Ozone O_3

1. General charaterization

It is a very oxidant and reactive gas with strong smell. It focuses on the stratosphere and protects against harmful UV radiation. Present ground level ozone acts as a component of "photochemical smog". It is formed through reaction involving, in particular, nitrogen oxides and volatile organic compounds.

2. Air pollutant effects on human health

- cough;
- wheezing;
- nasal and lugs congestion;
- heavy breathing, accelerated breathing;
- irritation of eyes and nose;
- nausea.

3. Air pollutant effects on ecosystems

- while the stratospheric ozone is a shield against ultraviolet radiation, the ground level ozone has impact on the cultures and forests;
- it has destructive effects on some products (rubber, nylon, etc.) fabricated by the human being;
- it contributes to the climatic changes as a gas with greenhouse effect;
- negative impact on the flora, retarding the photosynthesis and contributing to the cell destruction.

4. Specific Index

O_3 Concentration Range [µg/m^3]	Specific index
0-39.(9)	1
40-79.(9)	2
80-119.(9)	3
120-179.(9)	4
180-239.(9)	5
>240	6