SAFETY DATA SHEET



Green Earth Peroxide Cleaner

Section 1. Identif	ication
GHS product identifier	: Green Earth Peroxide Cleaner
Product code	: 336
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses of	the substance or mixture and uses advised against
Identified uses	
General/Multi-Purpose Clea	ner
Uses advised against Not applicable.	
Supplier's details	: Betco Corporation 400 Van Camp Road Bowling Green, Ohio 43402 www.betco.com 888-462-3826
Emergency telephone number	: Chemtrec (800) 424-9300 24 hour
Section 2. Hazard	ds identification
OSHA/HCS status	 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A
GHS label elements	
Hazard pictograms	
Signal word	: Warning
Hazard statements	: Causes skin irritation. Causes serious eye irritation.
Precautionary statements	•
Prevention	 Wear protective gloves. Wear eye or face protection: Recommended: safety glasses with side-shields. Wash thoroughly after handling.
Response	: Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
Storage	: Not applicable.
Disposal	: Not applicable.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture Other means of

identification

- : Mixture
- : Not available.

Ingredient name	%	CAS number
1-methoxy-2-propanol	≤10	107-98-2
Surfactant	≤5	-
hydrogen peroxide	≤5	7722-84-1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie. belt or waistband. : Flush contaminated skin with plenty of water. Remove contaminated clothing and Skin contact shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse. : Wash out mouth with water. Remove dentures if any. If material has been swallowed Ingestion and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms	/effects, acute and delayed	
Potential acute health eff	ects	
Eye contact	: Causes serious eye irritation.	
Inhalation	: No known significant effects or critical hazards.	
Skin contact	: Causes skin irritation.	
Ingestion	: No known significant effects or critical hazards.	
Over-exposure signs/symptoms		
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness	
Inhalation	: No specific data.	
Skin contact	: Adverse symptoms may include the following: irritation redness	

Ingestion

Section 4. First aid measures

: No specific data.

Indication of immediate me	lical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures	
Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special protective actions for fire-fighters	 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures			
For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.	
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".	
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).	
Methods and materials for containment and cleaning up			
Small spill	:	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and	

place in an appropriate waste disposal container. Dispose of via a licensed waste

disposal contractor.

Section 6. Accidental release measures

Section 7. Handling and storage

Precautions for safe handling	L	
Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name		Exposure limits
1-methoxy-2-propanol		ACGIH TLV (United States, 1/2022).
		TWA: 50 ppm 8 hours.
		TWA: 184 mg/m ³ 8 hours.
		STEL: 100 ppm 15 minutes.
		STEL: 369 mg/m ³ 15 minutes.
		OSHA PEL 1989 (United States, 3/1989).
		TWA: 100 ppm 8 hours.
		TWA: 360 mg/m ³ 8 hours.
		STEL: 150 ppm 15 minutes.
		STEL: 540 mg/m ³ 15 minutes.
		NIOSH REL (United States, 10/2020).
		TWA: 100 ppm 10 hours.
		TWA: 360 mg/m ³ 10 hours.
		STEL: 150 ppm 15 minutes.
		STEL: 540 mg/m ³ 15 minutes.
		CAL OSHA PEL (United States, 5/2018).
		Absorbed through skin.
		STEL: 540 mg/m ³ 15 minutes.
		STEL: 150 ppm 15 minutes.
		TWA: 360 mg/m ³ 8 hours.
		TWA: 100 ppm 8 hours.
Surfactant		None.
hydrogen peroxide		ACGIH TLV (United States, 1/2022).
		TWA: 1 ppm 8 hours.
		TWA: 1.4 mg/m ³ 8 hours.
ate of issue/Date of revision : 2/8/2024	Date of previous issue	: No previous validation Version : 1

Section 8. Exposure controls/personal protection

OSHA PEL 1989 (United States, 3/1989). TWA: 1 ppm 8 hours.
TWA: 1.4 mg/m ³ 8 hours. NIOSH REL (United States, 10/2020).
TWA: 1 ppm 10 hours. TWA: 1.4 mg/m ³ 10 hours. OSHA PEL (United States, 5/2018).
TWA: 1 ppm 8 hours. TWA: 1.4 mg/m ³ 8 hours. CAL OSHA PEL (United States, 5/2018).
TWA: 1.4 mg/m³, (as H202) 8 hours. TWA: 1 ppm, (as H202) 8 hours.

Biological exposure indices

No exposure indices known.

Appropriate engineering	:	Good general ventilation should be sufficient to control worker exposure to airborne
controls		contaminants.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measu	res	
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Recommended: safety glasses with side-shields
Skin protection		
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Protective gloves
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
Personal protective equipment (Pictograms)	:	

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	: Liquid.
Color	: Colorless. Clear.
Odor	: Minty. Fragrance Added.
Odor threshold	: Not available.
рН	: 3 to 4
Melting point/freezing point	: Not available.
Boiling point, initial boiling point, and boiling range	: Not available.
Flash point	: Closed cup: >120°C (>248°F) [Product does not sustain combustion.]
Flammability	: Not available.
Lower and upper explosion limit/flammability limit	: Not available.

Vapor pressure

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		Vapor Press	ure at 20°C	N	/apor pres	sure at 50°C
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
water	17.5	2.3				
1-methoxy-2-propanol	8.5	1.1				
(R)-p-mentha-1,8-diene	1.5	0.2				
hydrogen peroxide	0.75	0.1				
Linalool	0.2	0.027	OECD 104			
citric acid	0.0000000	17 0.00000000	23			
Relative vapor density	: Not a	vailable.				
Relative density	: 1.008	6				
Solubility(ies)	:					
Media		Result				
cold water hot water		Easily soluble Easily soluble				
Solubility in water	: Not a	vailable.				
Miscible with water	: Yes.					
Partition coefficient: n- octanol/water	: Not a	pplicable.				
Auto-ignition temperature	:					
Ingredient name		°C	°F	N	lethod	
Linalool		235	455			
(R)-p-mentha-1,8-diene		237	458.6			
1-methoxy-2-propanol		270	518			
citric acid		1010	1850			
Decomposition temperature	: Not a	vailable.		•		
Viscosity	: Not a	vailable.				
Particle characteristics Median particle size	: Not a	pplicable.				

Section 10. Stability and reactivity

Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Incompatible materials	: No specific data.
Conditions to avoid	: No specific data.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Chemical stability	: The product is stable.
Reactivity	: No specific test data related to reactivity available for this product or its ingredients.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
1-methoxy-2-propanol	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	6600 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
hydrogen peroxide	Eyes - Severe irritant	Rabbit	-	1 mg	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
hydrogen peroxide	-	3	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	•••	Route of exposure	Target organs
	Category 3 Category 3		Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure) Not available.

Section 11. Toxicological information

Aspiration hazard

Not available.

Information on the likely routes of exposure	:	Routes of entry anticipated: Oral, Dermal, Eyes. Routes of entry not anticipated: Inhalation.
Potential acute health effects		
Eye contact	:	Causes serious eye irritation.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	Causes skin irritation.
Ingestion	:	No known significant effects or critical hazards.
Symptoms related to the phy	sic	cal, chemical and toxicological characteristics
Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	1	No specific data.
Skin contact	-	Adverse symptoms may include the following: irritation redness
Ingestion	:	No specific data.
Delayed and immediate effec	<u>ts</u>	and also chronic effects from short and long term exposure
<u>Short term exposure</u>		
Potential immediate effects	1	Not available.
Potential delayed effects	:	Not available.

<u>Long term exposure</u>	
Potential immediate	: Not available.
effects	
Potential delayed effects	: Not available.
Potential chronic health effe	<u>ects</u>
Not available.	
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/ I)
1-methoxy-2-propanol	6600	13000	N/A	N/A	N/A
hydrogen peroxide	500	N/A	N/A	N/A	N/A

Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure	
hydrogen peroxide	Acute EC50 1.2 mg/l Marine water	Algae - <i>Dunaliella tertiolecta</i> - Exponential growth phase	72 hours	
	Acute EC50 2320 µg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours	
	Acute LC50 93 ppm Fresh water Chronic NOEC 100 mg/l Fresh water	Fish - Oncorhynchus mykiss Fish - Micropterus salmoides	96 hours 28 days	

Persistence and degradability

Not available.

Taviality

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
1-methoxy-2-propanol	<1	-	Low
hydrogen peroxide	-1.36	-	Low

Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods
 The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.

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Section 14. Transport information

Special precautions for user	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to IMO instruments

Section 15. Regulatory information

U.C. Foderel regulations	TECA (/a) ODD Exampt/Dential examption: Not determined	
U.S. Federal regulations	: TSCA 8(a) CDR Exempt/Partial exemption: Not determined	
	Clean Water Act (CWA) 311: sodium hydroxide	
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Not listed	
Clean Air Act Section 602 Class I Substances	: Not listed	
Clean Air Act Section 602 Class II Substances	: Not listed	
DEA List I Chemicals (Precursor Chemicals)	: Not listed	
DEA List II Chemicals (Essential Chemicals)	: Not listed	
SADA 202/204		

<u>SARA 302/304</u>

Composition/information on ingredients

			SARA 302 T	PQ	SARA 304 F	RQ.
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
hydrogen peroxide	≤5	Yes.	1000	106.1	1000	106.1

SARA 304 RQ

: 27803.4 lbs / 12622.8 kg [3306.1 gal / 12515.1 L]

SARA 311/312 Classification

: SKIN IRRITATION - Category 2

EYE IRRITATION - Category 2A

Composition/information on ingredients

Name	%	Classification
1-methoxy-2-propanol	≤10	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Surfactant	≤5	SKIN IRRITATIÓN - Category 2 EYE IRRITATION - Category 2A
hydrogen peroxide	≤5	OXIDIZING LIQUIDS - Category 1 ACUTE TOXICITY (oral) - Category 4 SKIN CORROSION - Category 1A SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

State regulations

Massachusetts	 The following components are listed: PROPYLENE GLYCOL METHYL ETHER; HYDROGEN PEROXIDE
New York	: The following components are listed: Hydrogen peroxide
New Jersey	 The following components are listed: PROPYLENE GLYCOL MONOMETHYL ETHER; HYDROGEN PEROXIDE
Pennsylvania	: The following components are listed: 2-PROPANOL, 1-METHOXY-; HYDROGEN PEROXIDE

Date of issue/Date of revision

Section 15. Regulatory information

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Eurasian Economic Union	: Russian Federation inventory: Not determined.
Japan	: Japan inventory (CSCL): At least one component is not listed. Japan inventory (ISHL): Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



Date of issue/Date of revision	: 2/8/2024	Date of previous issue	: No previous validation	Version :1	11/12

Section 16. Other information

Procedure used to derive the classification

		Classification	Justification	
SKIN IRRITATION - Catego EYE IRRITATION - Catego		Expert judgment Expert judgment		
<u>History</u>				
Date of printing	:	2/8/2024		
Date of issue/Date of revision	:	2/8/2024		
Date of previous issue	:	No previous validation		
Version	:	1		
Key to abbreviations	:	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coe MARPOL = International Convention for the Prevention as modified by the Protocol of 1978. ("Marpol" = marin N/A = Not available SGG = Segregation Group UN = United Nations	efficient on of Pollution From Ships, 1973	
References	1	Not available.		

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.