1) F-D, S-U no		
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code				
Not applicable for product as supplied.				
National Regulations				
49 CFR UN/ID/NA number Proper shipping name	-	UN 1950 AEROSOLS, FLAMMABLE, CONTAINING SUBSTANCES IN DIVISION 6.1, PACKING GROUP III		
Class	-	2.1		
Dooking group		Not oppigned by regulation		

Proper shipping name	: AEROSOLS, FLAMMABLE, CONTAINING SUBS DIVISION 6.1, PACKING GROUP III
Class	: 2.1
Packing group	: Not assigned by regulation
Labels	: Class 2 - Gases: Flammable (Division 2.1)
ERG Code	: 126

: no



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SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Component RQ (lbs)
METHANOL	67-56-1	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312	Hazards :	Fire Hazard Chronic Health Hazard Acute Health Hazard		
SARA 302	:	No chemicals in this materia quirements of SARA Title III		eporting re-
SARA 313	:	The following components a tablished by SARA Title III,		ng levels es-
		METHANOL	67-56-1	62.458 %
		ETHYLENE GLYCOL	107-21-1	5.921 %
US State Regu	lations			
Massachusetts	Right To Know	,		
	METHANOL		67-56-1	50 - 70 %
	ETHYLENE GL	YCOL	107-21-1	5 - 10 %
	CARBON DIOX	IDE	124-38-9	1 - 5 %
Pennsylvania F	Right To Know			
2	METHANOL		67-56-1	50 - 70 %
	WATER		7732-18-5	20 - 30 %
	ETHYLENE GL	YCOL	107-21-1	5 - 10 %
	CARBON DIOX	IDE	124-38-9	1 - 5 %
New Jersey Right To Know				
	METHANOL		67-56-1	50 - 70 %
	WATER		7732-18-5	20 - 30 %
	ETHYLENE GL	YCOL	107-21-1	5 - 10 %
	CARBON DIOX	IDE	124-38-9	1 - 5 %

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive



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harm.					

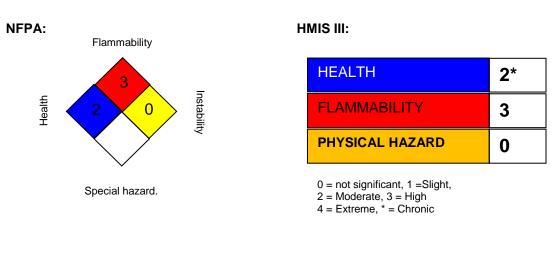
TSCA list

The following substance(s) is/are subject to a Significant New Use Rule: ETHYLENE GLYCOL MONOMETHYL ETHER 109-86-4

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information



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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.

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