SAFETY DATA SHEET

Betco pH7Q Dual (Diluted 1:64 to 1:256)

Section 1. Identif	ication
GHS product identifier	: Betco pH7Q Dual (Diluted 1:64 to 1:256)
Product code	: 355D
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses of	the substance or mixture and uses advised against
Identified uses	
Disinfectant	
Uses advised against	Reason
For Industrial and Institution	al Use Only -
Supplier's details	: Betco Corporation 400 Van Camp Road Bowling Green, Ohio 43402 www.betco.com 888-462-3826
Emergency telephone number (with hours of operation)	: Chemtrec (800) 424-9300 24 hour
EPA Details	: EPA Statement: This chemical is a product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-EPA registered chemicals. Below is the signal word as required on the label:
EPA Establishment Number EPA Registration Number EPA Signal Word	r : 4170 : 10324-141 : Danger

Section 2. Hazards identification

OSHA/HCS status	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	: Not classified.
GHS label elements	
Signal word	: No signal word.
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	<u>S</u>
Prevention	: Not applicable.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: Not applicable.
Date of issue/Date of revision	: 3/18/2020 Date of previous issue : 3/13/2020 Version : 1.03 1/

Section 2. Hazards identification

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

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

There are no 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	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	 Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoe: Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. 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. Do not induce vomiting unless directe to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
<u>Over-exposure signs/</u>	symptoms
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.

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.

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	: 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. 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, protect	ve equipment and emergency procedures		
For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuat surrounding areas. Keep unnecessary and unprotected personnel from entering. Do no touch or walk through spilled material. 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 an sewers. Inform the relevant authorities if the product has caused environmental pollutio (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 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.		
Large spill	Stop leak if without risk. Move containers from spill area. 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. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.		

Section 7. Handling and storage

Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handle stored and processed. Workers should wash hands and face before eating, drinking an smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Control parameters

Section 7. Handling and storage

Conditions for safe storage,	1	Store in accordance with local regulations. Store in original container protected from
including any		direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials
incompatibilities		(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

Occupational exposure limit None.	2
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 the 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 measure	<u>S</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, gase or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. 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. > 8 hours (breakthrough time): disposable vinyl
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 respirator protection program to ensure proper fitting, training, and other important aspects of use.
Personal protective equipment (Pictograms)	

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	Liquid.	
Color	Orange.	
Odor	Lemon-like.	
Odor threshold	Not available.	
рН	6 to 8	
Melting point	Not available.	
Boiling point	Not available.	
Flash point	Closed cup: Not applicable. [Product does not sustain combustion.]	
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	
Solubility	Easily soluble in the following materials: cold 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	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: Not available.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Not available.					
Not available.					
Sensitization					
Not available.					
Date of issue/Date of revision	: 3/18/2020	Date of previous issue	: 3/13/2020	Version : 1.03	5/

Section 11. Toxicological information

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure) Not available.

.

Aspiration hazard

Not available.

Ingestion

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	:	No known significant effects or critical hazards.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	;	No known significant effects or critical hazards.

: No known significant effects or critical hazards.

Symptoms related to the	he physical, chemical and toxicological characteristics
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.

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

<u>Short term exposure</u>		
Potential immediate effects	: Not available.	
Potential delayed effects	: Not available.	
Long term exposure		
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.	
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.	

: 3/13/2020

Section 11. Toxicological information

Numerical measures of toxicity Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

<u>Mobility in soil</u>	
Soil/water partition coefficient (Koc)	: Not available.

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 c 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. Empty containers or liners may retain some product residues. Avoid dispersa 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	IATA
JN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated
JN proper shipping name	-	-	-	-	-	-
Transport nazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental nazards	No.	No.	No.	No.	No.	No.

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 to Annex II of MARPOL and the IBC Code	:	Not available.

Section 15. Regulatory information

-	-
U.S. Federal regulations	: TSCA 4(a) proposed test rules: Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides
	TSCA 8(a) CDR Exempt/Partial exemption: Not determined
	Clean Water Act (CWA) 307: 3,7-dimethyloct-6-enenitrile
	Clean Water Act (CWA) 311: sodium hydroxide; Formaldehyde, solution
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: 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
SARA 302/304	

SARA 302/304

Composition/information on ingredients

			SARA 302 T	PQ	SARA 304 F	۲ Q
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
formaldehyde	<0.1	Yes.	500	73.9	100	14.8

SARA 304 RQ

: 16066838046.3 lbs / 7294344473 kg [1926961947.4 gal / 7294344473 L]

SARA 311/312 Classification

: Not applicable.

Composition/information on ingredients

No products were found.

State regulations

Massachusetts	: None of the components are listed.
New York	: None of the components are listed.
New Jersey	: None of the components are listed.
Pennsylvania	: None of the components are listed.
<u>California Prop. 65</u>	

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.

Section 15. Regulatory information

	J
<u>Montreal Protocol</u>	
Not listed.	
Stockholm Convention of	on Persistent Organic Pollutants
Not listed.	
	on Prior Informed Consent (PIC)
Not listed.	
	on POPs and Heavy Metals
Not listed.	
Inventory list	
Australia	: Not determined.
Canada	: Not determined.
China	: Not determined.
Europe	: At least one component is not listed.
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.
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.)



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 nc 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.

Date of issue/Date of revision	: 3/18/2020	Date of previous issue	: 3/13/2020	Version : 1.03	9/
					•

Section 16. Other information

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 NFP, 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

	Justification		
Not classified.			
History			
Date of printing	: 3/18/2020		
Date of issue/Date of revision	: 3/18/2020		
Date of previous issue	: 3/13/2020		
Version	: 1.03		
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 		
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.

10/