

# OZONIZER

OZONE GENERATOR BY EAGLE TECH

**CREARIA**



**CUBO 7**



**CUBO 14**



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**EAGLE TECH CO., LTD.**

257/104, VILLAGE NO. 1, NONG KRATHUM - MUANG DISTRICT, NAKHON RATCHASIMA 30000

## WHAT IS OZONIZER?

Ozonizer by Eagle Tech is your ozone generator for **sterilization of cars, offices, hotel rooms, schools and homes.**



Ozone, recognized by the Italian Ministry of Public Health as a natural aid for the sterilization of environments, performs an extraordinary and effective antifungal, bactericidal and above all virucidal action.

Unlike conventional disinfection systems, Ozone molecules are able to easily reach all surfaces, even the most hidden ones, for powerful and long-lasting sanitation.

**ALL IN LESS THAN 20 MINUTES.**

Leaving no residue and requiring no maintenance, it sanitizes and disinfects carefully every surface and material with which it comes into contact.

**Eagle Tech Co., Ltd.** as the only accredited company in Thailand for the training and certification of the device, can provide **training and certification for ozone generator operators.**



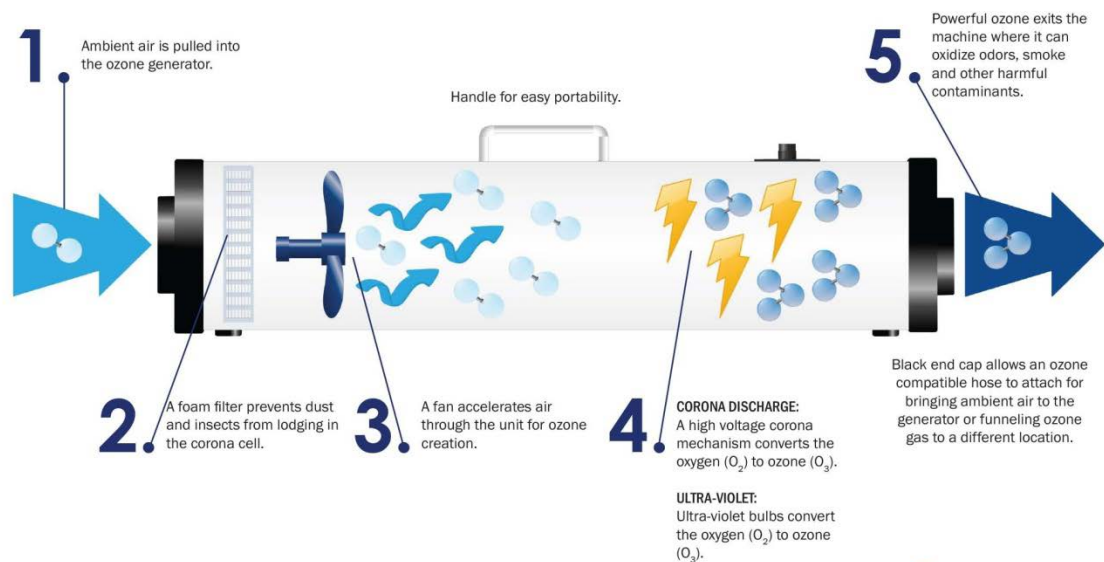
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## HOW DOES IT WORK?

Ozone generators produce ozone by adding energy to oxygen molecules ( $O_2$ ), which cause the oxygen atoms to part ways and temporarily recombine with other  $O_2$  molecules creating ozone ( $O_3$ ). This process occurs in nature by two ways: Lightning (Corona Discharge) or Sun (UV light).

**Ozone in Action:** Once ozone is produced it reacts with a pollutant, often long-chain carbon (organic) molecules, and breaks it down into less complex (and typically less harmful) molecules through a process called oxidation. Ozone that has not reacted with other molecules will decompose into oxygen over time.



**Sources of Oxygen** In light of ozone's properties, it cannot be stored or transported, and must be made on-site. Ozone can be created from air that is available in the environment, whether it is located indoors or outdoors.

The generators use an electric discharge field to convert oxygen into ozone. Because of the reactive nature of ozone, it oxidizes bacteria, mold and organic and other pollutants found in water.



## TYPICAL APPLICATIONS



**HOTELS** participants to Alternative State Quarantine will sterilize completely their rooms after the client has checked-out in a time of 20 minutes without using any chemical or any man work. Also welcoming foreign travellers in the “new normal era” will have great safety by introducing this sanitization protocol.



**SCHOOLS** every day, at the end of lessons, Ozonizer will disinfect the room in less than 30 minutes wiping out any trace of virus, bacteria, fungus etc. and giving children and kids a healthy environment ready for the next day.



**OFFICES AND FACTORIES** With no problem for machineries and documents, Ozonizer will completely sterilize the working environment every evening or after every workshift.



**CAR CARE** Additional 10 minutes to the normal waiting time, and Ozonizer will automatically sanitize the car or minivan. This should be a must for tourist transport under “new normal” protocol.



**HOME CARE** Between the walls of your home risk is very limited, but sanitization will add safety and make your homestay clean and sterile without any effort. Just switch on, set the timer and leave the room for few minutes. After the cycle is finished, just open windows for few minutes. Easy and fast!



## TECHNICAL DATA

### CUBO 14



- Power supply : 110-125Vac / 50-60 Hz;
- Ozone produced : 14g/h;
- Power: 160W
- Net Weight: 6,5Kgs
- Dimensions: 250 mm x 242 mm x 300 mm (w\*h\*l)

### CUBO 7



- Power supply : 110-125Vac / 50-60 Hz;
- Ozone produced : 7g/h;
- Power: 80W
- Net Weight: 6Kgs
- Dimensions: 250 mm x 242 mm x 300 mm (w\*h\*l)

### CREARIA



- Power consumption: 10 W;
- Voltage: 220V / 50HZ;
- Active oxygen produced: 500 mg / h;
- Timing: 3 times (5' - 10' - 15' - 20');
- Weight: 5 kg
- Dimensions: 250 mm x 80 mm x 200 mm (w\*h\*l)



## OZONIZER WORKING CYCLE

**How long does it take to sanitize my room?** The table below shows the time in minutes necessary to guarantee the sanitization of a room with CUBO 7 and 14

AREA		Total time (minutes)	
sqm	cbm	CUBO 7	CUBO 14
15	40.5	05:08	04:13
20	54	05:46	04:31
25	67.5	06:23	04:50
30	81	07:00	05:08
35	94.5	07:37	05:27
40	108	08:14	05:46
45	121.5	08:51	06:04
50	135	09:29	06:23
55	148.5	10:06	06:41
60	162	10:43	07:00
65	175.5	11:20	07:19
70	189	11:57	07:37
75	202.5	12:34	07:56
80	216	13:12	08:14
85	229.5	13:49	08:33
90	243	14:26	08:51
95	256.5	15:03	09:10
100	270	15:40	09:29
105	283.5	16:17	09:47
110	297	16:55	10:06
115	310.5	17:32	10:24
120	324	18:09	10:43
125	337.5	18:46	11:02
130	351	19:23	11:20
135	364.5	20:00	11:39
140	378	20:38	11:57
145	391.5	21:15	12:16
150	405	21:52	12:34
155	418.5	22:29	12:53
160	432	23:06	13:12
165	445.5	23:43	13:30
170	459	24:21	13:49
175	472.5	24:58	14:07
180	486	25:35	14:26
185	499.5	26:12	14:45
190	513	26:49	15:03
195	526.5	27:26	15:22
200	540	28:04	15:40



## OZONE SAFETY DATA SHEET

**Chemical name:** Ozone

**Common names:** triatomic oxygen, Ozone- Chemical formula: O<sub>3</sub> - CAS registry number: 10028-15-6 - EC no. 233-069-2.

**Product use:** Ozone produced in gaseous form, on site, by a corona discharge generator, for various applications in air or in liquids.

### PHYSICAL AND CHEMICAL PROPERTIES

**State:** Gas - Molecular weight: 48.0 - Colour: Blue - Odour: acrid and pungent (typical)

**Olfactory perception threshold:** 0.02÷0.05 ppm - Melting point: -193°C (-315°F)

**Boiling point:** -112°C (-169°F) - Vapour pressure: >1 atm. - Vapour density: 1.6 (air=1)

**Relative density:** 2.144 g/litre.

**Toxicological information:** Ozone is toxic and irritating mainly for the respiratory tract (> 0.3 ppm), slightly for the eyes and rarely for the skin.

**Respiratory protection:** use a breathing mask when entering areas with high concentration of Ozone (> 0.2 ppm). With no mask breathe slowly, for a short time, through a wet cloth.

**First Aid Measures:** first symptoms burning in the nose, throat and eyes.

- **Mild inhalation:** irritation to nose, throat and eyes > go outdoors into the fresh air
- **Average inhalation:** cough, headache, nausea > breathe medical oxygen
- **Strong inhalation:** heavy chest, shortness of breath > call for assistance.

**Fire fighting measures:** use any extinguishing media. Ozone itself is not flammable, but it may accelerate combustion or cause explosion in contact with some elements (see below).

**Stability and reactivity:** Ozone is highly unstable and highly reactive. Avoid contact with alkenes, ethylene, benzene, ethyl ether, diazotum tetroxide, bromine, hydrogen bromide, hydrobromic acid, nitroglycerine.



## DECLARATION OF CONFORMITY

The manufacturer, Terminter srl, with head quarter in San Filippo del Mela (ME), VAT Number 01145290837, DECLARE that the ozone generators named **CREARIA, CUBO 7 and CUBO 14** are **OZONE GENERATOR FOR AIR SANIFICATION, PROFESSIONAL USE ONLY** complies with all relevant legal provisions, including:

### Mixture produced

- Ozone (O3): 1.07 – 3,5 - 7 g/h
- Oxygen (O2): > 90%
- Nitrogen (N2): < 5%
- Nitrogen Dioxide (NO2): < 0,01ppm

### EU Rules compliance

- Direttiva 2014/35/UE (Low Voltage Directive)
- Direttiva EMC 2014/30/UE (Electromagnetic Compatibility)
- EN60335-1 and subsequent amendments;
- EN55014-1:2019 and subsequent amendments;
- EN55014-2:2019 and subsequent amendments;
- EN61000-3-2: 2014 and subsequent amendments;
- EN61000-3-3:2014 and subsequent amendments.
- • Reg. UE N.528/2012 (Biocides regulation)
- • Reg. UE N.528/2012 (Biocides regulation)
- it is also built according to the provisions of Italian Legislative Decree 81/2008 "health and safety Ozone Compliance

The Ozone produced complies with Italian Ministry of health, Protocol no. 24482 dated 07/1996, as OZONE HAS BEEN RECOGNIZED BY PUBLIC HEALTH MINISTRY OF (PROTOCOLLO N. 24482 DEL 31 LUGLIO 1996) AS **NATURAL PROTECTION FOR THE STERILIZATION OF ENVIRONMENTS CONTAMINATED BY BACTERIA, VIRUSES, SPORES ETC. AND INFESTED WITH MITES, INSECTS, ETC.**

Made in Italy Pursuant to art. 16 c.1 of Legislative Decree 135/2009, Terminter srl with Head Quarter in San Filippo del Mela (ME) Z.I. , aware of the penalties provided for by art. 517 of the Italian Criminal Code in the case of untruthful declarations, DECLARES that the aforementioned Device in its engineering design, in its design, manual processing and packaging were carried out exclusively on the Italian Territory.

  
**TERMINTER srl**  
 Zona Industriale GIAMMORO  
 98044 S. FILIPPO DELMELA (Me)  
 Tel. 098.6385464 - 098.8985420  
 Fax 098.5385481 - Part. IVA: 01145290837



**EAGLE TECH CO., LTD.**

257/104, VILLAGE NO. 1, NONG KRATHUM - MUANG DISTRICT, NAKHON RATCHASIMA 30000



## CERTIFICATIONS



**afnor**  
ITALIA

**Spett.le  
TERMINER  
Zona Industriale Regionale  
98044 San Filippo del Mela (ME)**

Ref. C-107/AGA-brp

Oggetto: Attestazione di conformità di prodotto DISPOSITIVO AD OZONO CON TECNOLOGIA AD EFFETTO CORONA LAMELLARE O TUBOLARE O LAMPADA U.V.C. a partire da 0,2mg fino a 120g  
Product conformity attestation: OZONE DEVICE WITH LAMELLAR OR TUBULAR CROWN EFFECT TECHNOLOGY OR U.V.C. LAMP from 0.2mg up to 120g

Data: 29 Maggio 2020

Con la presente siamo lieti di comunicare che è stata riscontrata la rispondenza alle normative sotto indicate di prodotti in oggetto:  
*Hereby, we are pleased to inform you that the compliance of the products in question with the following standards has been found:*

Norma UNE 400 - 201 - 94.  
*UNE 400 - 201 - 94 Standard.*

Nei prossimi cinque giorni lavorativi saranno completati gli adempimenti burocratici da parte del nostro comitato di attestazione; da quel momento procederemo all'invio dell'attestato di conformità alla norma UNE 400-201-94, che porterà il numero 800-774-265, insieme alle marche da utilizzare.

*In the next five working days, the bureaucratic fulfillments will be completed by our attestation committee; from that moment we will proceed to send the certificate of conformity to the UNE 400-201-94 standard, which will bear the number 800-774-265, together with the brands to be used.*

CBCERT SRL

Sede Operativa-Direzionale: Via XXII Maggio 1944, 54 - 65013 CITTÀ SANT'ANGELO (PE) - ITALIA  
Tel e Fax +39 085 9506085 - [info@cbcert.it](mailto:info@cbcert.it) [cbcert@pec.it](mailto:cbcert@pec.it)  
Sede di Rappresentanza: Via Ada Negri, 18 - 20060 PESSANO CON BORNAGO (MI) -ITALIA  
Internet: [www.cbcert.it](http://www.cbcert.it)

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**EAGLE TECH CO., LTD.**

257/104, VILLAGE NO. 1, NONG KRATHUM - MUANG DISTRICT, NAKHON RATCHASIMA 30000



BUREAU  
VERITAS

Bureau Veritas Certification

## TERMINTER SRL

Zona Industriale, snc Frazione Giammoro-98044 S. FILIPPO DEL MELA (ME) - Italy

Sede Oggetto di certificazione:

Zona Industriale, 196 - Frazione Giammoro - 98044 SAN FILIPPO DEL MELA (ME)

Bureau Veritas Italia S.p.A. certifica che il sistema di gestione della Sicurezza Alimentare dell'organizzazione sopra indicata è stato valutato e giudicato conforme ai requisiti della norma di sistema di gestione seguente

## ISO 22000:2018

Campo di applicazione

Produzione di apparecchiature per il trattamento delle acque ad uso alimentare.

Categoria: J

Data della certificazione originale:	15-Maggio-2020
Data di scadenza precedente ciclo di certificazione:	NA
Data dell'Audit di certificazione / rinnovo:	24-Marzo-2020
Data d'inizio del presente ciclo di certificazione:	15-Maggio-2020
Soggetto al continuo e soddisfacente mantenimento del sistema di gestione questo certificato è valido fino al:	15-Maggio-2023

N° Certificato: IT298003

del: 15-Maggio-2020

Emissione N. 1

GIORGIO LANZAFAME - Local Technical Manager

Indirizzo dell'organismo di certificazione:

Bureau Veritas Italia S.p.A., Viale Monza, 347 - 20126 Milano, Italia

Ulteriori chiarimenti sul campo di applicazione di questo certificato e sui requisiti applicabili della norma del sistema di gestione possono essere ottenuti consultando l'organizzazione. Per controllare la validità di questo certificato consultare il sito [www.bureauveritas.it](http://www.bureauveritas.it)



IRAM N° 0202  
Membro del Gruppo di Norme Internazionali, ISO 9001  
Sistema di IS, SF and SPC, member Registrar Agreement



**BUREAU VERITAS**  
Certification



## TERMINTER S.R.L.

Zona Industriale, 196 – Frazione Giommoro 98044 San Filippo del Mela (ME)

**Sede oggetto di certificazione:**

Zona Industriale, 196 – Frazione Giommoro 98044 San Filippo del Mela (ME)

*Bureau Veritas Italia S.p.A. certifica che il Sistema Completo di Garanzia di Qualità di questa organizzazione è stato valutato e giudicato conforme ai requisiti previsti dalla*

### DIRETTIVA 93/42/CEE e s.m.i.

*in accordo all'Allegato II - escluso paragrafo 4)*

*In relazione ai seguenti prodotti*

Sottocategoria di prodotto:	Dispositivi attivi per disinfezione e sterilizzazione
Gruppo generico:	Sistema ad osmosi inversa per il trattamento delle acque in e modialisi
Nome commerciale:	Farmacqua®
Modello:	FM100D
Classe:	IIB

Riferimento pratica BV : ZIG. N. 60545631

Data della certificazione originale: **04 giugno 2018**

Data di scadenza precedente ciclo di certificazione: **na**

Data dell'Audit di certificazione / rinnovo: **11 maggio 2018**

Data d'inizio del presente ciclo di certificazione **04 giugno 2018**

Soggetto al continuo e soddisfacente mantenimento del sistema di gestione questo certificato è valido fino al: **03 giugno 2023**

N° Certificato - Revisione: IT281870-2

del: 23 marzo 2020

  
**ANDREA FILIPPI - Certification SL Manager**

*Tale certificato è rilasciato da Bureau Veritas Italia S.p.A., Viale Monza, 347- 20126 Milano, quale ente notificato per la direttiva 93/42/CEE, con numero identificativo 1370*

*Ulteriori chiarimenti sul campo di applicazione di questo certificato e sui requisiti applicabili della norma del sistema di gestione possono essere ottenuti consultando l'organizzazione. Per controllare la validità di questo certificato consultare il sito [www.bureauveritas.it](http://www.bureauveritas.it)*



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## SCIENTIFIC STUDIES

We are pleased to suggest you some articles and scientific literature on Ozone use for air sterilization.

### EXECUTIVE SUMMARY

Scientific Article	link
Ozone Efficacy for the control of airborne virus	<a href="#">READ THE ARTICLE</a>
Ozone disinfection of SARS Contaminated Areas	<a href="#">READ THE ARTICLE</a>
The Timeliness of ozone in the covid era	<a href="#">READ THE ARTICLE</a>
Potential use of Ozone in Sars-CoV2	<a href="#">READ THE ARTICLE</a>
Ozone Health Effects and Standards	<a href="#">READ THE ARTICLE</a>
Biocides and Novel Antimicrobial Agents for the Mitigation of Coronaviruses	<a href="#">READ THE ARTICLE</a>
On airborne transmission and control of SARS-Cov-2	<a href="#">READ THE ARTICLE</a>
Inactivation of surface viruses by gaseous Ozone	<a href="#">READ THE ARTICLE</a>
Ozone can be used to destroy new corona virus and disinfect areas	<a href="#">READ THE ARTICLE</a>

