Cleaner Sanitiser Trigger Portfolio

PVA HYGIENE LTD
PROFESSIONAL, VIABLE ALTERNATIVES

PVA Hygiene provides an innovative and sustainable method of cleaning. As the UK's leading manufacturer 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 environment diligence with commercial demands. Based in the South West of England, we distribute globally.

This portfolio contains documents relating to PVA Hygiene's CLEANER SANITISER.

This unique formulation is contained within a PVOH or paper film that dissolves at the point of use. The sachets are dry, compact and light, they reduce storage space and 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:

ISO 9001 : 2015 REGISTERED QUALITY MANAGEMENT
SOMERSET BUSINESS AWARDS 2023 WINNER
CHSA Accredited Manufacturer Certification Mark
Time is Precious In Memory of Ben Halford www.timeisprecious.org
Vegan
MADE IN BRITAIN
ISO 14001 : 2015 REGISTERED ENVIRONMENTAL MANAGEMENT

Product Description

Cleaner Sanitiser is based on PVA Hygiene's unique Aqua-Dis PDCS9 technology. Sachets contain a blend of biodegradable chelates, together with biodegradable surfactants and a cationic disinfectant. The product is designed for routine cleaning and disinfection of surfaces. Cleaner Sanitiser is biodegradable, safe for use on normal materials of construction, safe for use on food contact surfaces, and when used as directed this product conforms to EN13697, EN1276 and EN1650.

Sachets are supplied in the following Pack Sizes:-

Pack Size	Sachet Type	Order Code	Outer Packaging
20 * 10g	PVA-OH	Z4:20	Box
20 *10g	PVA-OH	B4:20	Pouch
20 *10g	Paper	PB4 :20	Pouch

- Supplied in a convenient water soluble PVA-OH or Paper sachets within a compostable container.
- Broad Spectrum Activity.
- Phosphate Free.
- Identifiable Colour.

Instructions for Use

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, the Cleaner Sanitiser solution is expected to have a shelf life of at least a week, but it is good practice make up a fresh solution daily.

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

TECHNICAL DATA SUMMARY

Appearance	Orange Yellow /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.

.

EFFICACY DETAILS

Test	Compliance Conditions		Organism Type/Compliance
	Time / Minutes	Minimum Concentration	
EN1276	5	1.3% (1 sachet /750ml)	Claim supported by standard organisms of:- Pseudomonas aeruginosa Escherichia coli, Enterococcus hirae, Staphylococcus aureus
EN1650	5	1.3% (1 sachet /750ml)	Claim supported by standard organisms of:- Candida Albicans
EN13697	5	1.3% (1 sachet /750ml)	Claim supported by standard organisms of:- Pseudomonas aeruginosa Escherichia coli, Enterococcus hirae, Staphylococcus aureus

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.

CLEANER SANITISER USE SOLUTION HEATH AND SAFETY SUMMARY

Issue Date 20/05/2022 Version 2.0

IDENTIFICATION OF THE MATERIAL	
Product Name	**Cleaner Sanitiser 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	Orange
pH	10 – 11.5

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 have no Environmental Classifications
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
BS EN 13697:2015+A1:2019

Company Name:	PVA Hygiene Ltd
Contact Name:	Jim Taylor
Contact Email:	technical@pva-hygiene.co.uk
Purchase Order No:	1554
Report Date:	16/03/2021
Melbec Ref Number:	23556
No. of Samples:	1
Name of Test Product:	PDCCS9 A Surface Disinfectant
Batch Number:	N/A

Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.

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

Sample Details:

Manufacture / Supplier:.....	PVA Hygiene Ltd
Product storage conditions:.....	Ambient
Appearance of the product (as supplied):.....	Clear colourless
Appearance of the product (after dilution):.....	Clear colourless
Active substance and concentration:.....	Benzalkonium Chloride
Product dilutions/concentrations:.....	Sachet in 750ml of water
Diluent used to dilute product:.....	Synthetic Hard Water
Incubation temperature:.....	36°C±1°C (24h)

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

Date product received: 21/12/20 Test Date: 07/01/21

Experimental Conditions:

Interfering substance:	Bovine Albumin (clean 0.3g/l)
Test temperature:	18 to 25 degrees
Contact time:	5 Minutes
Test organisms:	*Pseudomonas aeruginosa ATCC 15442*
	Staphylococcus aureus ATCC 6538
	Escherichia coli ATCC 10536
	Enterococcus hirae ATCC 10541

Requirements of the Standard:

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

MTF 5.10.94 Issue 1

Conclusion:

The test product has met the requirements as specified in EN13697 for Pseudomonas aeruginosa, Staphylococcus aureus, Escherichia coli and Enterococcus hirae in clean conditions with a contact time of 5 minutes.

Testing carried out by:

Name: Danika Weatherburn
Position: Laboratory Manager

Report authorised by:

Name: Dawn Mellors
Position: Technical Director
Date: 16/03/2021

Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.

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

Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.

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

	Pseudomonas aeruginosa ATCC 15442			*Staphylococcus aureus ATCC 6538*		
Count	-7	>330	>330	-6	>330	>330
	-8	47	42	-7	34	29
Weighted Mean	4.45E+09			3.15E+08		
Lg	9.65			8.50		
6.57<N<7.10	-			6.90		
7.57<N<8.10	8.05			-		

	Escherichia coli ATCC 10536			*Enterococcus hirae ATCC 10541*		
Count	-7	>330	>330	-6	>330	>330
	-8	45	42	-7	34	31
Weighted Mean	4.35E+09			3.25E+08		
Lg	9.64			8.51		
6.57<N<7.10	-			6.91		
7.57<N<8.10	8.04			-		

Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.

Validation and Controls (Counts on Test Surfaces)

	Pseudomonas aeruginosa ATCC 15442						*Staphylococcus aureus ATCC 6538*					
	NT			NC			NT			NC		
Count	-2	>330	>330	-2	>330	>330	-3	>330	>330	-3	>330	>330
	-3	137	124	-3	180	150	-4	96	76	-4	103	93
Weighted Mean	1.31E+06			1.65E+06			8.60E+06			9.80E+06		
Lg	6.12			6.22			6.93			6.99		
NC - Nc (Not > +/- 0.3lg)	-			-0.19			-			-0.09		
NT - Nc (Not > +/- 0.3lg)	-0.29			-			-0.14			-		

	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	41	-4	38	26	-4	69	47	-4	55	42
Weighted Mean	4.10E+06			3.20E+06			5.80E+06			4.85E+06		
Lg	6.61			6.51			6.76			6.69		
NC - Nc (Not > +/- 0.3lg)	-			0.16			-			0.14		
NT - Nc (Not > +/- 0.3lg)	0.27			-			0.21			-		

Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.

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

Pseudomonas aeruginosa ATCC 15442

10^x	Water Control (Nc)		Test Procedure (Nd)	
			Sachet in 750ml of water	
N	-		0	0
-1	-		-	-
-3	266	225	-	
-4	42	33	-	
Mean	2.57E+06		-	
Lg	6.41		<0.10	
Nts (count remaining on disc)	>100		0	
Log Reduction (R)			>6.31	

Staphylococcus aureus ATCC 6538

10^x	Water Control (Nc)		Test Procedure (Nd)	
			Sachet in 750ml of water	
N	-		48	43
-1	-		0	0
-3	>330	>330	-	
-4	120	120	-	
Mean	1.20E+07		4.55E+02	
Lg	7.08		2.66	
Nts (count remaining on disc)	>100		0	
Log Reduction (R)			4.42	

Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.

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

Escherichia coli ATCC 10536

10^x	Water Control (Nc)		Test Procedure (Nd)	
			RTU	
N	-		0	0
-1	-		-	-
-3	>330	>330	-	
-4	25	19	-	
Mean	2.20E+06		-	
Lg	6.34		<0.10	
Nts (count remaining on disc)	57		0	
Log Reduction (R)			>6.24	

Enterococcus hirae ATCC 10541

10^x	Water Control (Nc)		Test Procedure (Nd)	
			RTU	
N	-		36	30
-1	-		-	-
-3	>330	>330	-	
-4	39	32	-	
Mean	3.55E+06		3.30E+02	
Lg	6.55		2.52	
Nts (count remaining on disc)	>100		0	
Log Reduction (R)			4.03	

Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.

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	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****

Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.

Test Report for a General-Purpose Disinfectant Product
BS EN 1276:2019

Company Name:	PVA Hygiene Ltd
Contact Name:	Jim Taylour
Contact Email:	technical@pva-hygiene.co.uk
Purchase Order No:	TBC
Report Date:	28/06/2021
Melbec Ref Number:	28489
No. of Samples:	1
Name of Test Product:	PDCCS9 A Surface Disinfectant
Batch Number:	N/A

Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 857945.

Sample Details:

Manufacture / Supplier:.....	PVA Hygiene Ltd
Product storage conditions:.....	Ambient
Appearance of the product (as supplied):.....	White Sachet
Appearance of the product (after dilution):.....	Cloudy Liquid
Appearance of product with interfering substance and test organism:	Cloudy Liquid
Active substance and concentration:.....	Benzalkonium Chloride
Product dilution preparation.....	Volume/Volume
Product dilutions/concentrations:.....	1 x 10g Sachet dissolved into 600ml of water (Volume of water adjusted from 750ml to allow for dilution during test)
Diluent used to dilute product:.....	Synthetic Hard Water
Incubation temperature:	35 °C to 38 °C

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

Date product received: 07/06/21 Test Date: 17/06/21

Experimental Conditions:

Interfering substance:	Bovine Albumin (clean 0.3g/l)
Test temperature:	18 °C to 25 °C
Contact time:	5 minutes
Test organisms:	*Pseudomonas aeruginosa ATCC 15442* *Staphylococcus aureus ATCC 6538* *Escherichia coli ATCC 10536* *Enterococcus hirae ATCC 10541*

Deviations:

EN1276 states incubation temperature of 36±1°C or 37±1°C. Melbec Microbiology Ltd method states 35°C - 38°C.

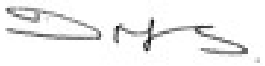
Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 857945.

Requirements of the Standard:
The test product shall demonstrate at least a 5 decimal logarithm (lg) reduction when tested in accordance with this standard under simulated clean or dirty conditions.

Conclusion:

For the product PDCCS9 A Surface Disinfectant, [Batch code: N/A] the log reduction requirements as specified in EN 1276:2019 (5 lg within the relevant contact time) were met in clean conditions with a contact time of 5 minutes.

Report authorised by:



Name: Dawn Mellors
Position: Technical Director
Date: 28/06/2021

Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 857945.

Test Results:

Neutralisation Method Used:

Membrane filtration

Rinsing Liquid Used: N7

Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 857945.

Pseudomonas aeruginosa ATCC 15442

Validation and controls

Melbec Ref No	**28489**

Validation suspension (Nv_0)			Experimental conditions control (***A***)			Neutralizer control (***B***)			Method validation (***C***) 10g in 750ml water		
Vc 1	72	$\bar{x}$ =	*Vc* 1	45	$\bar{x}$ =	*Vc* 1	43	$\bar{x}$ =	*Vc* 1	44	$\bar{x}$ =
Vc 2	66	69	*Vc* 2	43	44	*Vc* 2	38	40.5	*Vc* 2	32	38
30 ≤ $\bar{x}$ of Nv_0 ≤ 160? **Yes**			$\bar{x}$ of A is ≥ 0.5 x $\bar{x}$ of Nv_0? **Yes**			$\bar{x}$ of B is ≥ 0.5 x $\bar{x}$ of Nv_0? **Yes**			$\bar{x}$ of C is ≥ 0.5 x $\bar{x}$ of Nv_0? **Yes**		

Test suspension

	N	*Vc* 1	*Vc* 2			
Test suspension (*N* and N_0):	10^{-6}	>330	>330	X m	4.65E+08	; lg *N* = 8.67
				$N_0 = N/10$	; lg N_0=	7.67
	10^{-7}	53	40	7.17 ≤ lgN_0 ≤ 7.70?		Yes
				$\bar{x}$ quotient = >5 and <15?		N/A

Bactericidal activity results

Conc. of the active (%)	*Vc* 1	*Vc* 2	*Na* = $\bar{x}$ *x10*	lg*Na*	lg*R* N_0 = 7.67		Contact time	Result
1 x 10g Sachet dissolved into 600ml of water	<14	<14	1.40E+02	<2.15		>5.52	5 minutes	**Pass**

Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 857945.

Staphylococcus aureus ATCC 6538

Validation and controls

Melbec Ref No	**28489**

Validation suspension (Nv_0)			Experimental conditions control (***A***)			Neutralizer control (***B***)			Method validation (***C***) 10g in 750ml water		
Vc 1	83	$\bar{x}$ =	*Vc* 1	105	$\bar{x}$ =	*Vc* 1	73	$\bar{x}$ =	*Vc* 1	82	$\bar{x}$ =
Vc 2	74	78.5	*Vc* 2	87	96	*Vc* 2	72	72.5	*Vc* 2	75	78.5
30 ≤ $\bar{x}$ of Nv_0 ≤ 160? **Yes**			$\bar{x}$ of A is ≥ 0.5 x $\bar{x}$ of Nv_0? **Yes**			$\bar{x}$ of B is ≥ 0.5 x $\bar{x}$ of Nv_0? **Yes**			$\bar{x}$ of C is ≥ 0.5 x $\bar{x}$ of Nv_0? **Yes**		

Test suspension

	N	*Vc* 1	*Vc* 2			
Test suspension (*N* and N_0):	10^{-6}	>330	>330	X m	3.60E+08	; lg *N* = 8.56
				$N_0 = N/10$	; lg N_0=	7.56
	10^{-7}	37	35	7.17 ≤ lgN_0 ≤ 7.70?		Yes
				$\bar{x}$ quotient = >5 and <15?		N/A

Bactericidal activity results

Conc. of the active (%)	*Vc* 1	*Vc* 2	*Na* = $\bar{x}$ *x10*	lg*Na*	lg*R* N_0 = 7.56		Contact time	Result
1 x 10g Sachet dissolved into 600ml of water	<14	<14	1.40E+02	<2.15		>5.41	5 minutes	**Pass**

Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 857945.

UKAS TESTING 8615

Escherichia coli ATCC 10536

Validation and controls

Melbec Ref No	**28489**

Validation suspension (Nv_0)			Experimental conditions control (***A***)			Neutralizer control (***B***)			Method validation (***C***) 10g in 750ml water		
Vc 1	104	$\bar{x}$ =	*Vc* 1	87	$\bar{x}$ =	*Vc* 1	76	$\bar{x}$ =	*Vc* 1	74	$\bar{x}$ =
Vc 2	95	99.5	*Vc* 2	67	77	*Vc* 2	66	71	*Vc* 2	71	72.5
30 ≤ $\bar{x}$ of Nv_0 ≤ 160? **Yes**			$\bar{x}$ of A is ≥ 0.5 x $\bar{x}$ of Nv_0? **Yes**			$\bar{x}$ of B is ≥ 0.5 x $\bar{x}$ of Nv_0? **Yes**			$\bar{x}$ of C is ≥ 0.5 x $\bar{x}$ of Nv_0? **Yes**		

Test suspension

Test suspension (***N*** **and** ***N*** $_0$):	***N***	*Vc* 1	*Vc* 2	X m 4.95E+08 ; lg *N* = 8.69
	10^{-6}	>330	>330	$N_0 = N/10$; lg N_0= 7.69
	10^{-7}	52	47	7.17 ≤ lgN_0 ≤ 7.70? Yes
				$\bar{x}$ quotient = >5 and <15? N/A

Bactericidal activity results

Conc. of the active (%)	*Vc* 1	*Vc* 2	*Na* = $\bar{x}$ *x10*	lg*Na*	lg***R*** N_0 = 7.69		Contact time	Result
1 x 10g Sachet dissolved into 600ml of water	<14	<14	1.40E+02	<2.15		>5.55	5 minutes	**Pass**

Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 857945.

Enterococcus hirae ATCC 10541

Validation and controls

Melbec Ref No	**28489**

Validation suspension (Nv_0)			Experimental conditions control (***A***)			Neutralizer control (***B***)			Method validation (***C***) 10g in 750ml water		
Vc 1	115	$\bar{x}$ =	*Vc* 1	85	$\bar{x}$ =	*Vc* 1	99	$\bar{x}$ =	*Vc* 1	92	$\bar{x}$ =
Vc 2	76	95.5	*Vc* 2	64	74.5	*Vc* 2	82	90.5	*Vc* 2	81	86.5
$30 \le \bar{x}$ of $Nv_0 \le 160$? **Yes**			$\bar{x}$ of A is $\ge 0.5 \times \bar{x}$ of Nv_0? **Yes**			$\bar{x}$ of B is $\ge 0.5 \times \bar{x}$ of Nv_0? **Yes**			$\bar{x}$ of C is $\ge 0.5 \times \bar{x}$ of Nv_0? **Yes**		

Test suspension

	N	*Vc* 1	*Vc* 2			
Test suspension (*N* and N_0):	10^{-6}	>330	>330	X m	4.00E+08	; lg *N* = 8.60
	10^{-7}	42	38	$N_0 = N/10$; lg N_0=	7.60	
				$7.17 \le \lg N_0 \le 7.70$?	Yes	
				$\bar{x}$ quotient = >5 and <15?		N/A

Bactericidal activity results

Conc. of the active (%)	*Vc* 1	*Vc* 2	*Na* = $\bar{x}$ *x10*	lg*Na*	lg*R* N_0 = 7.60		Contact time	Result
1 x 10g Sachet dissolved into 600ml of water	<14	<14	1.40E+02	<2.15		>5.46	5 minutes	**Pass**

Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 857945.

Test Report General-Purpose Disinfectant Product
BS EN 1650:2019

Company Name:	PVA Hygiene Ltd
Contact Name:	Jim Taylour
Purchase Order No:	TBC
Report Date:	28/06/2021
Melbec Ref Number:	28490
No. of Samples:	1
Name of Test Product:	PDCCS9 A Surface Disinfectant
Batch Number:	N/A

Test Report General-Purpose Disinfectant Product
BS EN 1650:2019

Sample Details:

Manufacture / Supplier:.....	PVA Hygiene Ltd
Product storage conditions:.....	Ambient
Appearance of the product (as supplied):.....	Sachet
Appearance of the product (after dilution):.....	Cloudy liquid
Appearance of product with interfering substance and test organism:	Cloudy liquid
Active substance and concentration:.....	Benzalkonium Chloride
Product dilutions/concentrations:.....	1 Sachet in 600ml Hard Water (Volume of water adjusted from 750ml to allow for dilution during test)
Diluent used to dilute product:.....	Synthetic Hard Water

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

Date product received: 07/06/21 Test Date: 17/06/21

Experimental Conditions:

Interfering substance:	Bovine Albumin (clean 0.3g/l)
Test temperature:	18 to 25 ˚C
Contact time:	5 Minutes
Test organisms:	Candida albicans ATCC 10231
Incubation temperature:	30^{o}C +/- 1^{o}C

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 dirty conditions.

Conclusion:

For the product PDCCS9 A Surface Disinfectant, [Batch code N/A] the log reduction requirements as specified in EN 1650:2019 (4 lg within the relevant contact time) were met in clean conditions with a contact time of 5 minutes for Candida albicans.

Report authorised by:

Name: Dawn Mellors
Position: Technical Director
Date: 28/06/2021

Test Results:

Neutralisation Method Used:

Membrane filtration

Rinsing Liquid Used: N7

Test Report General-Purpose Disinfectant Product
BS EN 1650:2019

Candida albicans ATCC 10231

Validation and controls

Melbec Ref No	**28490**

Validation suspension (Nv_0)			Experimental conditions control (***A***)			Neutralizer control (***B***)			Method validation (***C***) Product conc: 1 Sachet in 600ml Hard Water		
Vc 1	82	$\bar{x}$ =	*Vc* 1	50	$\bar{x}$ =	*Vc* 1	57	$\bar{x}$ =	*Vc* 1	58	$\bar{x}$ =
Vc 2	79	80.5	*Vc* 2	49	49.5	*Vc* 2	45	51	*Vc* 2	52	55
30 ≤ $\bar{x}$ of Nv_0 ≤ 160? **Yes**			$\bar{x}$ of A is ≥ 0.5 x $\bar{x}$ of Nv_0? **Yes**			$\bar{x}$ of B is ≥ 0.5 x $\bar{x}$ of Nv_0? **Yes**			$\bar{x}$ of C is ≥ 0.5 x $\bar{x}$ of Nv_0? **Yes**		

Test suspension and test

Test suspension (*N* and N_0):	***N***	*Vc* 1	*Vc* 2			
	10^{-5}	>330	>330	X m	4.30E+07	; lg *N* = 7.63
	10^{-6}	50	36	$N_0 = N/10$; lg N_0=	6.63	
				6.17 ≤ lgN_0 ≤ 6.70?	Yes	
				$\bar{x}$ quotient = >5 and <15?	N/A	

Conc. of the active (%)	10^{-X}	*Vc* 1	*Vc* 2	*Na* = $\bar{x}$	lg*Na*	lg*R* N_0 = 6.63		Contact time	Result
1 Sachet in 600ml Hard Water	-1	<14	<14	1.40E+02	<2.15		>4.49	5 Minutes	**Pass**

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	CLEANER SANITISER
UFI	:	CPSM-W2HK-CE2N-H709
Product code	:	Z4.20, B4.20, PB4:20

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 – United Kingdom
T +44 (0)1934 862 859
sales@pva-hygiene.co.uk

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 2	H315
Serious eye damage/eye irritation, Category 2	H319
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412

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

Adverse physicochemical, human health and environmental effects

NOTE:- In Use Solutions of this Product are NOT CLASSIFIED.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS07

Signal word (CLP)	:	Warning
Hazard statements (CLP)	:	H315 - Causes skin irritation. H319 - Causes serious eye irritation. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	:	P273 - Avoid release to the environment. P280 - Wear eye protection, protective gloves. P302+P352 - IF ON SKIN: Wash with plenty of water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P402+P404 - Store in a dry place. Store in a closed container.
P501 - Dispose of contents and container to national regulations.
P102 - Keep out of reach of children.

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	≥ 70	Eye Irrit. 2, H319
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
Alkyl (C12-14) Dimethylbenzylammonium Choride	CAS-No.: 85409-22-9 EC-No.: 287-089-1 REACH-no: 01-2120754638-42	≥ 1.5 – < 2	Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
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	< 0.1	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410

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 is 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 : Unlikely without deliberate abuse. Move the affected person to the fresh air.

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.

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

Symptoms/effects : Neat product will cause irritation to skin and eyes. Diluted product may result in mild irritation to broken skin. Contact of dilute product with eyes should be treated as above.

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 : Prolonged or repeated exposure may result in irritation or redness, particulalry on broken skin.

Symptoms/effects after eye contact : Eye irritation.

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.

Unsuitable extinguishing media : Water.

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

Avoid release to the environment. Large scale spillages or uncontrolled discharges into water systems must be reported to the relevant 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.

Other information : Dispose of materials or solid residues at an authorized site.

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 skin and eyes.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. 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)

DISINFECTANT/DETERGENT. Suitable for use on food contact surfaces with subsequent incidental food contact. Not suitable for direct disinfection of food stuffs.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

CLEANER SANITISER	
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:
Safety glasses. Gloves.

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.

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

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	:	Orange.
Odour	:	odourless.
Odour threshold	:	No data available
pH	:	No data available
pH solution	:	10 – 11.5 @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)	:	Not Flammable
Vapour pressure	:	Not applicable
Relative vapour density at 20°C	:	Not applicable
Relative density	:	Not applicable
Density	:	0.5 – 1 g/cm³
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.

10.5. Incompatible materials

Strong acids. Oxidising agents. 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

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

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
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/foetal 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

CLEANER SANITISER	
Viscosity, kinematic	Not applicable

sodium carbonate (497-19-8)	
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) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Harmful 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

CLEANER SANITISER	
Persistence and degradability	The Surfactants and Chelants used in this mixture are Biodegradable.

12.3. Bioaccumulative potential

CLEANER SANITISER	
Bioaccumulative potential	Not expected to Bioaccumulate.

12.4. Mobility in soil

CLEANER SANITISER	
Additional information	soluble in water

12.5. Results of PBT and vPvB assessment

CLEANER SANITISER
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				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

ADR	IMDG	IATA	ADN	RID
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

Inland waterway transport
Not applicable

Rail transport
Not applicable

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

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 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.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:
Inclusion of EU UFI code and additional comments in section 7.

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
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

Abbreviations and acronyms:	
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 (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.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
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.
H412	Harmful to aquatic life with long lasting effects.
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B

Safety Data Sheet (SDS), EU

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.