SAFETY DATA SHEET



Color Safe Destainer

Section 1. Identi	fication
Product identifier	: Color Safe Destainer
Product code	: 478
Other means of identification	: Not available.
Product type	: Liquid.
	f the substance or mixture and uses advised against
Not applicable.	
Supplier's details	: Betco Corporation 1690 Huron Church Road, Suite 169 Windsor ON N9C0AC CA
	400 Van Camp Road Bowling Green, OH 43402 US www.betco.com 888-462-3826
Emergency telephone number (with hours of operation)	: Chemtrec (800) 424-9300 24 hour
Section 2. Hazar	d identification
Classification of the substance or mixture	: OXIDIZING LIQUIDS - Category 3 SKIN CORROSION - Category 1A SERIOUS EYE DAMAGE - Category 1
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	 May intensify fire; oxidizer. Causes severe skin burns and eye damage.
Processitionary statement	
Precautionary statement	
Prevention	: Wear protective gloves: > 8 hours (breakthrough time): butyl rubber. Wear protective clothing. Wear eye or face protection: Recommended: splash goggles. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Wash hands thoroughly after handling.
	protective clothing. Wear eye or face protection: Recommended: splash goggles. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Wash

: 10/25/2018 Date of previous issue

: 4/13/2018

Version : 2

1/11

Date of issue/Date of revision

Section 2. Hazard identification

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 3. Composition/information on ingredients

Substance/mixture
Other means of
identification

: Mixture : Not available.

Ingredient name% (w/w)CAS numberhydrogen peroxide10 - 207722-84-1

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 first aid measures		
Eye contact	: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.	
Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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	: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.	
Ingestion	: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. 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	<u>effects</u>
Eye contact	: Causes serious eye damage.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes severe burns.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/	<u>symptoms</u>

Date of issue/Date of revision

Section 4. First-aid measures

Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
Indication of immediate me	dical 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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	: Oxidizing material. May intensify fire. In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: No specific data.
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. Risk of explosion. If large quantities are involved in a major fire, evacuate the area. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Fight fire from protected location or maximum possible distance.
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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	Put on appropriate personal protective equipment.

Section 6. Accidental release measures

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 co	onta	ainment and cleaning up
Small spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Do not absorb in sawdust or other combustible material. It may lead to a fire risk when it dries out. 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.
Large spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Do not absorb in sawdust or other combustible material. It may lead to a fire risk when it dries out. 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

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Protective measures	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from clothing, incompatible materials and combustible materials. Keep away from heat. 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. Store locked up. Separate from reducing agents and combustible materials. Store away from grease and oil. 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
hydrogen peroxide	CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 1 ppm 8 hours. 8 hrs OEL: 1.4 mg/m ³ 8 hours. CA British Columbia Provincial (Canada, 6/2017). TWA: 1 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 1 ppm 8 hours. CA Quebec Provincial (Canada, 1/2014). TWAEV: 1 ppm 8 hours. TWAEV: 1.4 mg/m ³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 2 ppm 15 minutes. TWA: 1 ppm 8 hours.
Appropriate engineering controls	: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
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	9 <u>8</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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead. 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. > 8 hours (breakthrough time): butyl rubber
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.

Section 8. Exposure controls/personal protection

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.

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	Liquid. [Watery liquid.]	
Color	Clear. Colorless.	
Odor	Sharp. [Slight]	
Odor threshold	Not available.	
рН	2 to 4	
Melting point	Not available.	
Boiling point	Not available.	
Flash point	Closed cup: >100°C (>212°F) Open cup: Not applicable.	
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	1.1	
Solubility	Easily soluble in the following materials: cold water and hot water.	
Solubility in water	Not available.	
Partition coefficient: n- octanol/water	Not available.	
Auto-ignition temperature	Not available.	
Decomposition temperature	Not available.	
Viscosity	Not available.	
Flow time (ISO 2431)	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	 Hazardous reactions or instability may occur under certain conditions of storage or use. Conditions may include the following: contact with combustible materials Reactions may include the following: risk of causing or intensifying fire
Conditions to avoid	: Drying on clothing or other combustible materials may cause fire.
Incompatible materials	: Reactive or incompatible with the following materials: combustible materials reducing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Date of issue/Date of revision	: 10/25/2018 Date of previous issue : 4/13/2018 Version : 2 6/11

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
hydrogen peroxide	Eyes - Severe irritant	Rabbit	-	1 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
hydrogen peroxide	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely	: Routes of entry anticipated: Oral, Dermal, Inhalation.
routes of exposure	
Detential equite health offects	

Potential acute health effects

Eye contact	: Causes serious eye damage.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes severe burns.
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 watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains

Section 11. Toxicological information

Delayed and immediate effect	<u>cts</u>	and also chronic effects from short and long term exposure		
Short term exposure				
Potential immediate effects	:	Not available.		
Potential delayed effects	1	Not available.		
Long term exposure				
Potential immediate effects	1	Not available.		
Potential delayed effects	1	Not available.		
Potential chronic health effects				
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.		
Teratogenicity	:	No known significant effects or critical hazards.		
Developmental effects	:	No known significant effects or critical hazards.		

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	2777.8 mg/kg

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 93 ppm Fresh water Chronic NOEC 989.7 ppm Fresh water	Fish - Oncorhynchus mykiss Fish - Oncorhynchus tshawytscha - Egg	96 hours 43 days

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
hydrogen peroxide	-1.36	-	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Section 12. Ecological information

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

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Disposal methods
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: 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 nonrecyclable 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

	TDG Classification	DOT Classification	ADR/RID	IMDG	ΙΑΤΑ
UN number	UN2984	UN2984	UN2984	UN2984	UN2984
UN proper shipping name	Hydrogen Peroxide, Aqueous Solutions (with 18% Hydrogen Peroxide)				
Transport hazard class(es)	5.1	5.1	5.1	5.1	5.1
Packing group	111	ш	111	111	
Environmental hazards	No.	No.	No.	No.	No.
Additional inform TDG Classification	on : Prod Good	uct classified as per ds Regulations: 2.23 osive Limit and Li i	3-2.25 (Class 5).		ation of Dangerous
DOT Classification	on : <u>Limi</u>	ted quantity Yes.			
Special precautio	uprig	sport within user's ht and secure. Ensu event of an accident	ure that persons tra	•	containers that are ct know what to do i

Transport in bulk according : Not available. to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

Canadian lists

Canadian NPRI

- **CEPA Toxic substances**
- : None of the components are listed.
- : None of the components are listed.

International regulations

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

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

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.
Europe	: All components are listed or exempted.
Japan	 Japan inventory (ENCS): All components are listed or exempted. Japan inventory (ISHL): Not determined.
Malaysia	: All components are listed or exempted.
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	: All components are listed or exempted.
Viet Nam	: Not determined.

Section 16. Other information

<u>History</u>	
Date of printing	: 10/25/2018
Date of issue/Date of revision	: 10/25/2018
Date of previous issue	: 4/13/2018
Version	: 2
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations HPR = Hazardous Products Regulations

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
OXIDIZING LIQUIDS - Category 3	Expert judgment
SKIN CORROSION - Category 1A	Calculation method
SERIOUS EYE DAMAGE - Category 1	Calculation method

References

: Not available.

V 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 abovenamed 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.