# **SAFETY DATA SHEET**



1/11

#### Green Earth Peroxide Cleaner

Section 1. Identif	fication		
GHS product identifier	: Green Earth Peroxide Cleaner		
Other means of identification	: Not available.		
Product type	: Liquid.		
Relevant identified uses of Not applicable.	f the substance or mixture and uses advised against		
Supplier's details	: Betco Corporation 400 Van Camp Road Bowling Green 43402 www.betco.com 888-462-3826		
Emergency telephone number (with hours of operation)	: Chemtrec (800) 424-9300 24 hour		
Section 2. Hazar	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 serious eye irritation. Causes skin irritation.		
Precautionary statements	<u>5</u>		
Prevention	: Wear protective gloves: 1 - 4 hours (breakthrough time): Gloves: butyl rubber , natural rubber (latex). Wear eye or face protection: Recommended: splash goggles. Wash hands thoroughly after handling.		
Response	: IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical 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 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.

#### **CAS number/other identifiers**

CAS number	: Not applicable.
Product code	: 336

Ingredient name	%	CAS number
1-methoxy-2-propanol	≥5 - <10	107-98-2
Alcohols, C7-21, ethoxylated	≥3 - <5	68991-48-0
hydrogen peroxide	≥3 - <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 as hazardous to health or the environment 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 f				
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.			
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.			
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed 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	<u>cts</u>			
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/sym	<u>ptoms</u>			
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness			
Inhalation	: No specific data.			
Date of issue/Date of revision	: 1/30/2017 Date of previous issue : 3/11/2016 Version : 2.04 2/11			

### Section 4. First aid measures

Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
Notes to physician	<ul> <li>dical attention and special treatment needed, if necessary</li> <li>Treat symptomatically. Contact poison treatment specialist immediately if large guantities have been ingested or inhaled.</li> </ul>
Specific treatments	
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

3	5
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	<ul> <li>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.</li> </ul>
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		

### Section 6. Accidental release measures

Large spill	: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

### Section 7. Handling and storage

Precautions for safe handling	1	
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.

## Section 8. Exposure controls/personal protection

#### **Control parameters**

#### **Occupational exposure limits**

1-methoxy-2-propanol	ACGIH TLV (United States, 3/2015).			
	ACGIH TLV (United States, 3/2015). TWA: 50 ppm 8 hours. TWA: 184 mg/m <sup>3</sup> 8 hours. STEL: 100 ppm 15 minutes. STEL: 369 mg/m <sup>3</sup> 15 minutes. OSHA PEL 1989 (United States, 3/1989). TWA: 100 ppm 8 hours. TWA: 360 mg/m <sup>3</sup> 8 hours. STEL: 150 ppm 15 minutes. STEL: 540 mg/m <sup>3</sup> 15 minutes. NIOSH REL (United States, 10/2013). TWA: 100 ppm 10 hours. TWA: 360 mg/m <sup>3</sup> 10 hours. STEL: 150 ppm 15 minutes. STEL: 150 ppm 15 minutes. STEL: 150 ppm 15 minutes. STEL: 540 mg/m <sup>3</sup> 15 minutes.			
hydrogen peroxide	ACGIH TLV (United States, 3/2015). TWA: 1 ppm 8 hours. TWA: 1.4 mg/m <sup>3</sup> 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 1 ppm 8 hours. TWA: 1.4 mg/m <sup>3</sup> 8 hours. NIOSH REL (United States, 10/2013). TWA: 1 ppm 10 hours. TWA: 1.4 mg/m <sup>3</sup> 10 hours. OSHA PEL (United States, 2/2013). TWA: 1 ppm 8 hours.			

### Section 8. Exposure controls/personal protection

TWA: 1.4 mg/m<sup>3</sup> 8 hours.

Appropriate engineering controls	: Good general ventilation should be sufficient to control worker exposure to airborne 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 meas	<u>ures</u>	
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: splash goggles	
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. 1 - 4 hours (breakthrough time): Gloves: butyl rubber , natural rubber (latex)	
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.	
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)		
Osstisus O. Dhussis	al and chamical properties	

## Section 9. Physical and chemical properties

Date of issue/Date of revision	: 1/30/2017 Date of previous issue	: 3/11/2016	Version : 2.04	5/11	
Flash point	: Closed cup: >120°C (>248°F) [Prod	uct does not sustain	combustion.]		
Boiling point	: Not available.				
Melting point	: Not available.				
рН	: 6.5 to 7				
Odor threshold	: Not available.				
Odor	: Minty. Fragrance Added.				
Color	: Colorless. Clear.				
Physical state	: Liquid.				
Appearance					

### Section 9. Physical and chemical properties

_	
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.0086
Solubility	: Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.

### Section 10. Stability and reactivity

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

### Section 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity

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

#### Irritation/Corrosion **Product/ingredient name** Result **Species** Score Exposure **Observation** 1-methoxy-2-propanol Eyes - Mild irritant Rabbit 24 hours 500 \_ milligrams Skin - Mild irritant Rabbit 500 \_ milligrams hydrogen peroxide Eyes - Severe irritant Rabbit 1 milligrams

#### **Sensitization**

Not available.

#### **Mutagenicity**

Not available.

#### **Carcinogenicity**

Not available.

#### **Classification**

### Section 11. Toxicological information

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

#### **Reproductive toxicity**

Not available.

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
	Category 3 Category 3	Not applicable.	Narcotic effects Respiratory tract irritation

#### Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

Not available.

Information on the likely routes of exposure	1	Routes of entry anticipated: Oral, Dermal. 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 physical, chemical and toxicological characteristics

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	: No specific data.

#### Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure			
Potential immediate effects	: Not available.		
Potential delayed effects	: Not available.		
<u>Long term exposure</u>			
Potential immediate effects	: Not available.		
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.		
Date of issue/Date of revision	: 1/30/2017 Date of previous issue : 3/11/2016		

### Section 11. Toxicological information

Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

#### Numerical measures of toxicity

Acute toxicity estimates

Not available.

### Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
hydrogen peroxide	Acute EC50 1.2 mg/l Marine water	Algae - Dunaliella tertiolecta - Exponential growth phase	72 hours
	Acute EC50 5.38 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 2320 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 22 ppm Fresh water	Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 989.7 ppm Fresh water	Fish - Oncorhynchus tshawytscha - Egg	43 days

#### Persistence and degradability

Not available.

#### **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	ADR/RID	IMDG	ΙΑΤΑ
UN number	Not regulated.	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.	No.
Additional 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 Annex II of MARPOL and the IBC Code

### Section 15. Regulatory information

U.S. Federal regulations	: TSCA 8(a) CDR Exempt/Partial exemption: Not determined 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
<b>DEA List I Chemicals</b>	: Not listed

- **DEA List II Chemicals** : Not listed (Essential Chemicals)
- SARA 302/304

(Precursor Chemicals)

**Composition/information on ingredients** 

				SARA 3	02 TPQ	SARA 3	04 RQ
Name		%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
hydrogen peroxide		≥3 - <5	Yes.	1000	106.1	1000	106.1
SARA 304 RQ ARA 311/312	: 27777.8 lb	s / 12611.1 k	kg [3303.1 ga	al / 12503.	6 L]		
Classification Composition/information		e (acute) heal	th hazard				
te of issue/Date of revision	: 1/30/2017	Date of pre	vious issue	: 3/11/	2016	Version	: 2.04

### Section 15. Regulatory information

Name	%	Fire hazard	Sudden release of pressure		(acute) health	Delayed (chronic) health hazard
1-methoxy-2-propanol Alcohols, C7-21, ethoxylated hydrogen peroxide	≥3 - <5	Yes. No. Yes.	No. No. No.	No. No. No.	Yes. Yes. Yes.	No. No. No.

#### State regulations

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

#### International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals	
Not listed.	

1-METHOXY-

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

### Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

#### International lists

#### National inventory

Australia	: Not determined.
Canada	: Not determined.
China	: Not determined.
Europe	: Not determined.
Japan	: Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
Malaysia	: Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: Not determined.

### Section 16. Other information

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



### Section 16. Other information

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 are not required on SDSs 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 mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

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



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

#### Procedure used to derive the classification

Clas	sification	Justification Expert judgment Expert judgment		
Skin Irrit. 2, H315 Eye Irrit. 2A, H319				
<u>History</u>				
Date of printing	: 4/25/2017			
Date of issue/Date of revision	: 1/30/2017			
Date of previous issue	: 3/11/2016			
Version	: 2.04			
Key to abbreviations: ATE = Acute Toxicity E BCF = Bioconcentratio GHS = Globally Harmo IATA = International Ai IBC = International Ai IBC = International M LogPow = logarithm of MARPOL = Internation		on Factor onized System of Classification and Labelling of Chemicals ir Transport Association		
References	: 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.