ChemChill

CHEMCHILL EVAP-CLEAN 19 OZ.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 09/04/2013 :

	bstance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixture
Trade name	: CHEMCHILL EVAP-CLEAN 19 OZ.
Product code	: 165310
1.2. Relevant identified uses of the sub	stance or mixture and uses advised against
Use of the substance/mixture	: FOLLOW LABEL DIRECTIONS
1.3. Details of the supplier of the safety	/ data sheet
Climate Components, LLC 725 Old Norcross rd. #D Lawrenceville, GA 30046	
1.4. Emergency telephone number	
Emergency number	: CHEMTREC 24 Hour 1-800-424-9300
SECTION 2: Hazards identification	
2.1. Classification of the substance or I	mixture
Classification (GHS-US)	
Flam. Liq. 2 H225	
2.2. Label elements	
GHS-US labeling	
Hazard pictograms (GHS-US)	GHS02
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	 H225 - Highly flammable liquid and vapor H280 - Contains gas under pressure; may explode if heated
Precautionary statements (GHS-US)	 P210 - Keep away from heat/sparks/open flames/hot surfaces No smoking P233 - Keep container tightly closed P240 - Ground/bond container and receiving equipment P241 - Use explosion-proof electrical/ventilating/lighting/ equipment P242 - Use only non-sparking tools P243 - Take precautionary measures against static discharge P280 - Wear protective gloves/protective clothing/eye protection/face protection P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower P370+P378 - In case of fire: Use to extinguish P403+P235 - Store in a well-ventilated place. Keep cool P501 - Dispose of contents/container to P251 - Pressurized container: Do not pierce or burn, even after use P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
2.3. Other hazards	
Other hazards not contributing to the classification	: Contains gas under pressure; may explode if heated.
2.4. Unknown acute toxicity (GHS-US)	
No data available	
SECTION 3: Composition/information	on on ingredients
3.1. Substance	
Not applicable	
3.2. Mixture	

Version:

Safety Data Sheet

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

Name		Product identifier	%	Classification (GHS-US)
2-butoxyethanol		(CAS No) 111-76-2	1 - 5	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
nonylphenolpolyethyleneglycol ether, conc=70%, aqu solution	leous	(CAS No) 9016-45-9	<= 0.768	Not classified
Nonlyphenol Ethoxylate		(CAS No) 127087-87-0	<1	Eye Irrit. 2B, H320
EC9541A		(CAS No) Proprietary	< 1	Not classified
ammonium hydroxide, aqueous solution, conc=25%		(CAS No) 1336-21-6	< 1	Skin Corr. 1B, H314 Aquatic Acute 1, H400
sodium hydroxide, conc=50%, aqueous solution		(CAS No) 1310-73-2	0.01375 - 0.12875	Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 2, H401
polyethylene glycol 200-600		(CAS No) 25322-68-3	<= 0.0216	Not classified
NONYL NONOXYNOL-5		(CAS No) 9014-93-1	<= 0.0144	Not classified
sodium chloride		(CAS No) 7647-14-5	0 - 0.0125	Not classified
SECTION 4: First aid measures				
4.1. Description of first aid measures				
First-aid measures general		r give anything by mouth to an u v the label where possible).	nconscious person. If y	ou feel unwell, seek medical advie
First-aid measures after inhalation	: Assu	re fresh air breathing. Allow the	victim to rest.	
First-aid measures after skin contact	: Rinse	skin with water/shower. Remov	e/Take off immediately	all contaminated clothing.
First-aid measures after eye contact	: Rinse persis	immediately with plenty of wate	r. Obtain medical atter	tion if pain, blinking or redness
First-aid measures after ingestion	•	e mouth. Do NOT induce vomitin	g. Obtain emergency n	nedical attention.
4.2. Most important symptoms and effe	cts, both	acute and delayed		
Symptoms/injuries	: Not e	xpected to present a significant	hazard under anticipate	ed conditions of normal use.
4.3. Indication of any immediate medica	al attentio	n and special treatment neede	d	
No additional information available				
SECTION 5: Firefighting measures				
5.1. Extinguishing media				
Suitable extinguishing media	: Foam	. Dry powder. Carbon dioxide. V	Vater spray. Sand.	
Jnsuitable extinguishing media	: Do no	ot use a heavy water stream.		
Fire hazard		y flammable liquid and vapor.	,	
Explosion hazard	: May i	orm flammable/explosive vapor-	air mixture.	
5.3. Advice for firefighters				
Firefighting instructions		vater spray or fog for cooling exp ical fire. Prevent fire-fighting wat		
Protection during firefighting Dther information		ot enter fire area without proper p A Aerosol Level 1.	protective equipment, i	ncluding respiratory protection.
		-		
SECTION 6: Accidental release mea 6.1. Personal precautions, protective ed		and emergency procedures		
General measures		ove ignition sources. Use special	care to avoid static ele	ectric charges. No naked lights. No
6.1.1. For non-emergency personnel				
Protective equipment	: Glove	es. Safety glasses.		
Emergency procedures	: Evac	uate unnecessary personnel.		
5.1.2. For emergency responders				
Protective equipment	: Equip	cleanup crew with proper prote	ction.	

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Safety Data Sheet

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

6.3. Methods and material for containment and cleaning up			
For containment		: Dam up the liquid spill.	
Method	s for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Co spillage. Store away from other materials.	ollect
6.4.	Reference to other sections		

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Additional hazards when processed	: Handle empty containers with care because residual vapors are flammable.	
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No naked lights. No smoking. Use only non-sparking tools.	
7.2. Conditions for safe storage, including	ng any incompatibilities	
Technical measures	 Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/ equipment. 	
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Keep in fireproplace. Keep container tightly closed.	
Incompatible products	: Strong bases. Strong acids.	
Incompatible materials	: Sources of ignition. Direct sunlight. Heat sources.	
7.3. Specific end use(s)		

Fallew Label Directions

Follow Label Directions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-butoxyethanol (111-76-2)			
USA ACGIH ACGIH TWA (ppm) 20 ppm			
USA ACGIH	ACGIH STEL (ppm)	20 ppm	
	•	•	

sodium hydroxide, conc=50%, aqueous solution (1310-73-2)USA ACGIHACGIH Ceiling (mg/m³)

8.2. Exposure controls

Personal protective equipment

: Gloves. Safety glasses. Avoid all unnecessary exposure.

2 mg/m³



Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Respiratory protection	: Wear appropriate mask.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and	d chemical properties	
Physical state	: Liquid	
Appearance	: Liquid.	
Color	: Colourless to light yellow. milky.	
Odor	: lemon-like.	
Odor threshold	: No data available	
рН	: 10	
Relative evaporation rate (butyl acetate=1)	: No data available	
Melting point	: No data available	
Freezing point	: No data available	
Boiling point	: 100 °C	
Flash point	: < -17 °C PROPELLANT	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
11/07/2014	EN (English LIS)	3

Safety Data Sheet

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

Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	:1 @60 F
Solubility	: Soluble in water.
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
Oxidizing properties	: No data available
Explosive limits	: No data available
0.0 Other information	

9.2. Other information VOC content

: 7.19 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established. Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

		10.3.	Possibility of	hazardous	reactions
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Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
2-butoxyethanol (111-76-2)	
LD50 oral rat	530 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 1746 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rat	> 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
LD50 dermal rabbit	435 mg/kg (435 mg/kg bodyweight; Rabbit; Rabbit; Experimental value,435 mg/kg bodyweight; Rabbit; Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	2.17 mg/l/4h (Rat; Experimental value; 2.35 mg/l/4h; Rat; Experimental value)
LC50 inhalation rat (ppm)	450-486,Rat; Weight of evidence
polyethylene glycol 200-600 (25322-	68-3)
LD50 oral rat	> 15000 mg/kg (Rat)
LD50 dermal rabbit	> 20000 mg/kg (Rabbit)
sodium chloride (7647-14-5)	
LD50 oral rat	3000 mg/kg (Rat; Experimental value; 3550 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Experimental value)
nonylphenolpolyethyleneglycol ethe	er, conc=70%, aqueous solution (9016-45-9)
LD50 oral rat	> 15000 mg/kg (Rat)
Skin corrosion/irritation	Not classified
	pH: 10
Serious eye damage/irritation	Not classified
	pH: 10
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	: Not classifiedBased on available data, the classification criteria are not met

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

Carcinogenicity	: Not classified
2-butoxyethanol (111-76-2)	
IARC group	3
Reproductive toxicity	: Not classifiedBased on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classifiedBased on available data, the classification criteria are not met
Aspiration hazard	: Not classifiedBased on available data, the classification criteria are not met
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information ty

12.	1.	Гох	icit

2-butoxyethanol (111-76-2)			
LC50 fish 1	116 ppm (96 h; Cyprinodon variegatus; Nominal concentration)		
EC50 Daphnia 1	1700 mg/l (48 h; Daphnia sp.; Nominal concentration)		
LC50 fish 2	1341 ppm (96 h; Lepomis macrochirus)		
EC50 Daphnia 2	1720 mg/l (24 h; Daphnia magna)		
TLM fish 1	100 - 1000,96 h; Pisces		
TLM other aquatic organisms 1	100 - 1000,96 h		
Threshold limit algae 1	900 mg/l (168 h; Scenedesmus quadricauda)		
Threshold limit algae 2	35 mg/l (192 h; Microcystis aeruginosa)		
polyethylene glycol 200-600 (25322-68-3)			
LC50 fish 1	> 1000 mg/l (96 h; Pisces)		
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)		
LC50 fish 2	> 5000 mg/l (24 h; Carassius auratus)		
Threshold limit other aquatic organisms 1	<= 100 mg/l (96 h; Plankton)		
Threshold limit other aquatic organisms 2	> 1000 mg/l		
Threshold limit algae 2	500 mg/l (720 h; Algae; No effect)		
sodium hydroxide, conc=50%, aqueous solut	ion (1310-73-2)		
LC50 fish 1	45.4 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)		
LC50 other aquatic organisms 1	100 mg/l (48 h; Daphnia magna; Pure substance)		
LC50 fish 2	189 mg/l (48 h; Leuciscus idus)		
TLM fish 1	125 ppm (96 h; Gambusia affinis; Pure substance)		
TLM fish 2	99 mg/l (48 h; Lepomis macrochirus; Pure substance)		
Threshold limit other aquatic organisms 1	100 mg/l (48 h; Daphnia magna; Pure substance)		
sodium chloride (7647-14-5)			
LC50 fish 1	11100 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)		
EC50 Daphnia 1	1000 mg/l (48 h; Daphnia magna)		
LC50 fish 2	5840 mg/l (96 h; Lepomis macrochirus)		
EC50 Daphnia 2	340.7 mg/l (48 h; Daphnia magna)		
Threshold limit algae 1	4967 mg/l (72 h; Algae; Inhibitory)		
Threshold limit algae 2	2430 mg/l (120 h; Algae)		
nonylphenolpolyethyleneglycol ether, conc=7	70%, aqueous solution (9016-45-9)		
LC50 fish 1	> 1000 mg/l (Pisces)		
12.2. Persistence and degradability			
CHEMCHILL EVAP-CLEAN 19 OZ.			
Persistence and degradability	Not established.		
Petroleum gases, liquefied, sweetened (68476	5-86-8)		
Persistence and degradability	Not established.		
2-butoxyethanol (111-76-2)			
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photodegradation in the air.		
Biochemical oxygen demand (BOD)	$0.71 \text{ g } \text{O}_2$ /g substance		
Chemical oxygen demand (COD)	2.20 g O_2 /g substance		
ThOD	2.305 g O_2 /g substance		
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Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2-butoxyethanol (111-76-2)	
BOD (% of ThOD)	0.31 % ThOD
polyethylene glycol 200-600 (25322-68-3)	
Persistence and degradability	Biodegradability in water: no data available.
NONYL NONOXYNOL-5 (9014-93-1)	
Persistence and degradability	Not established.
Nonlyphenol Ethoxylate (127087-87-0)	
Persistence and degradability	Not established.
ammonium hydroxide, aqueous solution, con	a_250/ (1226-21-6)
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. No (test)data on mobility of the
reisistence and degradability	components available. Ozonation in the air.
WATER (7732-18-5)	
Persistence and degradability	Not established.
sodium hydroxide, conc=50%, aqueous solut	ion (1310-73-2)
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
sodium chloride (7647-14-5)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
nonylphenolpolyethyleneglycol ether, conc=7	
Persistence and degradability	Biodegradability in water: no data available. No (test)data on mobility of the components
	available.
EC9541A (Proprietary)	
Persistence and degradability	Not established.
12.3. Bioaccumulative potential	
CHEMCHILL EVAP-CLEAN 19 OZ.	
Bioaccumulative potential	Not established.
	I
Petroleum gases, liquefied, sweetened (68476	
Bioaccumulative potential	Not established.
2-butoxyethanol (111-76-2)	
Log Pow	0.81 (Experimental value; BASF test; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
· · ·	
polyethylene glycol 200-600 (25322-68-3)	-1.2
Log Pow Bioaccumulative potential	Bioaccumulation: not applicable.
NONYL NONOXYNOL-5 (9014-93-1)	
Bioaccumulative potential	Not established.
Nonlyphenol Ethoxylate (127087-87-0)	
Bioaccumulative potential	Not established.
•	l
ammonium hydroxide, aqueous solution, con	
Bioaccumulative potential	Not bioaccumulative.
WATER (7732-18-5)	
Bioaccumulative potential	Not established.
sodium hydroxide, conc=50%, aqueous solut	ion (1310-73-2)
Log Pow	-3.88 (Estimated value)
Bioaccumulative potential	Bioaccumulation: not applicable.

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

sodium chloride (7647-14-5)	
Log Pow	-3.0 (Calculated)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
nonylphenolpolyethyleneglycol ether, conc=	70%, aqueous solution (9016-45-9)
Bioaccumulative potential	No bioaccumulation data available.
EC9541A (Proprietary)	
Bioaccumulative potential	Not established.
•	
12.4. Mobility in soil	
2-butoxyethanol (111-76-2)	
Surface tension	0.027 N/m (25 °C)
12.5. Other adverse effects	
Other information	: Avoid release to the environment.
SECTION 13: Disposal consideration	S
13.1. Waste treatment methods	· Dispass in a sofe manner in accordance with level/national regulations. Dispass of
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to
Additional information	: Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials	: Avoid release to the environment.
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / IATA / AD	DN
US DOT (ground): UN1950, Aerosols, 2.2,	Limited Quantity
ICAO/IATA (air): UN1950, Aerosols, 2.2,	
1CAO/1ATA (all). $011300, Actosols, 2.2,$	
IMO/IMDG (water): UN1950, Aerosols, 2, L	imited Quantity
MO/IMDG (water): UN1950, Aerosols, 2, L	imited Quantity
MO/IMDG (water): UN1950, Aerosols, 2, L	imited Quantity
MO/IMDG (water): UN1950, Aerosols, 2, L	: Aerosols
IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name	: Aerosols non-flammable, (each not exceeding 1 L capacity)
MO/IMDG (water): UN1950, Aerosols, 2, L	: Aerosols
IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes	 Aerosols non-flammable, (each not exceeding 1 L capacity) 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115
IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard	: Aerosols non-flammable, (each not exceeding 1 L capacity)
IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes	 Aerosols non-flammable, (each not exceeding 1 L capacity) 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115
IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes	 Aerosols non-flammable, (each not exceeding 1 L capacity) 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115
IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes	 Aerosols non-flammable, (each not exceeding 1 L capacity) 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115
IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes	 Aerosols non-flammable, (each not exceeding 1 L capacity) 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115
IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes Hazard labels (DOT)	 : Aerosols non-flammable, (each not exceeding 1 L capacity) : 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115 : 2.2 - Non-flammable gas
IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes Hazard labels (DOT) DOT Packaging Exceptions (49 CFR 173.xxx)	 Aerosols non-flammable, (each not exceeding 1 L capacity) 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115 2.2 - Non-flammable gas 2.306
IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes Hazard labels (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx)	 Aerosols non-flammable, (each not exceeding 1 L capacity) 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115 2.2 - Non-flammable gas 2.2 - Non-flammable gas 306 None
IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes Hazard labels (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx)	 Aerosols non-flammable, (each not exceeding 1 L capacity) 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115 2.2 - Non-flammable gas 2.2 - Non-flammable gas 306 None
IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes Hazard labels (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) Hazard Information	 Aerosols non-flammable, (each not exceeding 1 L capacity) 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115 2.2 - Non-flammable gas 2.2 - Non-flammable gas 306 None None
 IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes Hazard labels (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) 	 Aerosols non-flammable, (each not exceeding 1 L capacity) 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115 2.2 - Non-flammable gas 2.2 - Non-flammable gas 306 None None
IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes Hazard labels (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) Hazard Information	 Aerosols non-flammable, (each not exceeding 1 L capacity) 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115 2.2 - Non-flammable gas 2.2 - Non-flammable gas 306 None None
 IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes Hazard labels (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) 	 Aerosols non-flammable, (each not exceeding 1 L capacity) 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115 2.2 - Non-flammable gas 2.2 - Non-flammable gas 306 None None
IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes Hazard labels (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) No additional information Dverland transport No additional information available Transport by sea	 Aerosols non-flammable, (each not exceeding 1 L capacity) 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115 2.2 - Non-flammable gas 2.2 - Non-flammable gas 306 None None None No supplementary information available.
 IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes Hazard labels (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) 	 Aerosols non-flammable, (each not exceeding 1 L capacity) 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115 2.2 - Non-flammable gas 2.2 - Non-flammable gas 306 None None
IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes Hazard labels (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) No additional information Dverland transport No additional information available Transport by sea	 Aerosols non-flammable, (each not exceeding 1 L capacity) 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115 2.2 - Non-flammable gas 2.2 - Non-flammable gas 306 None 306 None None None No supplementary information available. A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel. 48 - Stow "away from" sources of heat,87 - Stow "separated from" Class 1 (explosives) exception
IMO/IMDG (water): UN1950, Aerosols, 2, L 14.2. UN proper shipping name DOT Proper Shipping Name Department of Transportation (DOT) Hazard Classes Hazard labels (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) 14.3. Additional information Other information Other information Overland transport No additional information available Transport by sea DOT Vessel Stowage Location	 Aerosols non-flammable, (each not exceeding 1 L capacity) 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115 2.2 - Non-flammable gas 2.2 - Non-flammable gas 306 None 306 None None No supplementary information available. * A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
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Safety Data Sheet

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

SECTION 15: Regulatory information		
15.1. US Federal regulations		
Petroleum gases, liquefied, sweetened (68476	-86-8)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Fire hazard Sudden release of pressure hazard	
Nonlyphenol Ethoxylate (127087-87-0)		
Listed on United States SARA Section 313		
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Immediate (acute) health hazard	
SARA Section 313 - Emission Reporting	5 % Glycol Ethers	
sodium hydroxide, conc=50%, aqueous solution	on (1310-73-2)	
Listed on the United States SARA Section 302		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	
EC9541A (Proprietary)		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	
15.2. International regulations		

CANADA

sodium hydroxide, conc=50%, aqueous soluti	on (1310-73-2)
Listed on the Canadian DSL (Domestic Sustances List)	
WHMIS Classification	Class E - Corrosive Material

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC or 1999/45/EC

Carc.Cat.1; R45 Muta.Cat.2; R46 F; R11 Full text of R-phrases: see section 16

15.2.2. National regulations

No additional information available

SECTION 16: Other information

15.3. US State regulations

2-butoxyethanol (111-76-2)	
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
U.S New Jersey - Right to Know Hazardous Substance List	

Indication of changes	: Revision - See : *.	
Other information	: None.	
Full text of H-phrases: see section 16:		
Acute Tox. 3 (Dermal)		Acute toxicity (dermal) Category 3
Acute Tox. 4 (Dermal)		Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation:dust,mist)		Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)		Acute toxicity (oral) Category 4
Aquatic Acute 1		Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2		Hazardous to the aquatic environment - Acute Hazard Category 2
Eye Dam. 1		Serious eye damage/eye irritation Category 1
Eye Irrit. 2A		Serious eye damage/eye irritation Category 2A
Eye Irrit. 2B		Serious eye damage/eye irritation Category 2B

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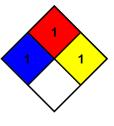
Flam. Lig. 1	Flammable liquids Category 1
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 4	Flammable liquids Category 4
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H224	Extremely flammable liquid and vapor
H225	Highly flammable liquid and vapor
H227	Combustible liquid
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H320	Causes eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H401	Toxic to aquatic life

NFPA health hazard

: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard NFPA reactivity 1 - Must be preheated before ignition can occur.
1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.

Irritation or minor reversible injury possible



HMIS III Rating

Health	: 1 Slight Hazard -
Flammability	: 1 Slight Hazard
Physical	: 1 Slight Hazard

SDS US (GHS HazCom 2012) - Technical Chemical

The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product

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