

HARD SURFACE CLEANER/ DISINFECTANT EFFECTIVE AGAINST ENVELOPED VIRUSES

What is CONTROL Technology™?

CONTROL is a high level disinfectant technology platform offering safe, effective, user friendly single step cleaning and disinfection across a wide range of industries. From healthcare to educational establishments, food processing to veterinary science, Sychem CONTROL is a proven technology safe to use in all associated food, animal and human environments.

The CONTROL Technology™ platform is based around the quaternary ammonium compounds didecylmethyl ammonium chloride (DDAC) and benzalkonium chloride (BAC) with an adjuvant effect to enhance its antimicrobial efficacy.

How effective is CONTROL Technology™ against microbes?

Extensive testing at independent, accredited laboratories has demonstrated that CONTROL Technology™ products offer broad spectrum high level disinfection. See below for details of the antimicrobial efficacy testing that CONTROL Technology™ products have passed.

MICROBIAL CLASS	ANTIMICROBIAL EFFICACY TEST*	CONTACT TIME (MINUTES)	LOG REDUCTION
BACTERIA (Gram-positive/ Gram-negative)	EN 1276 ¹	1	>6
	AOAC - Bactericidal ²	10	>6
VIRUSES (enveloped and non-enveloped)	EN 14476 ³	5	>4
	AOAC - Virucidal ⁴	5	>4
FUNGI (mould and yeast)	EN 1650 ⁵	1	>5
	AOAC - Fungicidal ⁶	10	>6
BACTERIAL SPORES EN	13704 ⁷	60	>3
MYCOBACTERIA	EN 14348 ⁸	1	>5

* All testing was performed using hard water and under dirty conditions in order to present the toughest challenge to the CONTROL Technology™ platform.

I VorTEC™ fluid

Based on the CONTROL Technology™ platform, VorTEC™ fluid undergoes specific manufacturing processes which optimise its performance when aerosolised through the mains powered VorTEC™ misting system. VorTEC™ can disinfect rooms with capacities ranging from 100m³ to 600m³.

All Sychem CONTROL products are fully compliant with all current legislation including the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Directive.



What makes Sychem CONTROL products unique?

In addition to very high levels of antimicrobial efficacy Sychem CONTROL products are fragrance free, chlorine free, alcohol free and exhibit the following key qualities when in use:

- non-corrosive
- non-irritant
- non-toxic
- food safe
- safe in use
- cost effective
- easy to use with excellent levels of user acceptance
- prolonged antimicrobial effect after application
- excellent materials compatibility

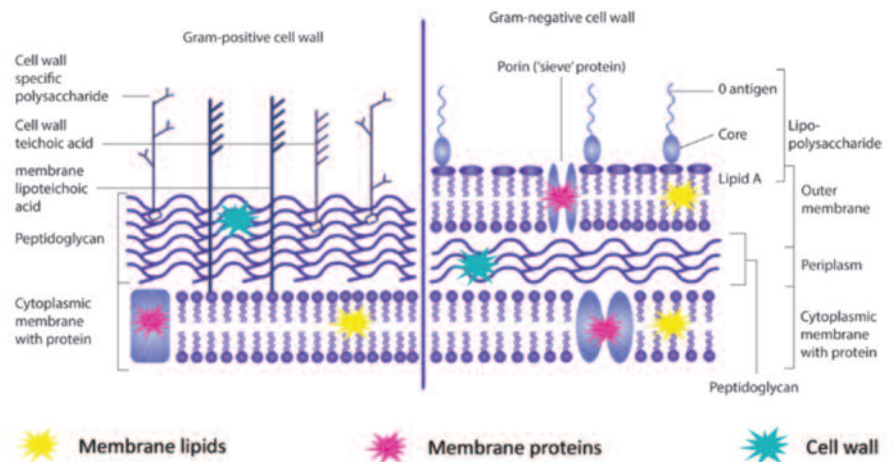
How does CONTROL Technology™ kill micro-organisms?

CONTROL Technology™ kills micro-organisms by simultaneously attacking multiple microbial structures and components which are all essential to life (see Figure 2). The result is a rapid microbial kill of bacteria, viruses, fungi and spores.

How cost effective is CONTROL Technology™?

A clinical paper by Keward (2013) in the British Journal of Nursing reported an 84% cost saving when adopting CONTROL Technology™ products Trust wide at Alder Hay Children's Hospital in place of chlorine dioxide on a like basis ie 1 x litre of Sychem CONTROL vs 1 x litre of chlorine dioxide.⁹

Figure 2. Schematic diagram highlighting the key bacterial structures affected by CONTROL Technology™



REFERENCES

1. Hospital Infection Research Laboratory. Efficacy tests (EN1276). EN1276 Chemical disinfectants and antiseptics – Quantitative suspension test for the evaluation of chemical disinfectants and antiseptics used in food, industrial, domestic and institutional areas (phase 2/step 1). Hospital Infection Research Laboratory, Birmingham, UK. February 2008. *
2. ATS Labs. AOAC Bactericidal efficacy test. Eagan, MN, USA. April 2008. *
3. BluTest Laboratories Ltd. Test Report: EN14476:2005 Chemical disinfectants and antiseptics – virucidal quantitative suspension test for chemical disinfectants and antiseptics used in human medicine - Test method and requirements (phase 2/step 1) Modified for Feline calicivirus (Human Norovirus Surrogate). Glasgow, UK. November 2012. *
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6. ATS Labs. AOAC Fungicidal efficacy test. Eagan, MN, USA. April 2008. *
7. BluTest Laboratories Ltd. Test Report: EN13704:2002 Chemical disinfectants – quantitative suspension test for the evaluation of sporicidal activity of chemical disinfectants used in food, industrial, domestic and institutional areas – (phase 2, step 1), modified. Clostridium difficile endospores. Glasgow, UK. November 2012. *
8. BluTest Laboratories Ltd. Test Report: EN14348:2005 Chemical disinfectants and antiseptics – quantitative suspension test for the evaluation of mycobactericidal activity of chemical disinfectants in the medical area including instrument disinfectants – test methods and requirements (phase 2, step 1). Glasgow, UK. December 2014. *
9. Keward J. Disinfectants in health care: finding an alternative to chlorine dioxide. Br J Nurs. 2013 Sep 12-25; 22(16):926, 928-32.
10. Eastmead L. Adopting a new cleaner disinfectant to optimise cleanliness and improve the staff experience. National Infection Prevention Society Conference, London 2013. Poster Presentation

Why, where, when and how should I use Sychem CONTROL?

Why... Improving environmental cleanliness reduces the risk of infection, cross infection, contamination, spoilage etc. whilst also reducing the number of microbes transferred onto people's hands. Sychem CONTROL products have been particularly successful in the very challenging healthcare and biomedical sectors where their use has resulted in cleaner clinical environments when compared to both standard cleaning¹⁰ and chlorine dioxide based cleaning and disinfection protocols.⁹

Where... Sychem CONTROL products are designed for use in situations where there is a clear need to create and maintain the cleanest possible environment whilst reducing the bioburden (i.e. number of microbes present) in order to interrupt key microbial transmission pathways (surfaces and/or air) and reduce the risk of infection, cross infection, contamination, spoilage etc.

When... To get the best results, Sychem CONTROL products should be used frequently (ideally daily) and should be used in place of your standard cleaning and/or disinfection products, becoming an integral part of your normal cleaning processes.

How... Sychem CONTROL products clean and disinfect simultaneously and therefore only require a single stage process to achieve the highest levels of cleanliness. The wipes, sprays and concentrate are very simple to use and will fit seamlessly into your existing cleaning processes with little or no training required. The more specialist misting systems will require basic training (approximately 1 hour) to ensure they are used correctly and deliver the results that you require.



SAFETY DATA SHEET
Sychem CONTROL Ready for Use
High Level Disinfectant Cleaner

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Compilation date: 16.02.2016

Revision date: 16.02.2016

Revision No: 1.0

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product name: Sychem CONTROL Ready for Use Flip Top
Sychem CONTROL Ready for Use Trigger Spray

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

Uses: High Level Disinfectant Cleaner

1.3. Details of the supplier of the safety data sheet

Company name: VI Distribution Ltd
Unit 7 Springvale Business Centre
Millbuck Way
Sandbach
Cheshire
CW11 3HY
Tel: 01270 750520
Contact: Iain Wilson
Email: sales@vidistribution.co.uk

1.4. Emergency telephone number

Emergency Tel: 07855958624

Section 2: Hazards Identification

2.1. Classification under CLP:

Most important adverse effects: Not Applicable

2.2. Label elements

Hazard Statements: Not Applicable
Single word: Not Applicable
Hazard Pictograms: Not Applicable

Precautionary phrases: P264: Wash hands thoroughly after handling
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P302+352: IF ON SKIN: Wash with plenty of water
P312: Call a doctor if you feel unwell

2.3. Other Hazards

PBT: This product is not identified as a PBT substance

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Section 3: Composition/Information on Ingredients

3.2. Mixtures

Hazardous ingredients:

DIDECYLDIMETHYLAMMONIUM CHLORIDE

EINECS	CAS	CHIP Classification	CLP Classification	Percent
230-525-2	7173-51-5	Xn: R22; C: R34	Acute Tox. 4: H302; Skin Corr. 1B:	<0.05%

ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE

H314

EINECS	CAS	CHIP Classification	CLP Classification	Percent
270-325-2	68424-85-1	Xn: R21/22; C: R34; N: R50	Acute Tox. 4: H302; Skin Corr. 1B:	<0.03 %

H314; Aquatic Acute 1: H400

Section 4: First Aid Measures

4.1. Description of first aid measures

Skin contact:	There may be mild irritation at the site of contact, wash immediately with plenty of soap and water. If symptoms persist consult doctor
Eye contact:	There may be irritation and redness, bathe the eye with running water for 15 minutes. If symptoms persist consult doctor
Ingestion:	There may be irritation of the throat, wash out mouth with water
Inhalation:	No symptoms

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

Skin contact:	There may be irritation at the site of contact
Eye contact:	There may be irritation and redness
Ingestion:	There may be irritation of the throat
Inhalation:	No symptoms

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

Section 5: Fire-Fighting Measures

5.1. Extinguishing media

Extinguishing media:	Suitable extinguishing agents: Water spray jet, extinguishing powder, CO2, foam
Unsuitable extinguishing agents:	None
Protective equipment:	Wear self-contained breathing apparatus Cool endangered containers with water spray jet

5.2. Special hazards arising from the substance or mixture

Exposure hazards:	No hazardous ingredients
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5.3. Advice for fire-fighters

Wear self-contained breathing apparatus
Cool endangered containers with water spray jet

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High Level Disinfectant Cleaner

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Section 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear personal protective equipment, gloves and eye/face protection

6.2. Environmental precautions

Environmental precautions: Do not allow product to enter waters without treatment. Inform authorities in case of contamination of water or sewage system

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Collect in suitable container. Cover with absorbent, mix and collect mechanically dispose of contaminated material as waste

6.4. Reference to other sections

Suitable binder: Multi-purpose absorbent

Section 7: Handling and Storage

7.1. Precautions for safe handling

Handling requirements: No specific instructions

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Protect from heat and direct sunlight, well-ventilated area. Keep container tightly closed

7.3. Specific end use(s)

Suitable packaging: Must only be kept in original packaging

Section 8: Exposure Controls/Personal Protection

8.1. Control parameters

No hazardous ingredients

8.1. DNEL/PNEC Values

DNEL / PNEC: No data available

8.2. Exposure controls

Engineering measures: No specific guidance required

Respiratory protection: Respiratory protection not required

Hand protection: Wear appropriate protective gloves

Eye protection: Safety glasses not required. Ensure eye bath is to hand

Skin protection: Wear appropriate personal protective equipment

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Section 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

State:	Liquid
Colour:	Colourless
Odour:	Characteristic odour
Oxidising:	Non-oxidising (by EC criteria)
Solubility:	Fully miscible
Viscosity at 20°C:	Non viscous
Flash point:	>70°C
pH at 20°C:	6-7

9.2. Other information

Other information:	No data available
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Section 10: Stability and Reactivity

10.1. Reactivity

None

10.2. Chemical stability

Chemical stability:	Stable under normal conditions
Minimum shelf life:	2 years from dilution

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Conditions to avoid:	Heat
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10.5. Incompatible materials

Materials to avoid:	Strong oxidising agents. Strong acid
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10.6. Hazardous decomposition products

Haz. decomposition products:	In combustion emits toxic fumes
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Section 11: Toxicological Information

11.1. Information on toxicological effects

Refer to section 4 of SDS for routes of exposure and corresponding systems

Symptoms / routes of exposure:	Skin contact: There may be irritation at the site of contact
	Eye contact: There may be irritation and redness
	Ingestion: There may be irritation of the throat
	Inhalation: No symptoms

[cont...]

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Section 12: Ecological Information

12.1. Toxicity

Eco-toxicity values: No data available
Components are readily biodegradable

12.2. Persistence and degradability

Persistence and degradability: The surfactants in this product comply with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the component authorities of the Member States and will be made available to them at their direct request or at the request of the detergent manufacturer

12.3. Bioaccumulative potential

No bioaccumulation potential is expected

12.4. Mobility in soil

Readily absorbed into soil

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT substances

12.6. Other adverse effects

Does not contain substances influencing AOX of waste water
Does not contain any heavy metals

Section 13: Disposal Considerations

13.1. Waste treatment methods

NB: Product must be disposed of according to local regulations pertaining to the disposal of hazardous waste empty and clean contaminated packaging with water before recycling
The user's attention is drawn to the possible existence of regional or national regulations regarding disposal

Section 14: Transport Information

14.1. UN number

UN number: Not classified

14.2. UN proper shipping name

Shipping name: Not classified

14.3. Transport hazard class(es)

Transport class: Not classified

14.4. Packing group

Packing group: Not classified

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

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Marine pollutant: No

14.6. Special precautions for user**Section 15: Regulatory Information****15.1. Specific regulations:**

Safety, health and environmental regulations/legislation specific for the substance or mixture:
National regulations may apply in event of accident

15.2. Chemical Safety Assessment

No significant hazard

Section 16: Other Information**Other information:**

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010

Phrases used in S.2 and 3:

Not applicable

Legal disclaimer:

This information and all further technical advice is based on our present knowledge and is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from having contact with the above product