EVERYDAY VIRUCIDAL DISINFECTANT DOCUMENT PORTFOLIO

Issue Date 04/03/2022 Version 1.0

PVA Hygiene provides an innovative and sustainable method of cleaning. As a leading UK developer and manufacture of water-soluble cleaning products we cover all areas of commercial cleaning. Over 24 years we have developed a system using pre-dosed sachets that is straightforward to implement and balances environmental diligence with commercial demands.

We are based in the South West of England and distribute our products globally

This portfolio contains documents relating to PVA Hygiene's **EVERYDAY VIRUCIDAL DISINFECTANT.** This unique formulation is contained within a PVOH film that dissolves at the point of use. The sachets are dry, compact and light, they reduce storage space, transportation costs and heavily reduce the environmental implications often associated with delivering cleaning supplies. The sachets are packed in planet friendly packaging, that can either be composted or recycled, helping you to eliminate single-use plastic from your current cleaning procedure.

CONTENTS.

Environmentally friendly products for professional cleaning

PVA Hygiene, Unit 6, Havyat Road Business Park, Havyat Road, Bristol, BS40 5PA.
Tel: +44 (0) 1934 862859 Email: sales@pva-hygiene.co.uk

EVERYDAY VIRUCIDAL DISINFECTANT

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PRODUCT DESCRIPTION

Everyday Virucidal Disinfectant is based on PVA Hygiene's unique Aqua-Dis PDCS9 technology. Sachets contain a blend of environmentally friendly chelates, together with surfactants and a cationic disinfectant. The product is designed for routine cleaning and disinfection of surfaces where a higher level of microbial control is required. Everyday Virucidal Disinfectant is biodegradable, safe for use on normal materials of construction, and when used as directed this product conforms to EN13697 (bacteria and yeast) and EN14476 (enveloped viruses).

Sachets are supplied in the following Pack Sizes:-

Pack Size	Order Code
20 * 15g	DZ4-20

- Supplied in a convenient water soluble sachet within a compostable container.
- Broad Spectrum Activity.
- Phosphate Free.
- Biodegradable Components.
- Vegan Society Approved.

USE INSTRUCTIONS

For general cleaning, remove any gross debris from the surface, place one sachet into the empty trigger spray bottle, and fill with water to the 750ml mark. Replace the trigger head and shake until the sachet has dissolved (note, warm water will aid the rate of dissolution, but is not essential). Spray the solution onto the surface and wipe clean. For disinfection apply a second spray to the clean surface and allow to air dry over 5 minutes.

Once made, use solutions are expected to have a shelf life of at least a week.

TECHNICAL DATA SUMMARY

Appearance	White Powder
Odour	Non distinct (Perfume free)
Foam	Low
pH of use solution	10 - 11
Storage Temperature Range	0°C to +40°C
Shelf Life of Sachet	Minimum of 2 years under normal conditions of dry storage.

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EFFICACY DETAILS

Test	Compliance Conditions		Organism Type/Compliance
	Time / Minutes	Minimum Concentration	
EN14476 (Enveloped Virus)	5	2% wt/v 1 sachet / 750ml	Claim supported by Vaccinia virus VR-1508 (Modified Vaccinia Ankara) specified in the standard.
EN13697 (Bacteria and Yeast)	5	1.3% wt/v (1 sachet /1100ml). In normal use 1 sachet will be placed in 750ml to give 2% wt/v.	Claim supported by:- Pseudomonas aeruginosa Escherichia coli, Enterococcus hirae, Staphylococcus aureus Candida albicans As specified in the standard.

EMERGENCY DETAILS

For accident, emergency and health & safety information refer to the Safety Data Sheet for this product.

This product is registered with the UK National Poisons Information Service.

Office Hours Emergency Number +44 (0) 1934 862859

Outside Office Hours: - +44 (0)7967 149256 (This is for health, safety and environmental emergencies only, it is not for general enquires or ordering).

DISCLAIMER

Whilst every effort is made to ensure that the information given in this product information sheet is accurate it is given without guarantee, since the conditions of use are beyond our control.

EVERYDAY VIRUCIDAL DISINFECTANT SOLUTION HEATH AND SAFETY SUMMARY

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IDENTIFICATION OF THE MATERIAL	
Product Name	**Everyday Virucidal Disinfectant use solution**
Main Use	Cleaning and Disinfecting Hard Surfaces and Floors
Uses Advised Against	Not for Direct Oral Consumption Keep Out of Reach of Children Do Not Mix with other Chemicals/Detergents.
Manufacturer	PVA Hygiene, Unit 6 Havyat Business Park Havyat Road, Bristol, BS40 5PA
Telephone	+44 (0) 1934 862859

PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	Clear Liquid
Colour	Colourless
pH	10 – 11

CLASSIFICATION, PPE, FIRST AID AND DISPOSAL	
Health	In use solutions of this product have no Health Classifications
Physical	In use solutions of this product have no Physical Classifications
Environmental	In use solutions of this product are classified as “Harmful to aquatic life with long lasting effects”. *(Further dilution in waste disposal removes this classification).*
PPE	No PPE is mandated for this product at use strength However, we suggest gloves for general hygiene..
First Aid	**EYES:-** May cause reddening, discomfort and blurred vision Rinse with Plenty of Water. **SKIN:-** Repeated extended contact may result in skin dryness. Use a suitable re-moisturising cream and get medical attention if symptoms persist. **INHALATION:-** Unlikely. **INGESTION:-** A soapy taste may be reported, together with irritation to mouth and GI Tract rinse mouth thoroughly. If concerned seek medical advice Show the label or Safety Data sheet to the Physician.
Disposal	Solutions can be disposed to normal sewers and septic tanks.

Test Report for Virology
BS EN 14476:2013+A2:2019

Company Name:	**PVA Hygiene**
Contact Name:	Jim Taylour
Contact Email:	technical@pva-hygiene.co.uk
Purchase Order No:	1612
Report Date:	20/05/2021
Melbec Ref Number:	27538
Name of Test Product:	**Sachets PDCSS9A**
Batch Number:	**n/a**

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info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 857945.

Test Report for Virology
BS EN 14476:2013+A2:2019

Sample Details:

Manufacture / Supplier:.....	PVA Hygiene
Product storage conditions:.....	Ambient
Product appearance:.....	Sachets dissolved to give a clear blue liquid
Active substance and concentration:.....	ADBAC
Product dilution preparation:.....	Volume/Volume
Product dilutions/concentrations:.....	15g, 12g, and 10g sachets dissolved in 750 ml of water.
Diluent used to dilute product:.....	Sterile Deionised Water
Cytotoxicity Reduction method:.....	MicroSpin S 400 HR columns and Large volume plating
Incubation temperature:.....	37°C +/- 1°C CO_2

The test product was in satisfactory condition for testing when received.

Date product received: 30/04/21 Test Date: 14/05/21

Experimental Conditions:

Interfering substance:	Bovine Albumin (clean 0.3g/l)
Test temperature:	20 +/- 1 °C
Contact time:	5 minutes
Test organisms:	*Vaccinia virus VR-1508 (Modified Vaccinia Ankara)*
Cell line identification:	BHK-21 Clone 13
Cell culture media:	Dulbeco's minimum essential medium + 2.0% v/v Foetal Bovine Serum

Requirements of the Standard:

The test product shall demonstrate at least a 4 decimal logarithm (lg) reduction when tested in accordance with this standard under simulated clean or dirty conditions.

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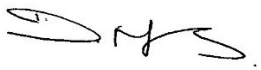
Conclusion:

For the product Sachets PDCSS9A , [Batch code: n/a] the log reduction requirements as specified in BS EN 14476:2013+A2:2019 (4 lg within the relevant contact time) were met in clean conditions with a contact time of 5 minutes for the 15g sachet.

Report authorised by:



Name: Dawn Mellors
Position: Technical Director
Date: 20/05/2021

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Method

Test procedure

To determine the virucidal activity of the product, test virus is exposed to product dilutions for the required contact time and subsequently, the product is neutralised. The solution is then serially diluted and titrated on cell monolayers. The surviving virus tissue culture infective dose ($TCID_{50}$) is determined by the appearance of cytopathic effect (CPE) on the cells and is calculated using the Spearman-Kärber calculation.

Several controls are run alongside each test to validate the assay.

Titration of Virus control: The titration of the virus test suspension is determined at the start of the test and at the end of the test to determine its infectivity.

Reference for Virus Inactivation control: Formaldehyde is used instead of the test product, at 2 time points to demonstrate that the virus remains resistant to biocidal action at known concentrations.

Efficiency of Suppression: The test product is neutralised during the test, prior to the addition of test virus. Recovery of the test virus at it's original titre demonstrates effective product neutralisation.

Interference control: Cell are incubated with the test product for 1 hour and subsequently the test virus is added. Recovery of the test virus at it's original titre demonstrates that the presence of the product does prevent infection of the cells by the test virus, and thus does not interfere with quantification of virucidal activity.

Cytotoxicity: Both the product and formaldehyde are incubated with cells, without the addition of test virus, to determine if any morphological changes occur that may mirror CPE normally caused by virus. This ensures any CPE seen is a result of residual virus and not the product.

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Test Report for Virology
BS EN 14476:2013+A2:2019

Vaccinia virus VR-1508 (Modified Vaccinia Ankara)

Test Results				
Contact time	5 minutes	**Raw data**	**log $TCID_{50}$/ml**	**Log reduction**
Product (15g)		000000	3.50	4.83
Product (12g)		666000	5.50	2.83
Product (10g)		666600	6.50	1.83
Virus Test Suspension	Start	06666660	**8.33**	
	Finish	06666640		

Inactivation control (0.7% Formaldehyde)			
Contact time	**Raw data**	**log $TCID_{50}$/ml**	**Log reduction**
15 mins	064400	5.17	3.17

Formaldehyde cytotoxicity	
Raw data	000000
Level of cytotoxicity	3.50

Product neutralisation		
Raw data	**log $TCID_{50}$/ml**	Log reduction
06666640	8.17	0.17

Product cytotoxicity	
Raw data	**Level of cytotoxicity**
00000000	3.50

Product interference			
	Raw data	**log $TCID_{50}$/ml**	Log reduction
PBS	06666660	8.50	-0.17
Test product	06666640	8.17	
Difference		**0.33**	

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Test Report for Virology
BS EN 14476:2013+A2:2019

Verification of the methodology

Result Summary	Log of TCID50	Average	Log Reduction	Criteria	met/not met
Titration of Virus Control (Start)	8.50	8.33			
Titration of Virus Control (End)	8.17				
Product (15g)	3.50		4.83	Log Reduction >= 4 Log	**Met**
Product (12g)	5.50		2.83	-	**-**
Product (10g)	6.50		1.83	Log Reduction <= 4 Log	**Met**
Reference test for virus inactivation (15 mins)	5.17		3.17	2.0>=Log reduction=<4.0	**Met**
Efficiency of Suppression	8.17		0.17	<=0.5 log of Average	**Met**
Inactivation Control (Product)	8.17		0.17	<=1.0 log of Average	**Met**
Inactivation Control (PBS)	8.50		-0.17	<=0.5 log of Average	**N/A**
Product Cytotoxicity	3.50				**N/A**

1) The titre of the test suspension is at least 10^8 TCID50 /ml or is sufficiently high to at least enable a titre reduction of 4 lg to verify the method: detectable titre reduction shall be at least 4 lg.

2) The difference between the logarithmic titre of the virus control and the logarithmic titre of the test organism in the reference inactivation test should be between –2,0 and <= –4,0 after 15 mins for the Vaccinia virus VR-1508 (Modified Vaccinia Ankara).

3) Cytotoxicity of the product test solution should not affect cell morphology and growth or susceptibility for the test organism in the dilutions of the test mixtures which are necessary to demonstrate a 4 lg reduction of the virus.

4) The product should not interfere with susceptibility of the cells to the test organism, the difference in the titre of the test suspension and the recovered titre of the interference control should be <1lg.

5) Control of efficiency for suppression of product activity (the difference to the test suspension shall be ≤ 0,5 lg).

6) At least one concentration per test shall demonstrate a 4 lg or more reduction and at least one concentration shall demonstrate a lg reduction of less than 4.

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Test Report for
BS EN 13697:2015+A1:2019

UKAS TESTING 8615

Company Name:	PVA Hygiene Ltd
Contact Name:	Jim Taylour
Contact Email:	technical@pva-hygiene.co.uk
Purchase Order No:	PO 1769
Report Date:	04/03/2022
Melbec Ref Number:	37972
No. of Samples:	
Name of Test Product:	PDCCS9 Every Day Virucidal Disinfectant
Batch Number:	N/A

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Sample Details:

Manufacture / Supplier:.....	PVA Hygiene Ltd
Product storage conditions:.....	Ambient
Appearance of the product (as supplied):.....	White powder
Appearance of the product (after dilution):.....	Cloudy liquid
Active substance and concentration:.....	Benzalkonium Chloride
Product dilutions/concentrations:.....	15g Sachet in 750ml (2%wt/v), 15g Sachet in 1100ml (1.36% wt/v), 15g Sachet in 3000ml (0.5% wt/v)
Diluent used to dilute product:.....	Warm Synthetic Hard Water
Incubation temperature:.....	Bacteria: 35 to 38°C for 48+6h; Yeast: 30+1°C for 48+6h; Mould: 30+1°C for 72+6h

The test product was in satisfactory condition for testing when received.

Date product received: 11/02/22 Test Date: 22/02/22

Experimental Conditions:

Interfering substance:	Bovine Albumin (clean 0.3g/l)
Test temperature:	19 to 21 °C
Contact time:	5 minutes
Test organisms:	*Pseudomonas aeruginosa ATCC 15442* *Staphylococcus aureus ATCC 6538* *Escherichia coli ATCC 10536* *Enterococcus hirae ATCC 10541* *Candida albicans ATCC 10231*

Deviations:

EN13697 states incubation temperature of 36±1°C or 37±1°C. Melbec Microbiology Ltd method states 35°C - 38°C.

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Requirements of the Standard:
The test product shall demonstrate at least a 4 decimal logarithm (lg) reduction for bacteria and at least a 3 decimal logarithm (lg) reduction for fungi when tested in accordance with this standard under simulated clean or dirty conditions.

Conclusion:

For the product PDCCS9 Every Day Virucidal Disinfectant, [Batch code: N/A] the log reduction requirements as specified in EN 13697:2015 (4 lg for bacteria and 3 lg for fungi within the relevant contact time) were met in clean conditions with a contact time of 5 minutes for the bacteria and the veast for the 2%wt/v and 1.36%wt/v.

Report authorised by:

Name: Dawn Mellors
Position: Technical Director
Date: 04/03/2022

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Test Results:

Neutralisation Method Used:

Dilution neutralisation by pour plate

Neutraliser used N1

Viable Counts (Nc, Nd & Nts)

Nc is the mean log number of organisms per test surface of the water control at the end of the contact time
Nd is the mean log number of organisms per test surface of the disinfectant test at the end of the contact time
Nts is the mean number of organisms remaining on the test surface at the end of the test.
NC is the neutraliser control
NT is the method validation

Log Reduction:
Log reduction (R) = LogNc – LogNd

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Bacterial or Fungal Test Suspension (N) (cfu/disc)

	Pseudomonas aeruginosa ATCC 15442			*Staphylococcus aureus ATCC 6538*			*Escherichia coli ATCC 10536*			*Enterococcus hirae ATCC 10541*		
Count	-7	>330	>330	-6	>330	>330	-6	>330	>330	-6	>330	>330
	-8	27	26	-7	52	47	-7	49	46	-7	43	41
Weighted Mean	2.65E+09			4.95E+08			4.75E+08			4.20E+08		
Lg	9.42			8.69			8.68			8.62		
6.57<N<7.10	-			7.09			7.07			7.02		
7.57<N<8.10	7.82											

	Candida albicans ATCC 10231		
Count	-6	>330	>330
	-7	40	31
Weighted Mean	3.55E+08		
Lg	8.55		
5.57<N<6.10	-		
6.57<N<7.10	6.95		

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Validation and Controls (Counts on Test Surfaces)

	Pseudomonas aeruginosa ATCC 15442						*Staphylococcus aureus ATCC 6538*					
	NT			NC			NT			NC		
Count	-2	>330	>330	-3	>330	>330	-3	>330	>330	-3	>330	>330
	-3	296	278	-4	31	30	-4	122	91	-4	107	104
Weighted Mean	2.87E+06			3.05E+06			1.07E+07			1.06E+07		
Lg	6.46			6.48			7.03			7.02		
NC - Nc (Not > +/- 0.3lg)	-			-0.23			-			0.01		
NT - Nc (Not > +/- 0.3lg)	-0.26			-			0.01			-		

	Escherichia coli ATCC 10536						*Enterococcus hirae ATCC 10541*					
	NT			NC			NT			NC		
Count	-3	>330	>330	-3	>330	>330	-3	>330	>330	-3	>330	>330
	-4	41	21	-4	59	43	-4	76	48	-4	72	60
Weighted Mean	3.10E+06			5.10E+06			6.20E+06			6.60E+06		
Lg	6.49			6.71			6.79			6.82		
NC - Nc (Not > +/- 0.3lg)	-			-0.04			-			0.25		
NT - Nc (Not > +/- 0.3lg)	-0.26			-			0.22			-		

	Candida albicans ATCC 10231					
	NT			NC		
Count	-2	>330	>330	-2	>330	>330
	-3	149	118	-3	189	189
Weighted Mean	1.34E+06			1.89E+06		
Lg	6.13			6.28		
NC - Nc (Not > +/- 0.3lg)	-			-0.12		
NT - Nc (Not > +/- 0.3lg)	-0.27			-		

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Determination of Microbicidal Activity (Nd) and Water Control (Nc) (Count/Test Surface)

Pseudomonas aeruginosa ATCC 15442

10^x	Water Control (Nc)		Test Procedure (Nd) 15g in 750ml		Test Procedure (Nd) 15g in 1100ml		Test Procedure (Nd) 15g in 3000ml of water	
N	-	-	0	0	0	0	>330	>330
-1	-	-	-	-	-	-	155	130
-2	-	-	-	-	-	-	-	-
-3	>330	>330	-		-		-	
-4	53	51	-		-		-	
Mean	5.20E+06		-		-		1.43E+04	
Lg	6.72		< 0.10		< 0.10		4.15	
Nts (count remaining on disc)	29		0		0		0	
Log Reduction (R)			> 6.62		> 6.62		2.56	
			PASS		PASS		FAIL	

Staphylococcus aureus ATCC 6538

10^x	Water Control (Nc)		Test Procedure (Nd) 15g in 750ml		Test Procedure (Nd) 15g in 1100ml		Test Procedure (Nd) 15g in 3000ml of water	
N	-	-	0	0	0	0	0	0
-1	-	-	-	-	-	-	-	-
-2	-	-	-	-	-	-	-	-
-3	>330	>330	-		-		-	
-4	105	102	-		-		-	
Mean	1.04E+07		-		-		-	
Lg	7.01		< 0.10		< 0.10		< 0.10	
Nts (count remaining on disc)	>100		0		0		0	
Log Reduction (R)			> 6.91		> 6.91		> 6.91	
			PASS		PASS		PASS	

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Escherichia coli ATCC 10536

10^x	Water Control (Nc)		Test Procedure (Nd) 15g in 750ml		Test Procedure (Nd) 15g in 1100ml		Test Procedure (Nd) 15g in 3000ml of water	
N	-	-	0	0	0	0	>330	>330
-1	-	-	-	-	-	-	38	36
-2	-	-	-	-	-	-	-	-
-3	>330	>330	-		-		-	
-4	67	45	-		-		-	
Mean	5.60E+06		-		-		3.70E+03	
Lg	6.75		< 0.10		< 0.10		3.57	
Nts (count remaining on disc)	>100		0		0		0	
Log Reduction (R)			> 6.65		> 6.65		3.18	
			PASS		PASS		FAIL	

Enterococcus hirae ATCC 10541

10^x	Water Control (Nc)		Test Procedure (Nd) 15g in 750ml		Test Procedure (Nd) 15g in 1100ml		Test Procedure (Nd) 15g in 3000ml of water	
N	-	-	0	0	<14	<14	32	27
-1	-	-	-	-	-	-	-	-
-2	-	-	-	-	-	-	-	-
-3	>330	>330	-		-		-	
-4	41	33	-		-		-	
Mean	3.70E+06		-		1.40E+02		3.00E+02	
Lg	6.57		< 0.10		< 2.15		2.48	
Nts (count remaining on disc)	>100		0		0		0	
Log Reduction (R)			> 6.47		> 4.42		4.09	
			PASS		PASS		PASS	

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Candida albicans ATCC 10231

10^x	Water Control (Nc)		Test Procedure (Nd) 15g in 750ml		Test Procedure (Nd) 15g in 1100ml		Test Procedure (Nd) 15g in 3000ml of water	
N	-	-	0	0	0	0	>330	>330
-1	-	-	-	-	-	-	59	34
-2	-	-	-	-	-	-	-	-
-3	259	237	-		-		-	
-4	24	24	-		-		-	
Mean	2.47E+06		-		-		4.65E+03	
Lg	6.39		< 0.10		< 0.10		3.67	
Nts (count remaining on disc)	100		0		0		0	
Log Reduction (R)			> 6.29		> 6.29		2.73	
			PASS		PASS		FAIL	

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Note:

Viable counts of 1-14 (below the lower limit) are expressed as $<1.4 \times 10^2$ (<2.15 Log)
Viable counts of 0 are expressed as < 0.10 Log
Viable counts >330 for bacteria and yeasts and >165 for mould (higher than the upper limit) are expressed as $> 3.3 \times 10^5$ (>5.52 log) or $> 1.65 \times 10^5$ (>5.22 log)
Nts counts of >100 are expressed as >100

Method Verification:

For Each Test:	
The mean counts used for calculation of N, Nc, Nd, NC and NT are between 14 and 330 for bacteria and yeasts and 14 and 165 for moulds	Yes
6.57≤N≤7.10 for bacteria in dirty conditions and clean conditions (except Pseudomonas aeruginosa) and for Candida albicans in clean conditions	Yes
7.57≤N≤8.10 for Pseudomonas aeruginosa in clean conditions	Yes
5.57≤N≤6.10 for Candida albicans in dirty conditions and Aspergillus brasiliensis in clean or dirty conditions	N/A
NC-Nc is not > ± 0.3 log	Yes
NT-Nc is not > ± 0.3 log	Yes
Nts is <100 cfu for active concentrations	Yes
Weighted mean quotient for N is 5≤N≤15	Yes
Nc is sufficiently high to demonstrate a 4 lg reduction for bacteria and a 3 lg reduction for fungi	Yes

The sample detailed in this report will be retained for 1 month after report date, unless otherwise requested.
The results on this report refer to the items tested only.
Sample description (name of product) and batch references (batch number) stated are as provided by the customer.

****End of test report****

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

1.1. Product identifier

Product name : EVERYDAY VIRUCIDAL DISINFECTANT

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

1.2.1. Relevant identified uses

Main use category : Professional use,Consumer use
Use of the substance/mixture : DISINFECTANT/DETERGENT

1.2.2. Uses advised against

Restrictions on use : Not for Oral Consumption, Not for Direct Application to Food Stuffs

1.3. Details of the supplier of the safety data sheet

Manufacturer
PVA HYGIENE
UNIT 6 Havyat Business Park Havyat Road
BS40 5PA Bristol
T 01934 862859
sales@pva-hygiene

1.4. Emergency telephone number

Emergency number : 01934 862859 (Office Hours). For Immediate first aid advice in the UK call 111
This product is registered with NPIS in the UK.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 1, Sub-Category 1B	H314
Serious eye damage/eye irritation, Category 1	H318
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

In Use Solutions are Un-Classified for Physical and Health hazards.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS05 GHS09

Signal word (CLP) : Danger
Contains : Alkyl (C12-14) Dimethylbenzylammonium Choride, Alcohols C9-11, Ethoxylated
Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P102 - Keep out of reach of children.
P264 - Wash hands thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective gloves.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P402+P404 - Store in a dry place. Store in a closed container.
P501 - Dispose of contents to national regulations.

2.3. Other hazards

This product does not contain any substances classifed as PBT
This product does not contain any substances clasified as vPvB.
Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP] and GB CLP Regulations
sodium carbonate	CAS-No.: 497-19-8 EC-No.: 207-838-8 EC Index-No.: 011-005-00-2 REACH-no: 01-2119485498-19	≥ 60 – < 70	Eye Irrit. 2, H319
Alkyl (C12-14) Dimethylbenzylammonium Choride	CAS-No.: 85409-22-9 EC-No.: 287-089-1 REACH-no: 01-2120754638-42	≥ 15 – < 25	Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
Citric Acid Mono Hydrate	CAS-No.: 5949-29-1 EC-No.: 691-328-9 REACH-no: 01-2119457026-42	≥ 5 – < 8	Eye Irrit. 2, H319
Alcohols C9-11, Ethoxylated	CAS-No.: 68439-46-3	≥ 0.5 – < 1.5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Benzododecinium Chloride	CAS-No.: 139-07-1 EC-No.: 205-351-5 REACH-no: 01-2120831693-52_XXXX	≥ 0.5 – < 1.5	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
Cetalkonium Chloride	-	≥ 0.1 – < 0.5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If medical advice is needed, have product container or label at hand. For immediate First Aid advice in the UK, dial 111. When it safe to do so, remove the victim immediately from the source of exposure. However, consideration should be given as to whether moving the victim will cause further injury.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If unconscious place in recovery position and seek medical advice.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : 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/attention.

First-aid measures after ingestion : Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention. If unconscious place in recovery position and seek medical advice.

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

Symptoms/effects : Neat product is corrosive to skin and eyes. Diluted product is Unclassified for health hazards.

Symptoms/effects after inhalation : Unlikely route of exposure, but inhalation of dilute solution droplets may result in a sore throat.

Symptoms/effects after skin contact : Causes severe burns.

Symptoms/effects after eye contact : Causes serious eye burns.

Symptoms/effects after ingestion : Unlikely route of exposure without deliberate abuse. If sachets are swallowed they may swell and could block the throat and GI tract. If Powder is ingested, irritation and burning to the mouth and GI tract may occur, a soapy taste may be reported. Ingestion of diluted solution is unlikely to cause long term harm, but a soapy taste may be reported together with mild irritation to the lips, throat and GI tract.

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

Rinse with plenty of water. Check for abrasion to the surface of the eye from powder particles.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing agent suitable for surrounding fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard : The product is not flammable.

Hazardous decomposition products in case of fire : On heating, irritating fumes may be produced.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Normal use solutions can be disposed to sewers and septic tanks. Large scale spillages or uncontrolled discharges into water systems must be reported to the relevent Environment Agency.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect and place spillage in suitable containers. Seal the containers and apply labelling to identify the material and hazards. For disposal see section 13 of this SDS. Dispose of via an authorised person/ licensed waste disposal contractor or by other suitable waste treatment techniques.

6.4. Reference to other sections

For further information refer to section 13. See sections 2,8,12,13 &14.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Carefully comply with the instructions for use. Avoid contact with eyes.
Hygiene measures : Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry place. Store in a closed container.

7.3. Specific end use(s)

DETERGENT. DISINFECTANT/DETERGENT.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

EVERYDAY VIRUCIDAL DISINFECTANT	
United Kingdom - Occupational Exposure Limits	
Remark	No exposure limits known for ingredients.

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:
Gloves. Safety glasses.

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Safety glasses. In normal use eye protection is not required. During manufacture and packing operations, eye protection is recommended. Refer to EN166 to select appropriate level of protection.

8.2.2.2. Skin protection

Hand protection:
During normal use gloves are not required. During manufacture and packing operations, the use of gloves with a breakthrough time >60 minutes is recommended. Refer to EN374 to select appropriate level of protection. Rubber and PVC gloves are recommended. NOTE:- Use of gloves is a good general hygiene practice.

8.2.2.3. Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. Note:- This would be very unusual in normal use.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

Other information:
The PPE indicated in this SDS is not a COSHH assessment. It represents the PPE that should be considered for the neat product at all stages of the products life cycle, including manufacture, packing, distribution, use and disposal. Use solutions are unclassified, but for these we recommend use of gloves as minimum PPE.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Powder.
Colour	:	white.
Odour	:	odourless.
Odour threshold	:	No data available
pH	:	No data available
pH solution	:	10 – 11 @1%
Relative evaporation rate (butylacetate=1)	:	Not applicable.
Melting point	:	Not applicable
Freezing point	:	Not applicable
Boiling point	:	Not applicable
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	Not applicable
Flammability (solid, gas)	:	Non flammable.
Vapour pressure	:	Not applicable
Relative vapour density at 20 °C	:	Not applicable
Relative density	:	0.8 – 0.9
Solubility	:	Completely soluble in water.
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	No data available
Explosive properties	:	Product is not explosive.
Oxidising properties	:	Not oxidising.
Explosive limits	:	Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Store away from moisture in a closed container. Protect from sunlight.

10.5. Incompatible materials

Strong acids. Oxidizing agent**.** Do not mix with Bleach or products containing Sodium Hypochlorite, this could result in dangerous heating of the solution.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Alkyl (C12-14) Dimethylbenzylammonium Choride (85409-22-9)	
LD50 oral rat	≈ 344 ml/kg
LD50 dermal rat	> 2000 ml/kg

Benzododecinium Chloride (139-07-1)	
ATE CLP (oral)	500 mg/kg bodyweight

Cetalkonium Chloride	
ATE CLP (oral)	500 mg/kg bodyweight
ATE CLP (dermal)	1100 mg/kg bodyweight

Alcohols C9-11, Ethoxylated (68439-46-3)	
LD50 oral rat	300 – 2000 ml/kg
LD50 dermal rat	> 2000 ml/kg
ATE CLP (oral)	500 mg/kg bodyweight

Skin corrosion/irritation : Causes severe skin burns.
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : This mixture is not classified as a carcinogen.

Reproductive toxicity : This mixture has no reproductive/feotal harm classifications and is not expected to be a risk to expectant mothers.
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

EVERYDAY VIRUCIDAL DISINFECTANT	
Viscosity, kinematic	Not applicable

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Normal use solutions of this product are not classified for environmental harm.
Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.
Not rapidly degradable

Alkyl (C12-14) Dimethylbenzylammonium Choride (85409-22-9)	
LC50 - Fish [1]	≈ 0.791 ml/l Rainbow Trout
EC50 - Crustacea [1]	≈ 0.0164 ml/l Water flea
EC50 72h - Algae [1]	≈ 0.00785 mg/l Green Algae

Alcohols C9-11, Ethoxylated (68439-46-3)	
LC50 - Fish [1]	1 – 10 mg/l
EC50 - Crustacea [1]	1 – 10 g/l
EC50 72h - Algae [1]	1 – 10 mg/l

12.2. Persistence and degradability

EVERYDAY VIRUCIDAL DISINFECTANT	
Persistence and degradability	The Surfactants and Chelants used in this mixture are Biodegradable.

12.3. Bioaccumulative potential

EVERYDAY VIRUCIDAL DISINFECTANT	
Bioaccumulative potential	Not expected to Bioaccumulate.

12.4. Mobility in soil

EVERYDAY VIRUCIDAL DISINFECTANT	
Additional information	soluble in water

12.5. Results of PBT and vPvB assessment

EVERYDAY VIRUCIDAL DISINFECTANT
This product does not contain any substances classifed as PBT
This product does not contain any substances clasified as vPvB.

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Disposal of this product must comply with local and national environmental legislation.
Sewage disposal recommendations : Small volumes of use solution can be disposed of to sewage drains.

SECTION 14: Transport information

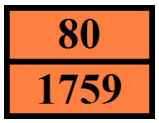
In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 1759	UN 1759	UN 1759	UN 1759	UN 1759
14.2. UN proper shipping name				
CORROSIVE SOLID, N.O.S. (Alkyl (C12-14) Dimethylbenzylammonium Choride ; Alcohols C9-11, Ethoxylated)	CORROSIVE SOLID, N.O.S. (Alkyl (C12-14) Dimethylbenzylammonium Choride ; Alcohols C9-11, Ethoxylated)	Corrosive solid, n.o.s. (Alkyl (C12-14) Dimethylbenzylammonium Choride ; Alcohols C9-11, Ethoxylated)	CORROSIVE SOLID, N.O.S. (Alkyl (C12-14) Dimethylbenzylammonium Choride ; Alcohols C9-11, Ethoxylated)	CORROSIVE SOLID, N.O.S. (Alkyl (C12-14) Dimethylbenzylammonium Choride ; Alcohols C9-11, Ethoxylated)
Transport document description				
UN 1759 CORROSIVE SOLID, N.O.S. (Alkyl (C12-14) Dimethylbenzylammonium Choride ; Alcohols C9-11, Ethoxylated), 8, II, (E)	UN 1759 CORROSIVE SOLID, N.O.S. (Alkyl (C12-14) Dimethylbenzylammonium Choride ; Alcohols C9-11, Ethoxylated), 8, II	UN 1759 Corrosive solid, n.o.s. (Alkyl (C12-14) Dimethylbenzylammonium Choride ; Alcohols C9-11, Ethoxylated), 8, II	UN 1759 CORROSIVE SOLID, N.O.S. (Alkyl (C12-14) Dimethylbenzylammonium Choride ; Alcohols C9-11, Ethoxylated), 8, II	UN 1759 CORROSIVE SOLID, N.O.S. (Alkyl (C12-14) Dimethylbenzylammonium Choride ; Alcohols C9-11, Ethoxylated), 8, II
14.3. Transport hazard class(es)				
8	8	8	8	8
				
14.4. Packing group				
II	II	II	II	II
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
Environmentally hazardous substances derogation applies (quantity of liquids ≤ 5 litres or net mass of solids ≤ 5 kg). The environmentally hazardous substance mark is therefore not required, as stated in the ADR regulation, section 5.2.1.8.1.				
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR) : C10
Special provisions (ADR) : 274
Limited quantities (ADR) : 1kg
Excepted quantities (ADR) : E2
Packing instructions (ADR) : P002, IBC08
Special packing provisions (ADR) : B4
Mixed packing provisions (ADR) : MP10

Portable tank and bulk container instructions (ADR)	:	T3
Portable tank and bulk container special provisions (ADR)	:	TP33
Tank code (ADR)	:	SGAN, L4BN
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	2
Special provisions for carriage - Packages (ADR)	:	V11
Hazard identification number (Kemler No.)	:	80
Orange plates	:	
Tunnel restriction code (ADR)	:	E
EAC code	:	2X

Transport by sea

Special provisions (IMDG)	:	274
Limited quantities (IMDG)	:	1 kg
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P002
IBC packing instructions (IMDG)	:	IBC08
IBC special provisions (IMDG)	:	B21, B4
Tank instructions (IMDG)	:	T3
Tank special provisions (IMDG)	:	TP33
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-B
Stowage category (IMDG)	:	A
Properties and observations (IMDG)	:	Causes burns to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y844
PCA limited quantity max net quantity (IATA)	:	5kg
PCA packing instructions (IATA)	:	859
PCA max net quantity (IATA)	:	15kg
CAO packing instructions (IATA)	:	863
CAO max net quantity (IATA)	:	50kg
Special provisions (IATA)	:	A3, A803
ERG code (IATA)	:	8L

Inland waterway transport

Classification code (ADN)	:	C10
Special provisions (ADN)	:	274
Limited quantities (ADN)	:	1 kg
Excepted quantities (ADN)	:	E2
Equipment required (ADN)	:	PP, EP
Number of blue cones/lights (ADN)	:	0

Rail transport

Classification code (RID)	:	C10
Special provisions (RID)	:	274
Limited quantities (RID)	:	1kg
Excepted quantities (RID)	:	E2
Packing instructions (RID)	:	P002, IBC08
Special packing provisions (RID)	:	B4
Mixed packing provisions (RID)	:	MP10
Portable tank and bulk container instructions (RID)	:	T3
Portable tank and bulk container special provisions (RID)	:	TP33
Tank codes for RID tanks (RID)	:	SGAN, L4BN
Transport category (RID)	:	2
Special provisions for carriage – Packages (RID)	:	W11

Colis express (express parcels) (RID) : CE10
Hazard identification number (RID) : 80

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.
Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants
Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.
Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.
Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

15.1.2. National regulations

GB REACH and CLP regulations.
HSE EH40 Publication.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods

Abbreviations and acronyms:	
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.