



PURE CITRUS ORANGE CLEANER 32 FL.OZ.

Safety Data Sheet

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

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Version: 1.2

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

1.1. Product identifier

Product form : Mixture
Trade name : PURE CITRUS ORANGE CLEANER 32 FL.OZ.
Product code : NA200

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

Use of the substance/mixture : General Cleaner

1.3. Details of the supplier of the safety data sheet

Technical Chemical Company
PO BOX 139
Cleburne, TX 76033
T 817-645-6088

1.4. Emergency telephone number

Emergency number : CHEMTREC 24 Hour 1-800-424-9300, 1-703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Irrit. 2 H315

Full text of H statements : see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H315 - Causes skin irritation
Precautionary statements (GHS-US) : P264 - Wash affected areas thoroughly after handling
P280 - Wear protective gloves, protective clothing, eye protection, face protection
P302+P352 - If on skin: Wash with plenty of soap and water
P321 - Specific treatment: See section 4.1 on SDS
P332+P313 - If skin irritation occurs: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse

2.3. Other hazards

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

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	%	GHS-US classification
Water	(CAS No) 7732-18-5	>= 95	Not classified
Triethanolamine	(CAS No) 102-71-6	< 1	Not classified
2-Butoxyethanol	(CAS No) 111-76-2	< 1	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
Citrus Mixture	(CAS No) Mixture	< 1	Flam. Liq. 3, H226
Citric Acid	(CAS No) 77-92-9	< 1	Not classified

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Name	Product identifier	%	GHS-US classification
Sodium Hydroxide, Conc=50%, Aqueous Solution	(CAS No) 1310-73-2	0.0242 - 0.2266	Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 2, H401
CITRUS SPECIES PEEL EXTRACT	(CAS No) 94266-47-4	0.05 - 0.2	Not classified
EUMULGIN RO 40	(CAS No) 61791-12-6	0.05 - 0.2	Not classified
PEG-10 COCOATE	(CAS No) 61791-29-5	0.05 - 0.2	Not classified
PEG-3 COCAMIDE	(CAS No) 61791-08-0	0.05 - 0.2	Not classified
Poly(oxy-1,2-ethanedijl),a-sulfo-w-hydroxy-,c10-16-alkyl ethers, ammonium salts	(CAS No) 67762-19-0	0.1508 - 0.156	Not classified
EDTA Tetrasodium Salt	(CAS No) 64-02-8	< 1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Carc. 1B, H350
Polyethylene Glycol 200-600	(CAS No) 25322-68-3	<= 0.054	Not classified
Nonyl Nonoxynol-5	(CAS No) 9014-93-1	<= 0.036	Not classified
Ethanol	(CAS No) 64-17-5	0.025857 - 0.0351	Flam. Liq. 2, H225
Sodium Chloride	(CAS No) 7647-14-5	0 - 0.022	Not classified
Dobanol Ethoxylates	(CAS No) 68131-39-5	>= 0.0078	Not classified
Ammonium Sulfate	(CAS No) 7783-20-2	0.00026 - 0.0052	Not classified
Methyl Isobutyl Ketone	(CAS No) 108-10-1	0.000338 - 0.00234	Flam. Liq. 2, H225 Acute Tox. 3 (Inhalation:gas), H331 Eye Irrit. 2A, H319 STOT SE 3, H335
Methanol	(CAS No) 67-56-1	0 - 0.00195	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331 STOT SE 1, H370
2-Propanol	(CAS No) 67-63-0	0 - 0.00195	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336

The exact percentage is a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment: See section 4.1 on SDS.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: If you feel unwell, seek medical advice.
Symptoms/injuries after skin contact	: May cause slight irritation . Causes skin irritation.
Symptoms/injuries after eye contact	: May cause slight eye irritation.
Symptoms/injuries after ingestion	: May be harmful if swallowed and enters airways.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
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Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources.

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Safety glasses.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

For containment : Dam up the liquid spill. Plug the leak, cut off the supply. Contain released substance, pump into suitable containers.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

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

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.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash affected areas thoroughly after handling. Always wash hands after handling the product. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Remove contaminated clothes. Separate working clothes from town clothes. Launder separately.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Comply with applicable regulations.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

Follow Label Directions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-Butoxyethanol (111-76-2)		
USA ACGIH	ACGIH TWA (mg/m ³)	97 mg/m ³
USA ACGIH	ACGIH TWA (ppm)	20 ppm (2-Butoxyethanol (EGBE); USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	240 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	50 ppm
Methyl Isobutyl Ketone (108-10-1)		
USA ACGIH	ACGIH TWA (ppm)	20 ppm (Methyl isobutyl ketone; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
USA ACGIH	ACGIH STEL (ppm)	75 ppm (Methyl isobutyl ketone; USA; Short time value; TLV - Adopted Value)
Triethanolamine (102-71-6)		
USA ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³ (Triethanolamine; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)

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CITRUS SPECIES PEEL EXTRACT (94266-47-4)		
USA ACGIH	ACGIH TWA (ppm)	30 ppm 8 Hour Citrus Terpenes
Methanol (67-56-1)		
USA ACGIH	ACGIH TWA (mg/m ³)	262 mg/m ³
USA ACGIH	ACGIH TWA (ppm)	200 ppm (Methanol; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
USA ACGIH	ACGIH STEL (mg/m ³)	328 mg/m ³
USA ACGIH	ACGIH STEL (ppm)	250 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	260 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm
2-Propanol (67-63-0)		
USA ACGIH	ACGIH TWA (mg/m ³)	980 mg/m ³
USA ACGIH	ACGIH TWA (ppm)	400 ppm
USA ACGIH	ACGIH STEL (mg/m ³)	1225 mg/m ³
USA ACGIH	ACGIH STEL (ppm)	500 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	980 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	400 ppm
Ethanol (64-17-5)		
USA ACGIH	ACGIH STEL (ppm)	1000 ppm (Ethanol; USA; Short time value; TLV - Adopted Value)

8.2. Exposure controls

Appropriate engineering controls : Local exhaust ventilation, vent hoods . Ensure good ventilation of the work station.
Personal protective equipment : Gloves. Safety glasses. Avoid all unnecessary exposure.



Hand protection : Wear protective gloves.
Eye protection : Chemical goggles or safety glasses.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : Wear appropriate mask.
Consumer exposure controls : Avoid contact during pregnancy/while nursing.
Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Liquid.
Color : Orange.
Odor : Citrus.
Odor threshold : No data available
pH : 9.5
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 : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : No data available
Solubility : Soluble in water.
Log Pow : No data available

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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
Explosion limits	: No data available

9.2. Other information

VOC content	: < 1 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Toxic fume. . Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

2-Butoxyethanol (111-76-2)	
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)
Methyl Isobutyl Ketone (108-10-1)	
LD50 oral rat	2080 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rat	>= 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
LD50 dermal rabbit	> 16000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	8.2- 16.4,Rat; Experimental value
LC50 inhalation rat (ppm)	2000 ppm/4h (Rat; Experimental value,Rat; Experimental value)
Ammonium Sulfate (7783-20-2)	
LD50 oral rat	2840 mg/kg (Rat)
Triethanolamine (102-71-6)	
LD50 oral rat	> 5000 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; 6400 mg/kg bodyweight; Rat)
LD50 dermal rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit)
CITRUS SPECIES PEEL EXTRACT (94266-47-4)	
LD50 oral rat	> 5 g/kg Citrus Terpenes
LD50 dermal rabbit	> 5 g/kg Citrus Terpenes
LC50 inhalation rat (mg/l)	> 1000 mg/kg Citrus Terpenes
EUMULGIN RO 40 (61791-12-6)	
LD50 oral rat	> 10000 mg/kg (Rat)

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Citric Acid (77-92-9)	
LD50 oral rat	3000 mg/kg (Rat; Literature study)
LD50 dermal rat	> 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
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)
Methanol (67-56-1)	
LD50 oral rat	>= 2528 mg/kg body weight application as 50% aqueous solution
LD50 dermal rabbit	17100 mg/kg corresponding to 20 ml/kg bw according to the authors
LC50 inhalation rat (mg/l)	128.2 mg/l/4h Air
2-Propanol (67-63-0)	
LD50 dermal rabbit	12870 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; 16.4; Rabbit)
LC50 inhalation rat (mg/l)	73 mg/l/4h (Rat)
Ethanol (64-17-5)	
LD50 oral rat	10740 mg/kg body weight (Rat; OECD 401: Acute Oral Toxicity; Experimental value)
LD50 dermal rabbit	> 16000 mg/kg (Rabbit; Literature study)

Skin corrosion/irritation : Causes skin irritation.

pH: 9.5

Serious eye damage/irritation : Not classified

pH: 9.5

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

2-Butoxyethanol (111-76-2)	
IARC group	3
Triethanolamine (102-71-6)	
IARC group	3
2-Propanol (67-63-0)	
IARC group	3
Ethanol (64-17-5)	
IARC group	1

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/injuries after skin contact : May cause slight irritation . Causes skin irritation.

Symptoms/injuries after eye contact : May cause slight eye irritation.

Symptoms/injuries after ingestion : May be harmful if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

Polyethylene Glycol 200-600 (25322-68-3)	
LC50 fish 2	> 5000 mg/l (LC50; 24 h)
Threshold limit algae 2	500 mg/l (EC0; 720 h)
Ammonium Sulfate (7783-20-2)	
EC50 Daphnia 1	202 mg/l (EC50; 96 h)
LC50 fish 2	250 - 480 mg/l (LC50; 96 h; Brachydanio rerio)
EDTA Tetrasodium Salt (64-02-8)	
LC50 fish 1	> 100 mg/l (LC50)
Triethanolamine (102-71-6)	
LC50 fish 2	450 - 1000 mg/l (LC50; 96 h; Lepomis macrochirus)
Citric Acid (77-92-9)	
EC50 Daphnia 1	120 mg/l (EC50; 72 h)

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Citric Acid (77-92-9)	
LC50 fish 2	1516 mg/l (LC50; 96 h)
Threshold limit algae 2	640 mg/l (EC0; 168 h)
Sodium Chloride (7647-14-5)	
LC50 fish 2	5840 mg/l (LC50; ASTM; 96 h; Lepomis macrochirus; Flow-through system; Fresh water; Experimental value)
Threshold limit algae 2	2430 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 120 h; Algae; Static system; Fresh water; Experimental value)
Methanol (67-56-1)	
LC50 fish 1	15400 mg/l (LC50; EPA 660/3 - 75/009; 96 h; Lepomis macrochirus; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 1	> 10000 mg/l (EC50; DIN 38412-11; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
LC50 fish 2	10800 mg/l (LC50; 96 h; Salmo gairdneri)
2-Propanol (67-63-0)	
LC50 fish 2	9640 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 2	13299 mg/l (EC50; Other; 48 h; Daphnia magna)
Ethanol (64-17-5)	
LC50 fish 2	13000 mg/l (LC50; 96 h; Salmo gairdneri; Static system; Fresh water)
12.2. Persistence and degradability	
PURE CITRUS ORANGE CLEANER 32 FL.OZ.	
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 g O ₂ /g substance
Chemical oxygen demand (COD)	2.20 g O ₂ /g substance
ThOD	2.305 g O ₂ /g substance
BOD (% of ThOD)	0.31
Polyethylene Glycol 200-600 (25322-68-3)	
Persistence and degradability	Biodegradability in water: no data available. Not established.
Nonyl Nonoxynol-5 (9014-93-1)	
Persistence and degradability	Not established.
Water (7732-18-5)	
Persistence and degradability	Not established.
Methyl Isobutyl Ketone (108-10-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Low potential for adsorption in soil. Photolysis in the air. Not established.
Biochemical oxygen demand (BOD)	2.06 g O ₂ /g substance
Chemical oxygen demand (COD)	2.16 g O ₂ /g substance
ThOD	2.72 g O ₂ /g substance
BOD (% of ThOD)	0.76
Dobanol Ethoxylates (68131-39-5)	
Persistence and degradability	Readily biodegradable in water.
Ammonium Sulfate (7783-20-2)	
Persistence and degradability	Biodegradability in water: no data available.
Poly(oxy-1,2-ethanediyl),a-sulfo-w-hydroxy-,c10-16-alkyl ethers, ammonium salts (67762-19-0)	
Persistence and degradability	Not established.
EDTA Tetrasodium Salt (64-02-8)	
Persistence and degradability	No test data of component(s) available. No (test)data on mobility of the components available.
Triethanolamine (102-71-6)	
Persistence and degradability	Readily biodegradable in water. Highly mobile in soil. Photolysis in the air.
Biochemical oxygen demand (BOD)	0.02 g O ₂ /g substance
Chemical oxygen demand (COD)	1.50 g O ₂ /g substance
ThOD	2.04 g O ₂ /g substance
BOD (% of ThOD)	0.02

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CITRUS SPECIES PEEL EXTRACT (94266-47-4)	
Persistence and degradability	Not established.
EUMULGIN RO 40 (61791-12-6)	
Persistence and degradability	Readily biodegradable in water. No (test)data on mobility of the components available.
PEG-10 COCOATE (61791-29-5)	
Persistence and degradability	Not established.
PEG-3 COCAMIDE (61791-08-0)	
Persistence and degradability	Not established.
Citric Acid (77-92-9)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	0.420 g O ₂ /g substance
Chemical oxygen demand (COD)	0.728 g O ₂ /g substance
ThOD	0.686 g O ₂ /g substance
BOD (% of ThOD)	0.89 (20 days; Literature study)
Sodium Hydroxide, Conc=50%, Aqueous Solution (1310-73-2)	
Persistence and degradability	Not established.
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
Citrus Mixture (Mixture)	
Persistence and degradability	Not established.
Methanol (67-56-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.
Biochemical oxygen demand (BOD)	0.6 - 1.12 g O ₂ /g substance
Chemical oxygen demand (COD)	1.42 g O ₂ /g substance
ThOD	1.5 g O ₂ /g substance
BOD (% of ThOD)	0.8 (Literature study)
2-Propanol (67-63-0)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	1.19 g O ₂ /g substance
Chemical oxygen demand (COD)	2.23 g O ₂ /g substance
ThOD	2.40 g O ₂ /g substance
Ethanol (64-17-5)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	0.8 - 0.967 g O ₂ /g substance
Chemical oxygen demand (COD)	1.70 g O ₂ /g substance
ThOD	2.10 g O ₂ /g substance
12.3. Bioaccumulative potential	
PURE CITRUS ORANGE CLEANER 32 FL.OZ.	
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)	
Log Pow	-1.2
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
Nonyl Nonoxynol-5 (9014-93-1)	
Bioaccumulative potential	Not established.
Water (7732-18-5)	
Bioaccumulative potential	Not established.
Methyl Isobutyl Ketone (108-10-1)	
BCF fish 1	2 - 5 (BCF)

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Methyl Isobutyl Ketone (108-10-1)	
Log Pow	1.9 (Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500). Not established.
Dobanol Ethoxylates (68131-39-5)	
Bioaccumulative potential	No bioaccumulation data available.
Ammonium Sulfate (7783-20-2)	
Log Pow	-5.1
Bioaccumulative potential	Bioaccumulation: not applicable.
Poly(oxy-1,2-ethanediyl),a-sulfo-w-hydroxy-,c10-16-alkyl ethers, ammonium salts (67762-19-0)	
Bioaccumulative potential	Not established.
EDTA Tetrasodium Salt (64-02-8)	
Bioaccumulative potential	No test data of component(s) available.
Triethanolamine (102-71-6)	
BCF fish 1	< <0.4-<3.9,BCF; OECD 305: Bioconcentration: Flow-Through Fish Test; 42 days; Cyprinus carpio; Flow-through system; Fresh water; Experimental value
Log Pow	-2.3 - 1.34 (Weight of evidence approach; -1; QSAR)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
CITRUS SPECIES PEEL EXTRACT (94266-47-4)	
Bioaccumulative potential	Not established.
EUMULGIN RO 40 (61791-12-6)	
Bioaccumulative potential	No bioaccumulation data available.
PEG-10 COCOATE (61791-29-5)	
Bioaccumulative potential	Not established.
PEG-3 COCAMIDE (61791-08-0)	
Bioaccumulative potential	Not established.
Citric Acid (77-92-9)	
BCF other aquatic organisms 1	3.2 (BCF; Other)
Log Pow	-1.61 / -1.80,Experimental value; Other
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Sodium Hydroxide, Conc=50%, Aqueous Solution (1310-73-2)	
Bioaccumulative potential	Not established.
Sodium Chloride (7647-14-5)	
Log Pow	-3.0 (Calculated)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Citrus Mixture (Mixture)	
Bioaccumulative potential	Not established.
Methanol (67-56-1)	
BCF fish 1	< 10 (BCF; 72 h; Leuciscus idus)
Log Pow	-0.77 (Experimental value; Other)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
2-Propanol (67-63-0)	
Log Pow	0.05 (Weight of evidence approach; Other; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Ethanol (64-17-5)	
Log Pow	-0.35 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 24 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
12.4. Mobility in soil	
2-Butoxyethanol (111-76-2)	
Surface tension	0.027 N/m (25 °C)
Methyl Isobutyl Ketone (108-10-1)	
Surface tension	0.024 N/m (20 °C)
Log Koc	Koc,101.85; Weight of evidence; Calculated value; log Koc; 2.008; Weight of evidence; Calculated value
Methanol (67-56-1)	
Surface tension	0.023 N/m (20 °C)

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Methanol (67-56-1)	
Log Koc	Koc,PCKOCWIN v1.66; 1; Calculated value
2-Propanol (67-63-0)	
Surface tension	0.021 N/m (25 °C)
Ethanol (64-17-5)	
Surface tension	0.0245 N/m (20 °C)

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations. . Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

US DOT (ground): Not Regulated,
ICAO/IATA (air): Not Regulated,
IMO/IMDG (water): Not Regulated,

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not Regulated

14.3. Additional information

Other information : No supplementary information available.

Overland transport

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

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SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
2-Butoxyethanol (111-76-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard Fire hazard
EDTA Tetrasodium Salt (64-02-8)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
Sodium Hydroxide, Conc=50%, Aqueous Solution (1310-73-2)	
Listed on the United States SARA Section 302 Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
Citrus Mixture (Mixture)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

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Methanol (67-56-1)	
Subject to reporting requirements of United States SARA Section 313 Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302 Listed on the United States SARA Section 355	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard Fire hazard

2-Propanol (67-63-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Fire hazard

15.2. International regulations

CANADA

2-Butoxyethanol (111-76-2)	
Listed on the Canadian DSL (Domestic Substances List)	

Sodium Hydroxide, Conc=50%, Aqueous Solution (1310-73-2)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class E - Corrosive Material

Citrus Mixture (Mixture)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class B Division 3 - Combustible Liquid

Methanol (67-56-1)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects

2-Propanol (67-63-0)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class B Division 2 - Flammable Liquid

EU-Regulations

2-Butoxyethanol (111-76-2)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

Sodium Hydroxide, Conc=50%, Aqueous Solution (1310-73-2)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

Citrus Mixture (Mixture)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

Methanol (67-56-1)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

2-Propanol (67-63-0)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

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

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

F; R11

Full text of R-phrases: see section 16

15.2.2. National regulations

2-Butoxyethanol (111-76-2)	
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on the Korean ECL (Existing Chemicals List) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)	

Sodium Hydroxide, Conc=50%, Aqueous Solution (1310-73-2)	
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on KECL (Korean Existing Chemicals Inventory) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)	

Citrus Mixture (Mixture)	
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on KECL (Korean Existing Chemicals Inventory) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)	

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Methanol (67-56-1)

Listed on the Canadian IDL (Ingredient Disclosure List)

2-Propanol (67-63-0)

Listed on the AICS (Australian Inventory of Chemical Substances)
 Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
 Listed on KECI (Korean Existing Chemicals Inventory)
 Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

15.3. US State regulations

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U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

2-Butoxyethanol (111-76-2)

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	Non-significant risk level (NSRL)
No	No	No	No	

Polyethylene Glycol 200-600 (25322-68-3)

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	Non-significant risk level (NSRL)
No	No	No	No	

Nonyl Nonoxynol-5 (9014-93-1)

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	Non-significant risk level (NSRL)
No	No	No	No	

Water (7732-18-5)

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	Non-significant risk level (NSRL)
No	No	No	No	

Methyl Isobutyl Ketone (108-10-1)

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	Non-significant risk level (NSRL)
Yes	No	No	No	

Dobanol Ethoxylates (68131-39-5)

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	Non-significant risk level (NSRL)
No	No	No	No	

Ammonium Sulfate (7783-20-2)

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	Non-significant risk level (NSRL)
No	No	No	No	

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Poly(oxy-1,2-ethanediyl),a-sulfo-w-hydroxy-,c10-16-alkyl ethers, ammonium salts (67762-19-0)				
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	Non-significant risk level (NSRL)
No	No	No	No	
EDTA Tetrasodium Salt (64-02-8)				
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	Non-significant risk level (NSRL)
No	No	No	No	
Triethanolamine (102-71-6)				
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	Non-significant risk level (NSRL)
No	No	No	No	
CITRUS SPECIES PEEL EXTRACT (94266-47-4)				
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	Non-significant risk level (NSRL)
No	No	No	No	
EUMULGIN RO 40 (61791-12-6)				
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	Non-significant risk level (NSRL)
No	No	No	No	
PEG-10 COCOATE (61791-29-5)				
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	Non-significant risk level (NSRL)
No	No	No	No	
PEG-3 COCAMIDE (61791-08-0)				
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	Non-significant risk level (NSRL)
No	No	No	No	
Citric Acid (77-92-9)				
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	Non-significant risk level (NSRL)
No	No	No	No	
Sodium Hydroxide, Conc=50%, Aqueous Solution (1310-73-2)				
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	Non-significant risk level (NSRL)
No	No	No	No	
Sodium Chloride (7647-14-5)				
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	Non-significant risk level (NSRL)
No	No	No	No	

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Citrus Mixture (Mixture)				
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	Non-significant risk level (NSRL)
No	No	No	No	

Methanol (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	Non-significant risk level (NSRL)
No	Yes	No	No	

2-Propanol (67-63-0)				
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	Non-significant risk level (NSRL)
No	No	No	No	

Ethanol (64-17-5)				
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	Non-significant risk level (NSRL)
No	No	No	No	

2-Butoxyethanol (111-76-2)				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - New Jersey - Right to Know Hazardous Substance List				

Methyl Isobutyl Ketone (108-10-1)				
State or local regulations				
U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)				

Sodium Hydroxide, Conc=50%, Aqueous Solution (1310-73-2)				
State or local regulations				
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 U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances Rhode Island Right to Know				

Methanol (67-56-1)				
State or local regulations				
U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL) New Jersey Right-to-Know Florida Right to Know U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List				

2-Propanol (67-63-0)				
State or local regulations				
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List				

SECTION 16: Other information

Other information : None.

Full text of H-phrases:

H225	Highly flammable liquid and vapor
H227	Combustible liquid
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin

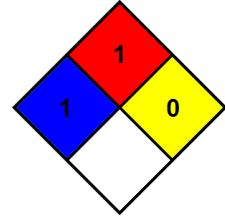
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H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H350	May cause cancer
H370	Causes damage to organs
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 : 1 - Must be preheated 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 Slight Hazard - Irritation or minor reversible injury possible
Flammability : 1 Slight Hazard
Physical : 0 Minimal Hazard
Personal Protection : B

SDS US (GHS HazCom 2012) - TCC

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

Disclaimer: The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.