UMONIUM 38®

Innovation in cold disinfection

Quality Insurance · Medical Device

lab. Huckert's International
has been registered by SGS Yarsley ICS
against ISO 9001 & ISO 13485

EXPERTISE

Experts in disinfection and bio-decontamination since 1970, Huckert's International provides know-how in the service of healthcare professionals and industry.
Our ISO 9001 and ISO 13485 certified Laboratory (qualified for Medical Devices) and our quality system, monitored by regular audits, ensure strict consistency in the quality of our product batches. Traceability is assured from materials receiving through to product delivery to the end user.

For two generations, Huckert's International has been manufacturing hygiene products that meet the exacting requirements expected of a specialist in the field:

- ETHICS
- PERFORMANCE
- SAFETY
- RELIABILITY
- GUARANTEE
- TRAINING

Our mission is to offer alternative solutions to the highest standards of performance and safety, with the aim of reducing the risks associated with the use of hazardous chemicals. All our formulations are based on research and development validated by accredited and independent laboratories.

SYSTEM CERTIFICATION ISO 13485 SGS

UKAS QUALITY MANAGEMENT 005

HACCP

SATISFIED OR REFUNDED FULL COVER

CE 0120

MICRO-ORGANISMS

They are everywhere: in the soil, in the air, in the water, and on every surface and object in the environment around us.
They need three things to develop:

Sufficient moisture

A comfortable temperature

An appetising nutrient medium

When these three conditions are brought together, transient microbial flora can reach highy pathogenic concentrations, thus becoming more and more difficult to eradicate.

Even where there is no water (dry surfaces), germs remain alive and therefore potentially dangerous. They can be transferred by contact or by displacing dust and are then liable to trigger an infection or contamination.

GOLDEN RULE

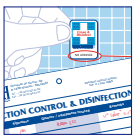
To achieve a High Level of biological safety, it is essential to follow these procedures:

Clean thoroughly

Disinfect according to the manufacturer's instructions:

concentration and contact time

Keep equipment clean



Check the effectiveness of these actions and log the results

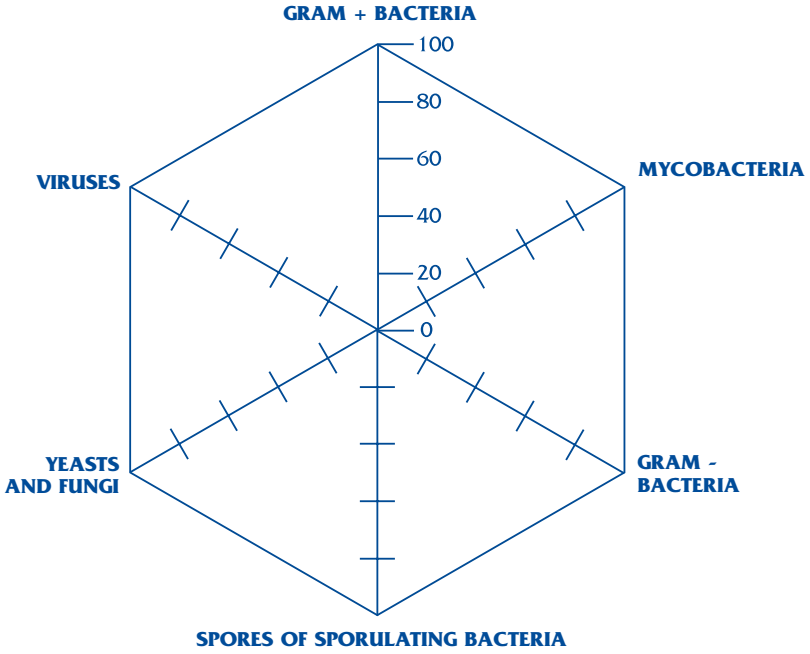
CLASSIFYING MICRO-ORGANISMS

Micro-organisms are classified by morphological type and biochemical character. Use the table below to place them in their taxonomic class. They are far too numerous to list individually, or to assess in terms of their individual resistance.
Many Standardising Bodies have defined reference micro-organisms as reference targets for their resistance to destruction. Each disinfectant has a specific spectrum of activity, which may be wide or narrow, and it may be active over part or all of this table.

VIRUSES
Hepatitis A, B, C, D, E
Poliovirus
Adenovirus
Coronavirus
Coxsakievirus
Nairovirus
Cytomegalovirus,
Norovirus
Epstein-Barr virus
Parvovirus
Herpes virus
Rotavirus
H.I.V.
…

GRAM + BACTERIA
Diplococcus pneumoniae
Streptococcus pyogenes
Pediococcus
Leuconostoc
Lactobacillus
Betabacterium
Yersinia pestis
Aerococcus spp
Bifidibacterium
Brevibacterium
Corynebacterium
Listeria
Staphylococcus
Sarcina …

MYCOBACTERIA
Mycobacterium tuberculosis,
Mycobacterium avium,
Mycobacterium leprae,
Mycobacterium smegmatis
…



YEASTS AND FUNGI
Saccharomyces cerivisae
Aspergillus fumigatus, niger, flavus
Hansenula
Debaryomyces
Brettanomyces
Candida albicans
Rhodotorula
Aspergillus spp.
Penicillium
Cladosporium
Fusarium
Cryptococcus neoformans
Neurospora crassa
Fusarium sporotrichioides
…

SPORES OF SPORULATING BACTERIA
Bacillus subtilis,
Bacillus cereus,
Bacillus anthracis,
Clostridium difficile,
Clostridium botulinum,
Clostridium tetani,
Clostridium perfrigens,
…

GRAM - BACTERIA
Salmonella typhimurium,
Citrobacter freundi,
Enterobacter aerogenes,
Serratia marcescens,
Proteus vulgaris,
Erwinia, Vibrio comma,
Brucella spp.,
Neisseria catarrhalis,
Campylobacter jejuni,
Citrobacter spp.,
Coxiella burnetii,
Streptomyces,
Enterobacter spp.,
Klebsiella pneumoniae,
Legionella pneumophilia,
Neisseria gonorrhoeae,
Vibrio cholerae,
Vibrio parahaemolyticus,
Yersinia pestis
…

UNDERSTANDING LOGARITHMIC REDUCTION

Killing a microbe population is achieved in steps, in much the same way as cooking food. The longer the food is in contact with the heat, the longer it is held at temperature, and the cooking process takes place progressively. Thus, when a mass of micro-organisms is exposed to a disinfectant, its destruction is effected in identical fractions at constant intervals. The reduction is said to be exponential or logarithmic. In other words, a reduction of 1 logarithm corresponds to the death of 90% of the microbe population. To reach the level defined by disinfection, a minimum reduction of 5 logarithms is needed.
The contact time and concentration of a disinfectant play a fundamental role in this operation. Applying too short a contact time (read the supplier's recommendations) or not using the correct concentration (specific to each product) will cause the disinfection operation to fail.

Contamination CFU/ml	Reduction	% reduction	Actions
100.000.000 Colony Forming Units per ml or soiling conditions			
10.000.000	1 logarithm	90 %	DRYING
1.000.000	2 logarithms	99 %	CLEANING
100.000	3 logarithms	99,9 %	BIO-CLEANING HYGIENIC WASHING
10.000	4 logarithms	99,99 %	DEEP BIO-CLEANING SURGICAL WASHING
1.000	5 logarithms	99,999%	CHEMICAL DESINFECTION
100	6 logarithms	99,9999%	HOT STERILISATION
10	7 logarithms	99,99999 %	HOT STERILISATION
1	8 logarithms	99,999999 %	GAMMA STERILISATION

RESISTANCE OF MICRO-ORGANISMS

TYPES	REFERENCE TARGETS	RESISTANCE AND STANDARD
Enveloped and medium-sized viruses	VIH, VHB, HSV	LOW RESISTANCE **EN 14476**
Vegetative bacteria	Pseudomonas aeruginosa Staphylococcus aureus Enterococcus hirae Escherichia coli Legionella pneumophilia	**Moderately resistant** **EN 1040, EN 1276, EN 13727 et EN 14561**
Yeasts and fungi	Candida albicans Aspergillus niger	**Aspergillus particularly resistant.** **EN 1275, EN 13624 et EN 14562**
Small viruses and non-lipidic viruses	poliovirus, adenovirus, rotavirus	**Highly resistant viruses** **EN 14476**
Mycobacteria	Mycobacterium terrae, Mycobacterium avium, Mycobacterium smegmatis,	**Highly resistant bacteria** **EN 14348 et EN 14563**
Bacterial spores	Bacillus cereus Bacillus subtilis Clostridium difficile Clostridium sporogenese Clostridium botulinum	**Most resistant type of bacteria** **EN 14347**
NCTA non-conventional transmission agent	Prion protein	**Highly resistant** Sterilisation by steam 134°C for 18 min.

IS YOUR DISINFECTANT EFFECTIVE?

Hospital

Pharmaceutical

Food

Industry

Veterinary

Biological liquids of human or animal origin (blood, urine, excreta, sweat, sebum) are a rich nutrient source for microbial flora. Foodstuffs, whether refrigerated or at room temperature, are nutrients of choice for micro-organisms. The presence of germs in organic matter poses a major contamination risk. Infections, food poisoning, and deterioration of products and equipment are attributable to the presence of germs.

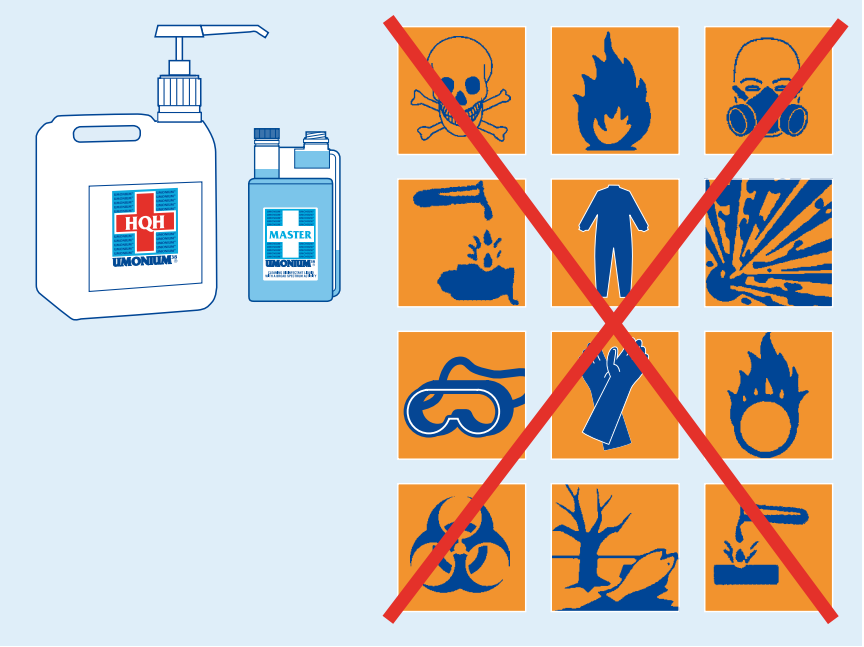
Preventive hygiene is the best strategy!

- Washing the hands, surfaces and equipment is an essential pre-requisite to safeguard health.
- Many disinfectants have a limited spectrum of activity; they only act on certain micro-organisms, so check the performance of your disinfectant!
- Where dirt is present, disinfectants lose their effectiveness, so choose a biocide that is resistant to inadvertent interference conditions.
- The expiry date is a good indicator of whether a product is valid. Many formulations are unstable beyond this date, and their effectiveness is not guaranteed.
- Volatile disinfectants (alcohols) evaporate very quickly. The contact time required to destroy the micro-organisms is often too short.
  Asepsis is not achieved, the pathogenic risk is still present.
- Some products are strong poisons for the operator and for the environment. Assess the hazard.
- Safe disinfection is only achieved with a precise concentration and contact time; for example, bleach (12° NaOCl) is used at the rate of 250 ml per litre of water for a minimum contact time of 20 minutes, and no less!
- Some active constituents coagulate biofilm; they harden the outer layer of the organic material and do not penetrate to the core of the infection. In critical instruments, these are effectively delayed-action bacteriological bombs.

ALTERNATIVE

UMONIUM38 is the optimum disinfection solution. Effective and safe, it can be used on equipment without danger. Kind to the operator, equipment and the environment. It has low toxicity, is not corrosive and does not release hazardous vapours. Chemically neutral (pH 7): poses no risk of violent chemical reaction. Non-flammable: poses no fire risk. Biodegradable: breaks down in the environment within 28 days.

UMONIUM38®

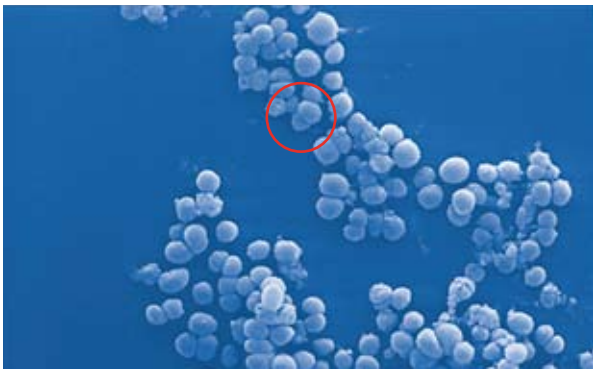


… and the others

MECHANISM OF ACTION

UMONIUM38 reduces the surface tension of water so that the supra-fluid solution penetrates the most inaccessible interstices of the organic mass. The product, in very close contact, causes the cytoplasmic membrane to swell until it bursts (protuberances visible on the photos). After penetrating the membrane, the solution diffuses into the germ by capillary action, poisons the nucleic fluid and causes the destruction of the micro-organism.

Colony of Staphylococcus aureus in a 0.5% solution of UMONIUM38



Swelling of the cytoplasmic membrane after 5 minutes contact

Bursting of the membrane and penetration of the disinfectant into the germ

Poisoning and destruction of the micro-organisms

INNOVATION IN TOTAL COLD DISINFECTION

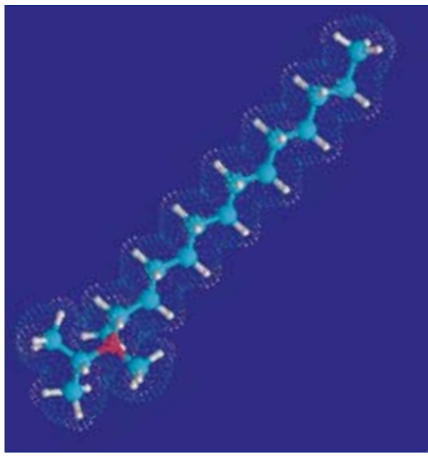
Our laboratory has developed a new generation of disinfectants combining high performance with enhanced safety.

FINALLY AN ALDEHYDE-FREE DISINFECTANT

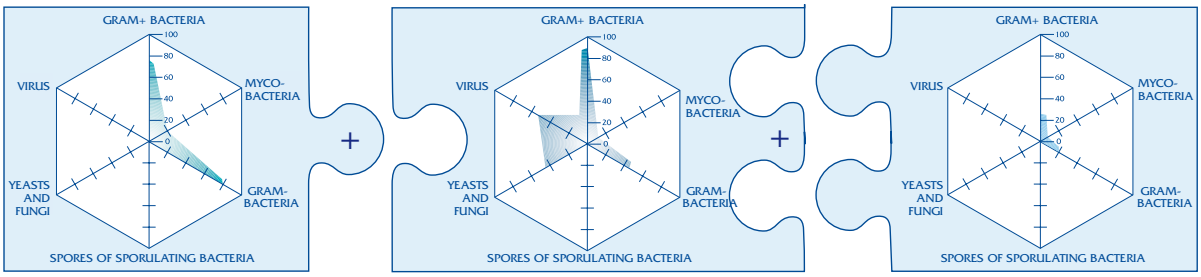
This molecule is obtained by combining two alcohols and one quaternary ammonium in carefully controlled proportions, and exhibits a remarkable synergistic effect in terms of its spectrum of activity and the contact time required to destroy micro-organisms.

Taken separately, the constituents have little or no disinfectant effect, yet in trials carried out by independent laboratories in different fields the combined constituents have demonstrated considerable biocidal performance with short contact times, perfectly capable of meeting current requirements.

It thus becomes possible to combine very short contact times with relatively economical concentrations. The surface-active nature of the molecule promotes cleaning and elimination of biofilms.



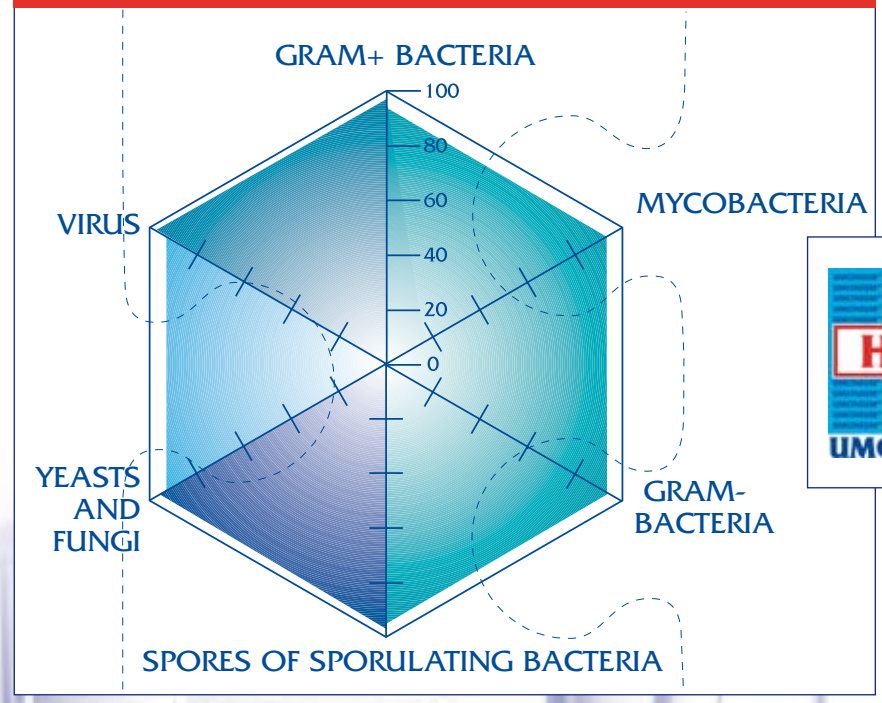
Isopropyl-tricedyl-dimethyl-ammonium®
32g/100ml



Isopropyl alcohol | Benzalkonium Chloride | Tridecyl ceteth alcohol

BACTERICIDE, MYCOBACTERICIDE, FUNGICIDE, VIRUCIDE, SPORICIDE.

Isopropyl-tridecyl-dimethyl-ammonium ®, 32g/100ml



UMONIUM38® THE PERFECT CHOICE

UMONIUM38® is a
BACTERICIDE
YEASTICIDE
FUNGICIDE
VIRUCIDE
TUBERCULOCIDE
MYCOBACTERICIDE
SPORICIDE

UMONIUM38 is the alternative of choice over aldehydes, peracetic acids or other caustic, corrosive and highly toxic disinfectants:

EFFICACY

UMONIUM38 has remarkable disinfecting power over a wide spectrum without corrosive effects and with very low toxicity. This molecule has been independently tested to the latest European Standards EN 1040 - EN 1275 - EN 1276 - EN 1650.

Its efficacy has been proven in the presence of organic matter and confirmed by a method that simulates in vivo conditions of use according to the standard: AFNOR NFT 72-190 "GERM CARRIER".

VALIDATION

Germs tested	Solution	Time	Reduction	Cond.	Method	Standard
Staphylococcus aureus ATCC 6538	0,50%	1 min.	9 logs	+	Dilution/neutralisation	EN 1276
Laboraco rue du Filleux 22, 1190 Bruxelles Belgique juin 1999						
Staphylococcus aureus ATCC 25923	0,50%	10 min.	>5 logs	+	Dilution/neutralisation	EN 1276
Staphylococcus aureus ATCC 25923	2,50%	1 min.	>5 logs	+		EN 1276
Universita Catolica del sacro Cuore Facoltà "Agostino Gemelli" Prof. Giovanni Fadda ROMA ITALIA Juin 1998						
Staphylococcus aureus ATCC 6538	0,50%	5 min.	>5 logs	-	Filtration/membrane	EN 1040
Staphylococcus aureus ATCC 6538	2,50%	5 min.	>5 logs	-	Filtration/membrane	EN 1040
Laboratoire ICARE Rue Denis Papin F63430 Pont du Chateau France Janv. 2002						
Staphylococcus aureus ATCC 6538	2,50%	1 min.	8,4 logs	+	Dilution/neutralisat°	EN 1276
Staphylococcus aureus ATCC 6538	2,50%	5 min.	8,4 logs	+	Dilution/neutralisat°	EN 1276
Laboraco rue du Filleux 22, 1190 Bruxelles Belgique Sept 1999						
Pseudomonas aeruginosa ATCC 15442	0,50%	1 min.	4,8 logs	+	Dilution/neutralisat°	EN 1276
Pseudomonas aeruginosa ATCC 15442	0,50%	5 min.	5,6 logs	+	Dilution/neutralisat°	EN 1276
Laboraco rue du Filleux 22, 1190 Bruxelles Belgique juin 1999						
Pseudomonas aeruginosa ATCC 15442	2,50%	1 min.	8,9 logs	+	Dilution/neutralisat°	EN 1276
Pseudomonas aeruginosa ATCC 15442	2,50%	5 min.	8,9 logs	+	Dilution/neutralisat°	EN 1276
Laboraco rue du Filleux 22, 1190 Bruxelles Belgique Sept 1999						
Pseudomonas aeruginosa ATCC 15442	0,50%	5 min.	> 5 logs	+	Dilution/neutralisat°	EN 1040
Pseudomonas aeruginosa ATCC 15442	1,50%	5 min.	> 5 logs	+	Dilution/neutralisat°	EN 1040
Pseudomonas aeruginosa ATCC 15442	2,50%	5 min.	> 5 logs	+	Dilution/neutralisat°	EN 1040
Laboratoire ICARE Rue Denis Papin F63430 Pont du Chateau France Janv. 2002						
Pseudomonas aeruginosa ATCC 27853	0,50%	10 min.	> 5 logs	+	Dilution/neutralisat°	EN 1276
Pseudomonas aeruginosa ATCC 27853	2,50%	1 min.	> 5 logs	+	Dilution/neutralisat°	EN 1276
Universita Catolica del sacro Cuore Facoltà "Agostino Gemelli" Prof. Giovanni Fadda ROMA ITALIA Juin 1998						
Enterococcus faecalis ATCC19433	0,50%	10 min.	> 5 logs	+	Dilution/neutralisat°	EN 1276
Enterococcus faecalis ATCC19433	2,50%	1 min.	> 5 logs	+	Dilution/neutralisat°	EN 1276
Universita Catolica del sacro Cuore Facoltà "Agostino Gemelli" Prof. Giovanni Fadda ROMA ITALIA Juin 1998						
Enterococcus hirae ATCC10541	0,50%	1 min.	4,6 logs	+	Dilution/neutralisat°	EN 1276
Enterococcus hirae ATCC10541	0,50%	5 min.	5,9 logs	+	Dilution/neutralisat°	EN 1276
Laboraco rue du Filleux 22, 1190 Bruxelles Belgique juin 1999						
Mycobacterium smegmatis CIP 7 326	0,50%	1 min.	3 logs	+	Dilution/neutralisat°	EN 1276
Mycobacterium smegmatis CIP 7 326	0,50%	5 min.	5 logs	+	Dilution/neutralisat°	EN 1276
Mycobacterium smegmatis CIP 7 326	2,50%	1 min.	5,1 logs	+	Dilution/neutralisat°	EN 1276
Mycobacterium smegmatis CIP 7 326	2,50%	5 min.	9,2 logs	+	Dilution/neutralisat°	EN 1276
Laboraco rue du Filleux 22, 1190 Bruxelles Belgique Sept 1999						
Mycobacterium avium ATCC 15769	Med. Spray	10 min.	> 5 logs	+	Dilution/neutralisat°	CEN*
Mycobacterium terrae ATCC 15755	Med. Spray	10 min.	> 5 logs	+	Dilution/neutralisat°	CEN*
Mycobacterium smegmatis CIP 7326	Med. Spray	10 min.	> 5 logs	+	Dilution/neutralisat°	CEN*
Universita Catolica del sacro Cuore Facoltà "Agostino Gemelli" Prof. Giovanni Fadda ROMA ITALIA Avril 2001						
Escherichia coli ATCC 10536	0,50%	1 min.	8,7 logs	+	Dilution/neutralisat°	EN 1276
Escherichia coli ATCC 10536	0,50%	5 min.	8,7 logs	+	Dilution/neutralisat°	EN 1276
Laboraco rue du Filleux 22, 1190 Bruxelles Belgique juin 1999						
Escherichia coli ATCC 25922	0,50%	10 min.	> 5 logs	+	Dilution/neutralisat°	EN 1276
Escherichia coli ATCC 25922	2,50%	1 min.	> 5 logs	+	Dilution/neutralisat°	EN 1276
Universita Catolica del sacro Cuore Facoltà "Agostino Gemelli" Prof. Giovanni Fadda ROMA ITALIA Juin 1998						
Candida albicans ATCC 24533	0,50%	10 min.	> 5 logs	+	Dilution/neutralisat°	EN 1276
Candida albicans ATCC 24533	2,50%	1 min.	> 5 logs	+	Dilution/neutralisat°	EN 1276
Aspergillus niger wild strain	0,50%	10 min.	> 5 logs	+	Dilution/neutralisat°	EN 1276
Aspergillus niger wild strain	2,50%	1 min.	> 5 logs	+	Dilution/neutralisat°	EN 1276
Universita Catolica del sacro Cuore Facoltà "Agostino Gemelli" Prof. Giovanni Fadda ROMA ITALIA Juin 1998						

Germs tested	Solution	Time	Reduction	Cond.	Method	Standard
Candida albicans ATCC 10231	0,50%	1 min.	7,6 logs	e d	Dilution/neutralisat°	EN 1275
Aspergillus niger ATCC 16404	0,50%	1 min.	3 logs	e d	Dilution/neutralisat°	EN 1275
Aspergillus niger ATCC 16404	0,50%	5 min.	3,2 logs	e d	Dilution/neutralisat°	EN 1275
Aspergillus niger ATCC 16404	0,50%	10 min.	4 logs	e d	Dilution/neutralisat°	EN 1275
FAspergillus niger ATCC 16404	0,50%	30 min.	4,1 logs	e d	Dilution/neutralisat°	EN 1275
Laboraco rue du Filleux 22, 1190 Bruxelles Belgique Juin 1999						
Candida albicans ATCC 10231	0,50%	1 min.	2,6 logs	+	Dilution/neutralisat°	EN 1650
Candida albicans ATCC 10231	0,50%	5 min.	3,8 logs	+	Dilution/neutralisat°	EN 1650
Candida albicans ATCC 10231	0,50%	10 min.	> 6,7logs	+	Dilution/neutralisat°	EN 1650
Aspergillus niger ATCC 16404	0,50%	1 min.	1,5 logs	+	Dilution/neutralisat°	EN 1650
Aspergillus niger ATCC 16404	0,50%	5 min.	3,1 logs	+	Dilution/neutralisat°	EN 1650
Aspergillus niger ATCC 16404	0,50%	10 min.	3,1 logs	+	Dilution/neutralisat°	EN 1650
Aspergillus niger ATCC 16404	0,50%	15 min.	4,1 logs	+	Dilution/neutralisat°	EN 1650
Aspergillus niger ATCC 16404	0,50%	30 min.	5,1 logs	+	Dilution/neutralisat°	EN 1650
Laboraco rue du Filleux 22, 1190 Bruxelles Belgique Mars 1999						
Escherichia coli ATCC 25922	0,50%	1 min.	< 5 logs	+	Glass/ PVC	EN 1040
Escherichia coli ATCC 25922	0,50%	10 min.	> 5 logs	+	Glass/ PVC	EN 1040
Escherichia coli ATCC 25922	0,50%	30min.	> 5 logs	+	Glass/ PVC	EN 1040
Escherichia coli ATCC 25922	2,50%	1 min.	>5 logs	+	Glass/ PVC	EN 1040
Escherichia coli ATCC 25922	2,50%	10 min.	> 5 logs	+	Glass/ PVC	EN 1040
Escherichia coli ATCC 25922	2,50%	30min.	> 5 logs	+	Glass/ PVC	EN 1040
Universita Catolica del sacro Cuore Facoltà "Agostino Gemelli" Prof. Giovanni Fadda ROMA ITALIA Juin 1998						
Pseudomonas aeruginosa ATCC 27853	0,50%	1 min.	< 5 logs	+	Glass/ PVC	EN 1040
Pseudomonas aeruginosa ATCC 27853	0,50%	10 min.	> 5 logs	+	Glass/ PVC	EN 1040
Pseudomonas aeruginosa ATCC 27853	0,50%	30min.	> 5 logs	+	Glass/ PVC	EN 1040
Pseudomonas aeruginosa ATCC 27853	2,50%	1 min.	> 5 logs	+	Glass/ PVC	EN 1040
Pseudomonas aeruginosa ATCC 27853	2,50%	10 min.	> 5 logs	+	Glass/ PVC	EN 1040
Pseudomonas aeruginosa ATCC 27853	2,50%	30min.	> 5 logs	+	Glass/ PVC	EN 1040
Universita Catolica del sacro Cuore Facoltà "Agostino Gemelli" Prof. Giovanni Fadda ROMA ITALIA Juin 1998						
Staphylococcus aureus ATCC 25923	0,50%	1 min.	< 5 logs	+	Glass/ PVC	EN 1040
Staphylococcus aureus ATCC 25923	0,50%	10 min.	>5 logs	+	Glass/ PVC	EN 1040
Staphylococcus aureus ATCC 25923	0,50%	30 min.	>5 logs	+	Glass/ PVC	EN 1040
Staphylococcus aureus ATCC 25923	2,50%	1 min.	>5 logs	+	Glass/ PVC	EN 1040
Staphylococcus aureus ATCC 25923	2,50%	10 min.	>5 logs	+	Glass/ PVC	EN 1040
Staphylococcus aureus ATCC 25923	2,50%	30 min.	>5 logs	+	Glass/ PVC	EN 1040
Universita Catolica del sacro Cuore Facoltà "Agostino Gemelli" Prof. Giovanni Fadda ROMA ITALIA Juin 1998						
Enterococcus faecalis ATCC19433	0,50%	1 min.	< 5 logs	+	Glass/ PVC	EN 1040
Enterococcus faecalis ATCC19433	0,50%	10 min.	>5 logs	+	Glass/ PVC	EN 1040
Enterococcus faecalis ATCC19433	0,50%	30 min.	>5 logs	+	Glass/ PVC	EN 1040
Enterococcus faecalis ATCC19433	2,50%	1 min.	>5 logs	+	Glass/ PVC	EN 1040
Enterococcus faecalis ATCC19433	2,50%	10 min.	>5 logs	+	Glass/ PVC	EN 1040
Enterococcus faecalis ATCC19433	2,50%	30 min.	>5 logs	+	Glass/ PVC	EN 1040
Universita Catolica del sacro Cuore Facoltà "Agostino Gemelli" Prof. Giovanni Fadda ROMA ITALIA Juin 1998						
Staphylococcus aureus ATCC 6538	0,50%	5 min.	5,4 logs	-	Glass	AFNOR*
Staphylococcus aureus ATCC 6538	0,50%	5 min.	4,9 logs	-	Iron	AFNOR*
Staphylococcus aureus ATCC 6538	0,50%	5 min.	5,6 logs	-	PVC	AFNOR*
Escherichia coli ATCC 10536	0,50%	5 min.	5,2 logs	-	Glass	AFNOR*
Escherichia coli ATCC 10536	0,50%	5 min.	8 logs	-	Iron	AFNOR*
Escherichia coli ATCC 10536	0,50%	5 min.	5,2 logs	-	PVC	AFNOR*
Candida albicans ATCC 10231	0,50%	10 min.	2,8 logs	-	Glass	AFNOR*
Candida albicans ATCC 10231	0,50%	10 min.	3,5 logs	-	Iron	AFNOR*
Candida albicans ATCC 10231	0,50%	10 min.	3,3 logs	-	PVC	AFNOR*
Candida albicans ATCC 10231	0,50%	20 min.	3,4 logs	-	Glass	AFNOR*
Candida albicans ATCC 10231	0,50%	20 min.	4 logs	-	Iron	AFNOR*
Candida albicans ATCC 10231	0,50%	20 min.	3,5 logs	-	PVC	AFNOR*
Laboraco rue du Filleux 22, 1190 Bruxelles Belgique Mai 2000						
Pseudomonas aeruginosa CIP A 22	0,50%	20 min.	5 logs		Glass	AFNOR*
Pseudomonas aeruginosa CIP A 22	0,50%	20 min.	5,3 logs		Iron	AFNOR*
Pseudomonas aeruginosa CIP A 22	0,50%	20 min.	5,2 logs		PVC	AFNOR*
Laboraco rue du Filleux 22, 1190 Bruxelles Belgique juin 2001						
Bacillus cereus wild strain	0,50%	1 min.	< 5 logs	+	Glass/ PVC	EN 1040
Bacillus cereus wild strain	0,50%	10 min.	< 5 logs	+	Glass/ PVC	EN 1040
Bacillus cereus wild strain	0,50%	30 min.	< 5 logs	+	Glass/ PVC	EN 1040
Bacillus cereus wild strain	2,50%	1 min.	> 5 logs	+	Glass/ PVC	EN 1040
Bacillus cereus wild strain	2,50%	10 min.	> 5 logs	+	Glass/ PVC	EN 1040
Bacillus cereus wild strain	2,50%	30 min.	< 5 logs	+	Glass/ PVC	EN 1040
Universita Catolica del sacro Cuore Facoltà "Agostino Gemelli" Prof. Giovanni Fadda ROMA ITALIA Juin 1998						
Clostridium sporogenes CIP 79.39	50,00%	1 H.	> 3 logs	50 °C	Dilution/neutralisat°	AFNOR**
Clostridium sporogenes CIP 79.39	0,25%	5 H.	> 3 logs	50 °C	Dilution/neutralisat°	AFNOR**
Bacillus subtilis CIP 77.18	5,00%	5 H.	> 3 logs	50 °C	Dilution/neutralisat°	AFNOR**
Bacillus cereus CIP 7803	2,50%	5 H.	> 3 logs	50 °C	Dilution/neutralisat°	AFNOR**
Institut de Recherche Microbiologique F77290 MITRY MORY France Juin 2003						
Candida albicans ATCC 24533	0,50%	1 min.	< 5 logs	+	Glass/ PVC	EN 1040
Candida albicans ATCC 24533	0,50%	10 min.	> 5 logs	+	Glass/ PVC	EN 1040
Candida albicans ATCC 24533	0,50%	30 min.	> 5 logs	+	Glass/ PVC	EN 1040
Candida albicans ATCC 24533	2,50%	1 min.	> 5 logs	+	Glass/ PVC	EN 1040
Candida albicans ATCC 24533	2,50%	10 min.	> 5 logs	+	Glass/ PVC	EN 1040
Candida albicans ATCC 24533	2,50%	30 min.	> 5 logs	+	Glass/ PVC	EN 1040
Universita Catolica del sacro Cuore Facoltà "Agostino Gemelli" Prof. Giovanni Fadda ROMA ITALIA Juin 1998						

Germs tested	Solution	Time	Reduction	Cond.	Method	Standard
Legionella pneumophilia ATCC 33152	0,50%	60 min.	> 5 logs	-		PrN 13623
Legionella pneumophilia ATCC 33152	0,50%	60 min.	> 5 logs	0,3 gl/l e l*		PrN 13623
Legionella pneumophilia ATCC 33152	0,50%	60 min.	> 5 logs	3 gl/l e l*		PrN 13623
Legionella pneumophilia ATCC 33152	2,50%	60 min.	> 5 logs	-		PrN 13623
Legionella pneumophilia ATCC 33152	2,50%	60 min.	> 5 logs	0,3 gl/l e l*		PrN 13623
Legionella pneumophilia ATCC 33152	2,50%	60 min.	> 5 logs	3 gl/l e l*		PrN 13623
Universita Catolica del sacro Cuore Facoltà "Agostino Gemelli" Prof. Giovanni Fadda ROMA ITALIA LUG. 2000						
VH.I.V. type 1	2,50%	1 min.	inactivated	-		
Public Health Laboratory Service John Radcliffe Hospital Oxford U.K. Aug. 1993						
Herpes Simplex Virus type 1	0,50%	5 min.	inactivated	-		
Herpes Simplex Virus type 1	2,50%	5 min.	inactivated	-		
Public Health Laboratory Service John Radcliffe Hospital Oxford U.K. Feb. 2001						
Polio Virus	0,50%	5 min.	inactivated	-		
Polio Virus	2,50%	5 min.	inactivated	-		
Public Health Laboratory Service John Radcliffe Hospital Oxford U.K.						
Hepatitis B Virus	0,50%	5 min.	inactivated	-		
Hepatitis B Virus	2,50%	5 min.	inactivated	-		
Public Health Laboratory Service John Radcliffe Hospital Oxford U.K.						
Echoviruis 11	0,50%	5 min.	inactivated	-		
Hepatitis B Virus	2,50%	5 min.	inactivated	-		
Public Health Laboratory Service John Radcliffe Hospital Oxford U.K.						
Rota Virus SA 11	0,50%	15 min.	> 6 logs	-	filtration	NFT 72*
Institut de Recherche Microbiologique F77290 MITRY MORY France Octobre 2002						
Hepatitis C Virus	0,50%	10 min.	> 3 logs	1:1 p h		
Hepatitis C Virus	0,50%	20 min.	> 4 logs	1:1 p h		
Hepatitis C Virus	2,50%	5 min.	> 4 logs	1:1 p h		
Università Vita-Salute San Raffaele, Milano Italia, Prof Massimo Clementi, M.D. March 2005						
Listeria monocytogenes DSMZ 12464	0,50%	1 min.	5,33 logs	-	spreading on BHI slides	
Listeria monocytogenes DSMZ 12464	0,50%	5 min.	7,99 logs	-	spreading on BHI slides	
Listeria monocytogenes DSMZ 12464	2,50%	1 min.	7,99 logs	-	spreading on BHI slides	
UBT -asbl MEURICE R&D B1070 Brussels, July 2005						
Salmonella typhimurium LMG 3264	0,50%	1 min.	6,93 logs	-	spreading on YEPD slides	
Salmonella typhimurium LMG 3264	2,50%	1 min.	6,93 logs	-	spreading on YEPD slides	
UBT -asbl MEURICE R&D B1070 Brussels, July 2005						
Avian Influenza Virus H5N1	0.50%	10 min		Inactived		
Avian Influenza Virus H5N1	2.50%	10 min		Inactived		
Newcastle disease Virus	0.50%	10 min		Inactived		
Newcastle disease Virus	2.50%	10 min		Inactived		
Faculty of Veterinary Medicine, Khon Kaen University, Khon Kaen 40002, THAILAND, Mai 2006						
Parvovirus bovin ATCC VR-767	0.50%	10 min	4.67 logs	+		EN 14675
Parvovirus bovin ATCC VR-767	2.50%	10 min	5.00 logs	+		EN 14675
Parvovirus bovin ATCC VR-767	2.50%	10 min	4.33 logs	+		EN 14675
School of Live Sciences, Glasgow Caledonian University, Glasgow G4 OBA, UK, Juin 2008-11-26						
Clostridium difficile ATCC 9689	2.50%	5 min	4.30 logs	+		
Clostridium difficile ATCC 9689	2.50%	10 min	4.60 logs	+		
Clostridium difficile ATCC 9689	2.50%	15 min	6.00 logs	+		
ALBHADES Province, ZA Les Roubines, F-04700 ORAISON – Juin 2007						
Bacilus subtilis LMG 8197	2.50%	30 min	4.45 logs			
Bacilus subtilis LMG 8197	2.50%	60 min	5.06 logs			
Bacilus subtilis LMG 8197	5.00%	60 min	5.42 logs			
UBT – Institut Meurice – CERIA – Avenue Gryzon, 1 – 1070 BRUXELLES –Janvier 2007						

* Cond. +: interference condition with 3 g/l bovine albumin o Cond -: without interference o y e: yeast extract
* AFNOR*: NFT 72-190/72-180/72-300 o CEN: CEN TC/216 WG 1N135 1997 - N146 1998. o PrN: PrN 13623 o d w: distilled water

FEATURES

UMONIUM38 is a disinfectant with a cleaning action, and performs the following functions in a single operation:

Breaks down biofilm | Disinfects in 10 minutes | Disinfects at low temperature (20°C) | Deodorises effectively | Prolongs bio-protection by a bacteriostatic film | Effectively reduces nosocomial infections | Specially designed for heat-sensitive instrumentation | Application in the form of compact foam | Non-foaming option

CONFIDENCE

- No loss of activity due to the accidental presence of organic matter (dirt).
- No coagulating effect on organic matter (blood) unlike oxygenated water, chlorine, or peracetic acid.

RESIDUES

- A bio-active microfilm prolongs the hygiene condition by a bacteriostatic and fungistatic effect. This residual film can be quickly removed simply by rinsing, as demonstrated in laboratory tests.
- Residual particles on non-rinsed surface: less than 5mg/6.25 dm^2 (25x25cm).

SAFETY

UMONIUM[38] is a chemically inert molecule.

- Non-flammable, non-explosive

COMPATIBILITY

- Specially designed for heat-sensitive instrumentation. Corrosion, cracking and embrittlement testing on various materials has proven negative on rubber, silicon, glass, optical filbre, plastic, plexiglas, and stainless steel.

pH=7

TOXICITY

- Very low toxicity: DL_{50} oral route in rats: 5840 mg/kg
- Non corrosive, non-necrosing on the skin
- Irritant in undiluted form, 2.5% solution is non-irritant

ECOTOXICITY

- Biodegradable > 81.1% per OECD 301 B,
- Toxicity in fish 96-h CL_{50}: 13.8 mg/l
- Toxicity in freshwater algae: 96h $CEb._{90}$: 0.54 ml/l
- Toxicity in Daphnia Magna: 48-h LC_{50}: 0.39 mg/l
- Algae 72-h CL_{50} growth rate: 0.25 mg/l
- Vapour tension: ASTM D 323: 13505: < 0.5 kpa
- Water/octanol partition coefficient: 0.48
- Algae 72-h CL_{50} biomass: 0.55 mg/l
- RODOX/town with 40,000 inhabitants: inoffensive effluent to drain at 7000 L of pure product per day.

STABILITY

- Chemically stable molecule. Studies have demonstrated the stability of the active constituents beyond 36 months.
- The performance of our concentrated solutions is guaranteed for 3 years.

LOT: 05C12D27
Best Before:
March 2015

TRACEABILITY

- Our packaging carries a batch number which identifies operators, inspection results and products, from materials receiving through delivery to the professional end-user.

HANDLING

- Our packs dispense 25 ml doses to ensure correct proportioning:
  25 ml in 5 litres of water = 0.5%
  25 ml in 1 litre of water = 2.5%

UMONIUM38®
MAJOR ADVANTAGES

10 GOOD REASONS TO CHOOSE UMONIUM38®

- ALDEHYDE AND ENZYME-FREE
- GOOD STABILITY
- NO COAGULATING EFFECT
- BROAD SPECTRUM ACTIVITY
- COST EFFECTIVE
- FULL GUARANTEED QUALITY
- FAST ACTING
- MULTI-PURPOSE
- NO TOXIC VAPOURS
- VALUABLE TECHNICAL SUPPORT

SOAKING • FLOW CIRCULATION • WET CLEANING • VAPORISATION • FOAM SPRAYING • FUMIGATION

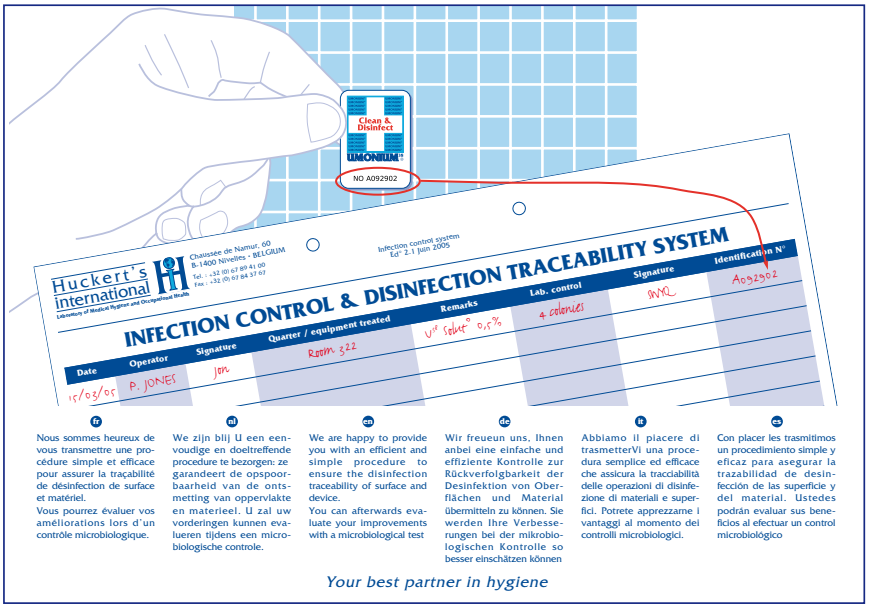
RESPONSIBLE DISINFECTION

NO QUALITY WITHOUT CONTROL

TOO MANY PEOPLE ARE DYING DUE TO THE INCOMPETENCE OF OTHERS!

To ensure safety and a high standard of hygiene, it is essential to:

1. Assess hygiene conditions by microbiological testing of surfaces;
2. Set achievable targets for biological cleanliness;
3. Measure the effectiveness of the methods put in place;
4. Record the results.



A traceability record and labels are included in each groupage carton of UMONIUM38 products. These documents are used to identify the locations treated, and details recorded include the date, operator's name, equipment or room treated, solutions used and results of bacteriological testing (number of colony forming units CFU).

RELIABILITY

Disinfection cannot be assessed with the naked eye! So how can the efficacy of disinfection be judged?

Through our partnership with international specialists in microbiological testing, we are well placed to recommend simple, effective and inexpensive methods to assess your biological risks and measure the improvement in your performance.

Our objective is to achieve reliable disinfection that reaches its target in 100% of cases with realistic contact times and in the most critical infection conditions. We do not compromise on the performance or safety of our preparations.

ACCESSIBILITY

UMONIUM38 is also a revolution in terms of economic accessibility; its ultra-concentrated formula allows the addition of 99.5% of locally available water to make up a high-quality disinfectant solution at very low cost.

Our mission:

To manufacture exceptional products to the highest standards of performance and safety. Our targets are:
1 - disinfection of surfaces, equipments, instruments
2 - care, protection and professional hygiene of the skin.

Our references:

Huckert's International is a medical devices laboratory, established since 1970, with ISO 9001 - ISO 13485 (UKAS & CMDCAS) certifications.
Active in over 25 countries, we offer our experience on the ground through continuous training.
Our claims are all backed by validated technical documentation compliant with European directives 93/42/CE, 94/60/CE et 98/8/CE. We offer a total satisfaction guarantee on all our products.

Documentation and scientific information:

Our safety datasheets, analysis protocols and technical case histories are available on request from: info@huckerts.net

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Laboratoire Huckert's international

SYSTEM CERTIFICATION ISO 13485 SGS

UKAS QUALITY MANAGEMENT 005

HACCP

SATISFIED or REFUNDED FULL COVER

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