

Technical Data

Overview

Ventum One-Touch™ is an Environmental Protection Agency (EPA) registered product designed to be used as a virucide, bactericide, fungicide and sporicide. Used as a disinfectant for cleanroom air and surfaces in the health/medical pharmaceutical, life science and food industry, One-Touch™ is a stabilized blend of peracetic acid, hydrogen peroxide and acetic acid, providing fast and effective microbial control.

One-Touch™ is available in different grades to accommodate a broad range of applications, from disinfection to sterilization and is acceptable for use on a wide range of surfaces. Please contact Ventum regarding substrate compatibility reports.

One-Touch™ is a pressurized device of PAA solution with a mixture of 2 neutral, stabilizing gases providing a powerful jet release within a one-shot dispersant nozzle. Residual PAA usually decomposes to acetic acid, oxygen and water. Consequently, the probability of consumer exposures to PAA is low. Exposure to PAA during its active phase can cause severe irritation, burns and other health effects to the skin, eyes and respiratory tract. Ingestion should be avoided at all concentrations. Most PAA is consumed in applications where it is used; however, it is not persistent in the environment and decomposes to acetic acid, water and oxygen when exposed to soils, sediments and surface or ground waters.

Properties

CAS # 79-21-0

Formula C₂H₄O₃

Form Colorless liquid

Odor Vinegar

Density 1.01

Sterile SAL of 1x10⁻⁶

For further information, please contact:

Ventum Biotech

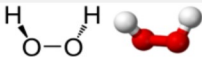
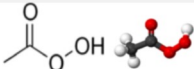
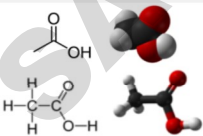











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Product summary

	HYDROGEN PEROXIDE	PERACETIC ACID	ACETIC ACID
CAS NO.	7722-84-1	79-21-0	64-19-7
STRUCTURE			
MOLECULAR FORMULA	H ₂ O ₂	C ₂ H ₄ O ₃	C ₂ H ₄ O ₂
OTHER NAMES	Dioxidane Oxidanyl	Ethaneperoxyic acid Peroxyacetic acid Acetic Peroxide Acetyl hydroperoxide Proxitane	Latin: <i>acetum</i> (vinegar) Ethanoic acid Methanecarboxylic acid
MOLAR MASS	34.0147 g/mol	76.05 g/mol	60.05 g/mol
APPEARANCE	Very light blue colorless in solution	Colorless liquid	Colorless liquid
DENSITY	1.135 g/cm ³ (20°C - 30%) 1.450 g/cm ³ (20°C - Pure)	1.0375 g/ml	1.049 g/cm ³
ODOR	Slightly Sharp		Pungent / Vinegar-like
MELTING POINT	-0.43°C	0°C	16°C
BOILING POINT	150.2°C	25°C	118°C
EU CLASSIFICATION & CLP REGULATIONS GHS PICTOGRAMS	 Oxidant (O)  Corrosive (C)  Harmful (Xn)	 Oxidant (O)  Corrosive (C)  Dangerous for the environment (N)	 Corrosive (C)  Flammable
NFPA 704			
FLASH POINT	Non-Flammable	40.5°C	40°C
USA EPA & FDA	Decomposition 2H ₂ O ₂ → 2H ₂ O + O ₂ FDA registered as an antimicrobial and environmentally safe alternative to Chlorine based bleaches for the disinfection in the medical field and waste-water to destroy organic contaminants, reduce odors	Registered as an antimicrobial for indoor use at medical facilities, agricultural premises, food, dairy/cheese processing, pasteurizers, breweries, also as water purifier and cooling water tower disinfectant to control Legionella bacteria	USA produce some 3 Mt/a (million tons /year) widely used. Diluted acetic acid is used in physical therapy & sport therapies using iontophoresis or electro-osmosis flux and blood glucose detection across skin layers

Test & Efficiency Procedure

Ventum® One-Touch™ has been tested by diffusing several multiples of 12mg/m³ with the following volumes:

- Bio Safety Cabinet (BSC Type II): 2m³
- Vertical Laminar Air Flow Workstation (VLAFW): 5m³
- Weighing Station (WS): 10m³
- Intensive Care (IC): 50m³
- Surgery Room (SR): 100m³

- Biological Indicators (BI):
 - APEX type BI 10⁴, 10⁵, 10⁶ *Geobacillus stearothermophilus* spores on stainless steel coupons
 - Incubation for 7 days at 55 - 60°C
 - Positive tests for the coupons | Negative tests for the media
- Chemical Indicators (CI):
 - Test for acetic acid from clear to dark color indication by pH measuring

INDICATOR	TANK CAPACITY [ML]	BLEND [ML]	VOLUME [M ³]
D1	125	24	2
D2	125	24	2
D3	210	60	5
D4	210	60	5
D5	300	120	10
D6	300	120	10
D7	650	600	50
D8	650	600	50
D9	800	1200	100
D10	800	1200	100

Test & Efficiency Procedure (Continued)

TYPE	BI POSITIVE	BI NEGATIVE	CI POTITIVE	CI NEGATIVE	BSC Type II	VLA FW	WS	IC	SR
CI 1	√	√	√	√	Positive	Positive	Positive	Positive	Positive
CI 2	√	√	√	√	Positive	Positive	Positive	Positive	Positive
CI 3	√	√	√	√	N.A.	N.A.	Positive	Positive	Positive
CI 4	√	√	√	√	N.A.	N.A.	N.A.	Positive	Positive
CI 5	√	√	√	√	N.A.	N.A.	N.A.	Positive	Positive
BI 1 (10 ⁴)	√	√	√	√	Limpid	Limpid	Limpid	Limpid	Limpid
BI 2 (10 ⁵)	√	√	√	√	Limpid	Limpid	Limpid	Limpid	Limpid
BI 3 (10 ⁶)	√	√	√	√	Limpid	Limpid	Limpid	Limpid	Limpid
BI 4 (10 ⁶)	√	√	√	√	Limpid	Limpid	Limpid	Limpid	Limpid
BI 5 (10 ⁶)	√	√	√	√	N.A.	N.A.	Limpid	Limpid	Limpid
BI 6 (10 ⁶)	√	√	√	√	N.A.	N.A.	N.A.	Limpid	Limpid
BI 7 (10 ⁶)	√	√	√	√	N.A.	N.A.	N.A.	Limpid	Limpid
BI 8 (10 ⁶)	√	√	√	√	N.A.	N.A.	N.A.	Limpid	Limpid
BI 9 (10 ⁶)	√	√	√	√	N.A.	N.A.	N.A.	N.A.	Limpid
BI 10 (10 ⁶)	√	√	√	√	N.A.	N.A.	N.A.	N.A.	Limpid

Product Data

Ventum® One-Touch™ is a solution containing peracetic acid, hydrogen peroxide and acetic acid. It is a highly effective biocide, used in a wide range of applications for the disinfection of equipment, surfaces or fluids.

Some applications of this product may be regulated or restricted by national or international standards (e.g. for food or feed additives, water treatments, cosmetic or pharmaceutical industry). The buyer and the eventual user, in his sole and entire liability, shall respect those standards, others of any relevant authority, and all existing patents and intellectual property rights; and shall comply with the laws and the regulations applicable to our products and/or to their activity. The buyer and the eventual user must independently determine the suitability of this product for any particular purpose and its manner of use.

For detailed information on the applications of peracetic acid, please contact Ventum Biotech, or ventumbiotech.com/technical-data

Standard Sales Specification

Description of the product [Contains surfactant]

CONTENT	UNIT	VALUE	METHODS OF ANALYSIS
PERACETIC ACID	Weight %	4,7 – 5,4	PAA-101/0-N
HYDROGEN PEROXIDE	Weight %	19,0 – 24,0	PAA-102/0-N
APPEARANCE		Clear liquid	Visual Inspection

Packaging

Ventum® One-Touch™ can be delivered in IBC's or drums.

Please consult Ventum Biotech for any further information relating to the product or options for supply.

Identification

COMPONENTS	PERACETIC ACID	HYDROGEN PEROXID	ACETIC ACID
CHEMICAL FORMULA	CH ₃ COOOH	H ₂ O ₂	CH ₃ COOH
CAS NUMBER	79-21-0	7722-84-1	64-19-7
EC (EINECS) NUMBER	201-186-8	231-765-0	200-580-7

Ventum® One-Touch™ is an aqueous solution of peracetic acid, hydrogen peroxide and acetic acid. It's a clear, colorless liquid, with a pungent odor, miscible with water in all proportions.

CHARACTERISTIC	UNIT	VALUE
SPECIFIC GRAVITY	m ³	1.1
FREEZING POINT	°C	-30
AVAILABLE OXYGEN	Weight %	~10.5
FLASH POINT		N/A

Ventum® One-Touch™ should be stored in properly designed bulk storage tanks made from approved materials. The packed One-Touch™ solution should be stored in the original vented container, upright, in a cool, ventilated area where the containers are protected from damage. Use only approved materials for pumps, piping and hoses.

Ventum® One-Touch™ has very specific requirements regarding handling and storage precautions. Contact your supplier to obtain more detailed information.

Personnel working with Ventum® One-Touch™ should be familiar with safety and handling procedures and should always wear goggles or face shield and rubber gloves. When working with large quantities, chemical suit and rubber boots shall be worn as well. Ventum® One-Touch™ is a corrosive solution that can cause burns. In case of contact with skin or eyes, always rinse with plenty of water and consult a doctor.

Detailed safety information is available in the MSDS (Material Safety Data Sheet)

UN Code	3149
ADR/RID Class	5.1
Packing group	II
Hazard label	5.1 + 8
Danger code	58
Placard	58/5149

List of compatible materials



Synthetic Materials

NAME	ISO SYMBOL	QUALIFICATION
POLYTETRAFLUORETHYLENE	Ptfe	A
ETHYLENE-PROPYLENE FLUORIDATED	Eff	A
ALKOXY PER FLUORIC ETHYLENE	Afp	A
TETRAFLUORETHYLENE	ETFE	A
POLY VINYLIDENE FLUORIDE	PVDF	A
POLYAMIDE	pa	B
POLYOXYMETHYLENE	POM (H)	B
POLYOXYMETHYLENE	POM (C)	C
ETHYLENE TEREPHTHALATE	PETP	A
POLYTEREPHTHALATE	PETP	A
POLYPHENYLENE OXIDE	PPO	A
POLYPHENYLENE SULPHIDE	Pps	A
POLYVINYL CHLORIDE	Soft PVC	A
POLYVINYL CHLORIDE	HARD PVC	A
POLYETHYLENE	PE	A
POLYPROPYLENE	Pp	A
POLYETHER SULPHATE	Pes	A
POLY SULPHATE	Psu	A
POLYCARBONATE	PC	A
METHYL METHYLATE POLY METHYLATE	PMMA	A

Elastomers

NAME	ISO SYMBOL	QUALIFICATION
NATURAL GUM (ISOPRENE RUBBER)	Nr	B
STYRENE RUBBER- BUTADIENE (BUNA S)	SBR	B
RUBBER WITH BUTYLENE ISO-ISOPRENE (CAOUTCHOUC AU BUTYL/CHLORBUTYL)	IIR/CIIR	A
BUTADIENE- ACRYLONITRILE RUBBER (CAOUTCHOUC AU NITRIL/PERBUNAN N)	NBR	B
CHLOROPRENE RUBBER (NEOPREN)	cr	A
RUBBER CHLOROSULFONYLE- POLYETHYLENE (HYPALON)	Msc	A
POLYACRYLATE RUBBER	Acm	C
RUBBER EPICHLORHYDRIN	ECO/CO	B
ETHYLENE RUBBER PROPYLENE	EPDM/EP M	A
SILICONE RUBBER	MQ/MVP	B
FLUORIDATED SILICONE RUBBER	MFQ	A
FLUORIDATED RUBBER (VITON)	Fpm	A
POLYURETHANE- ELASTOMER, RETICULATED	AU/EU/PU RE	C
PERFLUORATED ELASTOMER	KALREZ	A

Qualification Index

- A** - Resistant (virtually no, or only little attack)
- B** - Relatively resistant (moderate attack)
- C** - Non-resistant (important attacker)
- D** - Low corroded (low corroded)

Efficiency Tests

NF T72-281

- Air surface disinfection procedures - Determination of bactericidal activity, fungicide, levuricide, mycobactericidal, tuberculocidal sporicide and virucide including bacteriophages

EN 14,476

- Quantitative suspension test for evaluation of *virucidal activity in the medical field*

EN 1276

- Quantitative suspension test for the evaluation of *bactericidal* activity of antiseptics and chemical disinfectants used in the agri-food, industrial, domestic and community fields

EN 13,610

- Quantitative suspension test for evaluation of *virucidal activity* against *bacteriophages* of chemical disinfectants used in the agri-food and industrial fields

EN 13,623

- Quantitative suspension test for evaluation of *bactericidal* activity against legionella of chemical disinfectants for water systems

EN 13,624

- Quantitative suspension test for evaluation of fungicide activity *or levuricide* in medicine

EN 13,704

- Quantitative suspension test for the evaluation of *sporicide* activity of chemical disinfectants used in agri-food, industry, domestic and community

EN 13,727

- Quantitative suspension test for evaluation of *bactericidal* activity in medicine

EN 13,348

- Establishes requirements, sampling methods, testing methods and delivery conditions for copper tubes

EN 1650

- Quantitative suspension test for the evaluation of *fungicide activity or levuricide* of antiseptics and chemical disinfectants used in the agri-food, industrial, domestic and community fields

EN 14,561

- Quantitative germ door test for evaluation of *bactericidal* activity for instruments used in human medicine

EN 14,562

- Quantitative germ door test for evaluation of fungicide activity *or levuricide* for instruments used in human medicine

EN 13,697

- Quantitative non-porous surface test for the assessment of bactericidal and/or fungicide activity of chemical disinfectants used in agri-food, industry, domestic and community

Efficiency Tests (Continued)

Product	Test protocol	Test micro-organisms	Test Conditions	One-Touch™ inhouse results
Ventum® One-Touch™	EN 1040	Pseudomonas	20°C; 5 min.	✓
		aeruginosa	20°C; 5 min.	✓
		Staphylococcus aureus		
	EN 1276	Pseudomonas	20°C; 5 min. 0,03%	✓
		aeruginosa	BA	✓
		Staphylococcus aureus	20°C; 5 min. 0,03%	✓
		Escherichia coli	BA	✓
		Enterococcus hirae	20°C 5 min. 0,03%	
			BA	
	EN 1275		20°C; 5 min. 0,03%	
		Candida albican	BA	✓
		Sacharomyces	20°C; 5 min. 0,03%	✓
		Aspergillus niger	BA	✓
			20°C; 5 min. 0,03%	
	EN 1650		20°C; 5 min. 0,03%	
		Candida albican	BA	✓
		Sacharomyces	20°C; 5 min. 0,03%	✓
		Aspergillus niger	BA	✓
			20°C; 5 min. 0,03%	
	EN 13704		20°C; 5 min. 0,03%	
Bacillus cereus		BA	✓	

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