

## OZONE DECOMPOSITION CATALYST

THE TRANSFORMATION OF OZONE INTO OXYGEN (EFFICIENCY IS UP TO 99,8%)

### APPLICATION



Ozone is a toxic substance of the hazard the 1<sup>st</sup> category, the main aggressive agent of street smog provoking broncho-pulmonary diseases, asthma and allergy. Ozone is generated not only in the nature and in city streets. Significant sources - copy machines, laser printers, CRT-monitors, ionizers, air purification electric devices exist inside rooms.

The catalyst converts dangerous ozone into safe oxygen and decomposes some harmful volatile compounds into safe components.

### DESCRIPTION AND FEATURES

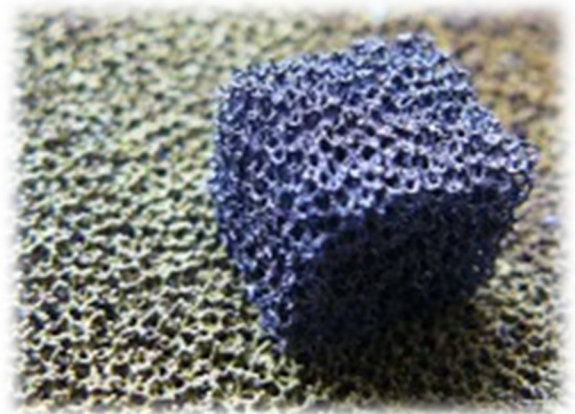
Catalyst is a composite material consists of 3 layers:

- ✓ catalyst carrier (ceramics foam, granules),
- ✓ secondary carrier with special composition and features,
- ✓ ultra-dispersed metal oxide catalytic coating.

The catalyst has a high efficiency and can be used in the wide range of temperatures and concentrations due to unique composition of catalytic layer and presence of the secondary carrier.

Generally we recommend using of catalyst based on ceramics foam. The unique open-cellular net structure of foam materials ensures ultrahigh permeability of the catalyst. Application of a catalyst based on foam materials allows intensifying energy— and mass — transferring at the surface, at the expense of efficient turbulization.

In a case when the usage of ceramics foam for some reason or other is impossible catalyst carrier is covered to granules of  $Al_2O_3$ .



## TECHNICAL CHARACTERISTICS

ECAT Company produces two types of Ozone Decomposition based on foam material (ceramics foam) or on Al<sub>2</sub>O<sub>3</sub> granules.

Appearance	Foam blocks	Granules (spheres)
Carrier	Al <sub>2</sub> O <sub>3</sub> foam	Al <sub>2</sub> O <sub>3</sub> granules
Catalytic coating	Metal oxides (Mn <sub>2</sub> O <sub>3</sub> -CuO-(NiO), LaAgMnO <sub>x</sub> и др.)	Metal oxides (Mn <sub>2</sub> O <sub>3</sub> -CuO-(NiO), LaAgMnO <sub>x</sub> и др.)
Specific surface	10-250 m <sup>2</sup> /g	90-150 m <sup>2</sup> /g
Average cell size	0,5 – 4 mm	-
Density	0,045-0,1 g/cm <sup>3</sup>	0,77-1,0 g/cm <sup>3</sup>
Max sizes	500x500x30 mm	-

## SERVICE CONDITIONS

Operating temperature	20 – 500°C
Efficiency	Up to 99,8%
Durability	10 000 - 30 000 hours

FOR MORE DETAILED INFORMATION YOU CAN CONTACT US BY FOLLOWING

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