

NATIONAL CHEMICAL LABORATORIES, INC.

SAFETY DATA SHEET

Section 2 - Hazard(s) Identification

		Category	Target Organ		
Physical Hazards	Not Classified				
Health Hazards	Not Classified				
OSHA defined hazards	Not Classified.				
Label Elements					
Hazard Symbol					
Signal Word					
Hazard statement	Not available.				
Precautionary statement					
Prevention	Observe good industrial hygiene practices.				
Response	Wash thoroughly after handling.				
Storage	Store away from incompatible materials.				
Disposal	Dispose of contents/container in accordance with local/region	nal/national/inter	national regulations.		
Hazard(s) not otherwise classified (HNOC)	None known.				
	Section 3 - Composition/Information	n on ingred	lients		
Mixture					
Hazardous Components	Ingredient Name	C	AS #	%	
	Diethylene Glycol Monoethyl Ether		11-90-0	1-5	
	Tris(2-Butoxyethyl) Phosphate	7	8-51-3	1 - 5	
Composition Comments	All concentrations are in percent by weight unless ingredient	is a gas. Gas conc	entrations are in percent	by volume.	
	Section 4 - First-aid Mea	sures			
Inhalation	Move to fresh air. Get medical attention if irritation persists.				
Skin contact	Wash skin with soap and water. Get medical attention if irrita	tion persists.			
Eye contact	Flush eyes thoroughly with water for at least 15 minutes. Get medical attention if irritation persists.				
Ingestion	Rinse mouth thoroughly with water. Seek medical advice.				
Most Important symptoms /effects, acute and delayed	Mild eye irritation.				
Indication of immediate medical attention and special treatment	Treat symptomatically.				
General Information	Ensure that medical personnel are aware of the material(s) in	volved, and take	precautions to protect th	emselves.	
	Section 5 - Fire-fighting me	easures			
Suitable extinguishing media	Carbon dioxide, alcohol-resistant foam, dry chemical, water s	pray, or water fog			
Unsuitable extinguishing media	Not available.				

Specific hazards arising from the chemical	None known.				
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.				
Fire-fighting equipment /instructions	Move containers from fire area if you can do it without risk. Use water spray to keep fire-exposed containers cool.				
General fire hazards	This product is not flammable or	This product is not flammable or combustible.			
Specific Methods					
	Section 6 - A	ccidenta	l release measures		
Personal precautions, protective equipment and emergency procedures.	Isolate area. Keep unnecessary p	ersonnel away.	. Use personal protection as recommended in Section 8 of the SDS.		
Methods and materials for containment and cleaning up	SMALL SPILLAGE: Absorb spillage with suitable absorbent material. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. After removal flush contaminated area thoroughly with water. LARGE SPILLS: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. After removal flush contaminated area thoroughly with water.				
Environmental precautions	Avoid discharge into drains, wate	er courses or or	nto the ground.		
	Section 2	7 - Handli	ing and storage		
Precautions for safe handling	-	-	id breathing mist or vapor. Do not taste or swallow. Use with adequate		
	ventilation. Wash thoroughly aft	er nandling. Us	e Personal Protective Equipment recommended in section 8 of the SDS.		
Conditions for safe storage, including any incompatibilities	ventilation. Wash thoroughly att Store away from incompatible m	-			
• ·	Store away from incompatible m	aterials. Keep o			
including any incompatibilities Occupational exposure limits	Store away from incompatible m	aterials. Keep o	container closed.		
including any incompatibilities Occupational exposure limits US. Workplace environmenta	Store away from incompatible m	aterials. Keep o	container closed.		
including any incompatibilities Occupational exposure limits	Store away from incompatible m Section 8 - Expose al Exposure Level (WEEL) Guides	aterials. Keep o	container closed.		
including any incompatibilities Occupational exposure limits US. Workplace environmenta Component Diethylene Glycol Monoeth	Store away from incompatible m Section 8 - Expose al Exposure Level (WEEL) Guides	aterials. Keep o Sure cont Type TWA	Value 140 mg/m ³ , 25 ppm		
including any incompatibilities Occupational exposure limits US. Workplace environmenta Component	Store away from incompatible m Section 8 - Expose al Exposure Level (WEEL) Guides hyl Ether (CAS 111-90-0) No biological exposure limits not	aterials. Keep of Sure cont Type TWA ed for the ingra	Value 140 mg/m ³ , 25 ppm		
including any incompatibilities Occupational exposure limits US. Workplace environmenta Component Diethylene Glycol Monoeth Biological limit values Exposure guidelines Appropriate engineering	Store away from incompatible m Section 8 - Expose al Exposure Level (WEEL) Guides hyl Ether (CAS 111-90-0) No biological exposure limits not Use personal protective equipme	aterials. Keep of Sure cont Type TWA ed for the ingre ent as required.	Value 140 mg/m ³ , 25 ppm edient(s).		
including any incompatibilities Occupational exposure limits US. Workplace environmenta Component Diethylene Glycol Monoeth Biological limit values Exposure guidelines Appropriate engineering controls Individual protection measures, s Eye/face protection	Store away from incompatible m Section 8 - Expose al Exposure Level (WEEL) Guides hyl Ether (CAS 111-90-0) No biological exposure limits not Use personal protective equipme Provide adequate ventilation and supply and eye wash facilities. uch as personal protective equipme	aterials. Keep of Sure cont Type TWA ed for the ingre- ent as required. d minimize the ent	Value 140 mg/m ³ , 25 ppm edient(s). . Keep working clothes separately.		
ncluding any incompatibilities Occupational exposure limits US. Workplace environmenta Component Diethylene Glycol Monoeth Biological limit values Exposure guidelines Appropriate engineering controls ndividual protection measures, s Eye/face protection Skin protection	Store away from incompatible m Section 8 - Expose al Exposure Level (WEEL) Guides hyl Ether (CAS 111-90-0) No biological exposure limits not Use personal protective equipme Provide adequate ventilation and supply and eye wash facilities. uch as personal protective equipm Wear safety glasses. If splash pot	aterials. Keep of Sure cont Type TWA ed for the ingre- ent as required. d minimize the ent sential exists, w	Container closed. trollpersonal protection Value 140 mg/m³ , 25 ppm edient(s). . Keep working clothes separately. risk of inhalation of vapors and mists. Provide easy access to water year full face shield or chemical goggles.		
ncluding any incompatibilities Dccupational exposure limits US. Workplace environmenta Component Diethylene Glycol Monoeth Biological limit values Exposure guidelines Appropriate engineering controls Individual protection measures, s Eye/face protection Skin protection Hand protection	Store away from incompatible m Section 8 - Expose al Exposure Level (WEEL) Guides hyl Ether (CAS 111-90-0) No biological exposure limits not Use personal protective equipme Provide adequate ventilation and supply and eye wash facilities. uch as personal protective equipm Wear safety glasses. If splash pol Wear chemical-resistant, imperv	aterials. Keep of SUIPE CONT Type TWA ed for the ingre- ent as required. d minimize the ent cential exists, w ious gloves. Sui	Container closed. Example container closed. Value 140 mg/m ³ , 25 ppm edient(s). Keep working clothes separately. risk of inhalation of vapors and mists. Provide easy access to water		
including any incompatibilities Occupational exposure limits US. Workplace environmenta Component Diethylene Glycol Monoeth Biological limit values Exposure guidelines Appropriate engineering controls Individual protection measures, s Eye/face protection Skin protection	Store away from incompatible m Section 8 - Expose al Exposure Level (WEEL) Guides hyl Ether (CAS 111-90-0) No biological exposure limits not Use personal protective equipme Provide adequate ventilation and supply and eye wash facilities. uch as personal protective equipme Wear safety glasses. If splash pol Wear chemical-resistant, imperv Wear appropriate chemical resis Use a respirator when local exha	aterials. Keep of SUIPE CONT Type TWA ed for the ingre- ent as required. d minimize the ent sential exists, w ious gloves. Sui tant clothing. ust or ventilation	Container closed. trollpersonal protection Value 140 mg/m³ , 25 ppm edient(s). . Keep working clothes separately. risk of inhalation of vapors and mists. Provide easy access to water year full face shield or chemical goggles.		
including any incompatibilities Occupational exposure limits US. Workplace environmenta Component Diethylene Glycol Monoeth Biological limit values Exposure guidelines Appropriate engineering controls Individual protection measures, s Eye/face protection Skin protection Hand protection Other	Store away from incompatible m Section 8 - Expose al Exposure Level (WEEL) Guides hyl Ether (CAS 111-90-0) No biological exposure limits not Use personal protective equipme Provide adequate ventilation and supply and eye wash facilities. uch as personal protective equipme Wear safety glasses. If splash pot Wear chemical-resistant, imperv Wear appropriate chemical resis	aterials. Keep of SUIPE CONT Type TWA ed for the ingre- ent as required. d minimize the ent tential exists, w ious gloves. Suit tant clothing. ust or ventilation red.	Container closed. Crollpersonal protection Value 140 mg/m³, 25 ppm edient(s). . Keep working clothes separately. risk of inhalation of vapors and mists. Provide easy access to water vear full face shield or chemical goggles. itable gloves can be recommended by the glove supplier. on is not adequate to keep exposures below the OEL. In a confined space a		

Section 9 - Physical and chemical properties

A	One must be wide
Appearance	Opaque Liquid.
Physical state	Liquid.
Form	Liquid.
Color	White.
Odor	Acrylic.
Odor threshold	Not available.
pH (Concentrate)	8.1
Melting point/freezing point	Not available.
Initial boinging point and	Not available.
boiling range	
Flash point	None to boiling.
Evaporation rate	Not available.

Flammability (solid, gas)	Not available.		
Upper/lower flammability or explosive limits			
Flammability limit - lower (%)	Not available.		
Flammability limit - upper (%)	Not available.		
Explosive limit - lower (%)	Not available.		
Explosive limit - upper (%)	Not available.		
Vapor pressure	Similar to water.		
Vapor density	Similar to water.		
Relative density	1.03 ± 0.01		
Relative density temperature	75 °F (23.89 °C)		
Solubilities	Soluble.		
Partition Coefficient n-	Not available		
octanol/water			
Auto-ignition temperature	Not Available		
Decomposition temperature	Not Available		
Viscosity	< 10 cP		
Viscosity Temperature	75 °F (23.89 °C)		

Section 10 - Stability and reactivity

Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable at normal conditions.
Possiblity of hazardous reactions	Hazardous polymerization does not occur.
Conditions to Avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous Decomposition	Carbon monoxide. Carbon dioxide.
Products	

Section 11 - Toxicological information

Information on likely routes of e	xposure				
Ingestion	No adverse effects due to ingestion are expected.				
Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.				
Skin contact	Prolonged or repeated skin contact may cause drying, cracking, or irritation.				
Eye contact	May cause eye irritation.				
Symptoms related to the physical, chemical and toxicological characteristics	May cause eye irritation. Prolonged or repeated skin contact may cause drying, cracking, or irritation.				
Information on toxicological effe	ects.				
Acute toxicity	Not expected to be hazardous.				
Skin corrosion/irritation	Prolonged or repeated contact may dry skin and cause irritation.				
Serious eye damage/ eye irritation	May cause eye irritation.				
Respiratory sensitization	Not classified.				
Skin sensitization	Not available.				
Germ cell mutagenicity	Not classified.				
Carcinogenicity	Not classified.				
Reproductive toxicity	Not classified.				
Specific target organ toxicity - single exposure	Not classified.				
Specific target organ toxicity - repeated exposure	Not classified.				
Aspiration hazard	Not available.				
Chronic effects Further information					
	Section 12 - Ecological Information				
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.				
Persistence and degradability	The product is expected to be biodegradable.				
Bioaccumulative potential	Not known.				
Mobility in soil	Not available.				

		SA	IFE IY L	DATA SHEET	
Mobility in general	•		e and may spr	ead in water systems.	
Other adverse effects	None	known.			
		Section	13 - Dis	posal consideration	S
Disposal instructions	Dispos	se in accordance with	applicable fee	deral, state, and local regulations.	
ocal disposal regulations	Dispos	se of in accordance w	ith local regula	ations.	
lazardous waste code	Waste	e codes should be assi	igned by the u	ser based on the application for w	hich the product was used.
Vaste from residues / unus products	sed Dispos	se in accordance with	all applicable	regulations.	
Contaminated packaging	Since	emptied containers m	nay retain proc	duct residue, follow label warning	s even after container is emptied.
		Sectio	n 14 - Tr	ansport information	
DOT	Not re	egulated as dangerous	s goods.		
ATA		gulated as dangerous	-		
MDG		egulated as dangerous	s goods.		
Fransportation in bulk according to Annex II of	NOLES	stablished.			
MARPOL 73/78 and IBC Cod	de				
General Information					
		Santiar	AE Do		
US federal regulations	This n			gulatory Information	OSHA Hazard Communication Standard, 29 CFR
-	1910.:	1200.		and the second of the second by the	
TSCA Section 12(b) Exp			-	Not regulated.	
US. OSHA Specifically F	-	-	1001-1050)	Not listed.	
CERCLA Hazardous Sub	-	CFR 302.4			
Components				Result	
Diethylene 0	Slycol Monoeth	yl Ether (CAS 111-90-	0)	LISTED	
Tris(2-Butox	yethyl) Phosph	ate (CAS 78-51-3)		LISTED	
Superfund Amendmen	ts and Reautho	orization Act of 1986	(SARA)		
Hazard Categories	Immediate H				
	Delayed Haza				
	Fire Hazard Pressure Haz	No No			
	Reactivity Ha				
SARA 302 Extremely ha					
SARA 311/312 Hazardo		No			
SARA 313 (TRI reportin					
	ical name			CAS #	% by wt.
Diethy	/lene Glycol Mo	onoethyl Ether		111-90-0	1 - 5
Tris(2-	-Butoxyethyl) P	hosphate		78-51-3	1 - 5
Other federal regulations					
Clean Air Act (CAA) Sec	tion 112 Hazar	dous Air Pollutants (HSPs) List		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		ponents	,		
	Dieth	ylene Glycol Monoet	hyl Ether (CAS	111-90-0)	
		2-Butoxyethyl) Phospl			
Clean Air Act (CAA) Sec	-		-		d.
Safe Drinking Water Ac		Not regulated.	• • • • •		
Food and Drug Adminis		Not regulated.			
US state regulations		This product does n reproductive harm.		hemical known to the State of Cal	ifornia to cause cancer, birth defects or other
US.Massachusetts RTK	- Substance Lis	•	Compon	ents	
			-	ne Glycol Monoethyl Ether (CAS 1	
			Tris(2-Butoxyethyl) Phosphate (CAS 78-51-3)		
US.New Jersey Worker	and Communi	ty Right-to-Know Act	•		
				ne Glycol Monoethyl Ether (CAS 1	•
				itoxyethyl) Phosphate (CAS 78-51	-3)
US.Pennsylvania RTK -	Hazardous Sub	stances	Compon		
				ne Glycol Monoethyl Ether (CAS 1	-
			-	itoxyethyl) Phosphate (CAS 78-51	-3)
US.Rhode Island RTK			Compon		
			Diethyle	ne Glycol Monoethyl Ether (CAS 1	11-90-0)

Tris(2-Butoxyethyl) Phosphate (CAS 78-51-3)

Toxicity (CRT): Listed substance	Not listed.		
ternational Inventories			
Country(s) or region	Inventory Name	On Inventory (yes/no)*	
Australia	Australian Inventory of Chemical Substances (AICS)	Yes	
Canada	Domestic Substances List (DSL)	Yes	
Canada	Non-Domestic Substances List (NDSL)	No	
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes	
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes	
Europe	European List of Notifed Chemical Substances (ELINCS)	No	
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes	
Korea	Existing Chemicals List (ECL)	Yes	
New Zealand	New Zealand Inventory Yes		
Philippines	Philippine Inventory of Chemicals and Chemical Substances	Yes	
Unites States	Toxic Substances Control Act (TSCA) Inventory	Yes	
Puerto Rico			

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

. -

_

*A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

--

- .

Section 16 - Other information, including date of preparation or last version			
Issue date	5/28/2014		
Revision date			
Version #	01		
Further information			
List of abbreviations			
References			
Disclaimer	The information contained herein was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond the manufacturer's control, it is the user's responsibility both to determine safe conditions for use of this product and to assume liability for loss, injury, damage or expense arising from the product's improper use. No warranty, expressed or implied, regarding the product described herein shall be created by or inferred from any statement or omission in this SDS. Various government agencies may have specific regulations concerning the transportation, handling, storage, use or disposal of this product which may not be reflected in this SDS. The user should		

review these regulations to ensure full compliance.

_ ._

- -