

SEA WATER TREATMENT

Our reactors are also proposed in **HDPE**.



UVGERMI
ULTRAVIOLET HIGH TECHNOLOGY

*The specialist
of dechloramination through
ultraviolet reactors.*

● ○ ● MADE IN FRANCE

WATER INTENDED FOR **PUBLIC SWIMMING POOLS** AND **WELLNESS AREAS**

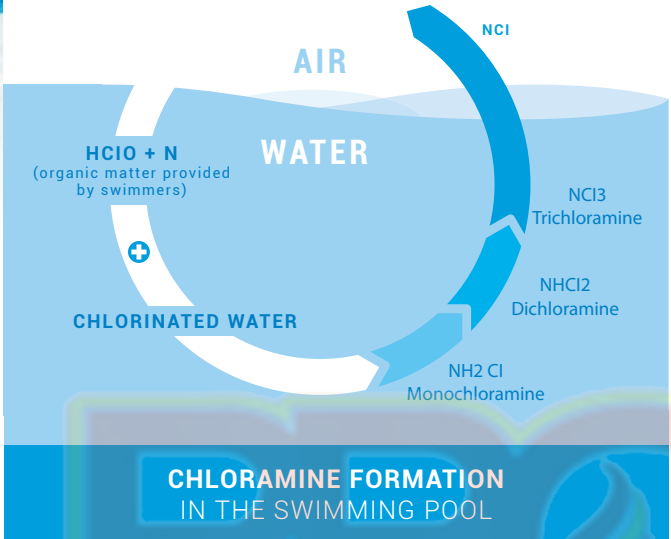
- PUBLIC SWIMMING POOLS
- WELLNESS AREAS
- SPAS THALASSOTHERAPY

THE ISSUE

The chlorine used in water disinfection of swimming pools and wellness areas reacts with nitrogenous pollutants brought by the swimmers (urine, sweat, saliva, hair). Compounds are created. Trichloramine, (most volatile compound) passes in the atmosphere causing eye, nasal irritations and dangerous respiratory disorders for the human health.



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Today, more than **1500 pools** are equipped with our **UVDECHLO technology** all over the world.

THE CONCEPT

The UV dechloramination process presents the particularity of **reducing the rate of combined chlorine by a photochemical action on all the organochlorinated compounds in the water** (monochloramine, dichloramine, and trichloramine).

Studies conducted by the **Professor BATCHELEY** (USA) team and **LAAT** (France) demonstrate that low pressure UV technology **is effective on all 3 types of chloramines**.

The use of low pressure UV lamps, usually used in drinking water since 1904, is safe because **they prevent from the formation of chlorine by-products** such as THMs.



- Power modulation : energy saving
- Simple Installation
- Low power consumption
- Low maintenance costs
- Lamp lifespan up to 16000 hours or 2 years
- No formation of by-products
- Comfort of bathing
- Better improvement of staff working conditions
- Better management for new water supply

THE SOLUTION

The ultraviolet rays generated by UVDECHLO destroy bacteria, viruses and all micro-organisms present in the water of pools brought by swimmers, causing photochemical reactions to their DNA and RNA.

An abnormal contact is created on the bacterium's DNA chain, which loses its reproductive capacity. Cell division is no longer possible, bacterial proliferation is stopped.

UVDECHLO devices enable to reduce the level of chloramines in water by an average of 80% and the level of nitrogen trichlorides in the air by 50%.

TECHNICAL SPECIFICATIONS

UVDECHLO range is made from **stainless steel 316L** or in **HDPE** and integrates low-pressure UV lamps with a lifespan of **16 000 hours** (or two years). They are **sized according to your needs** to obtain at the same time an important destruction of chloramines and a better control of the quantity of chlorine to be injected.

UVDECHLO reactors can be easily integrated into the pool's recycling circuit, after the filtration, and before the chlorine injection.



AGREEMENT

The French ministerial approval which we received for our technology in November 2006 bases on studies demonstrating that the UVDECHLO has no incidence on the rate of THMs.



	NUMBER OF LAMPS/POWER	FLOW RATE (m ³ /h) (T=98%)		CONNECTION DN FLANGE (PVC)(mm)	REACTOR DIAMETER (mm)	POWER SUPPLY/FREQUENCY (V/Hz)
		60 mJ/cm ²	30 mJ/cm ²			
UVDECHLO 20	1X200 Watts	10	20	50 (63)	104	230/50-60 Hz
UVDECHLO 45	2X200 Watts	24	48	80 (90)	140	230/50-60 Hz
UVDECHLO 90	4X200 Watts	78	157	100 (110)	220	230/50-60 Hz
UVDECHLO 150	6X200 Watts	172	344	150 (160)	300	400 V Tri+N+T / 50-60 Hz
UVDECHLO 200 L300	6X300 Watts	295	590	200 (200-225)	350	400 V Tri+N+T / 50-60 Hz
UVDECHLO 300 L300	9X300 Watts	458	917	300 (315)	400	400 V Tri+N+T / 50-60 Hz
UVDECHLO 400 L300	13X300 Watts	787	1574	300 (315) 400 possible	500	400 V Tri+N+T / 50-60 Hz
UVDECHLO 700 L300	20X300 Watts	1200	3600	400	600	400 V Tri+N+T / 50-60 Hz