Carbon Monoxide CO

1. General characterization

At ambient temperature carbon monoxide is a colorless, odorless, tasteless gas, of both natural and anthropogenic origin. Carbon monoxide is formed primarily by the incomplete combustion of fossil fuels.

Carbon monoxide may accumulate at a dangerous level, especially during the calm weather periods, in winter and spring time (being much more chemically stable at low temperatures), when the burning of fossil fuels reaches a maximum.

2. Air pollutant effects on human health

-it is a toxic gas, being a lethal one in high concentrations (at concentrations of about 100 mg/m^3), by reducing the transport capacity of oxygen in blood, with consequences on the respiratory and cardiovascular system.

-at relatively low concentrations, it affects the central nervous system, weakens the heart rate, decreasing so the blood volume distributed in organism, reduces the visual acuity and physical capacity; short time exposure may cause acute fatigue, shortness of breath and chest pain to the persons with cardiovascular diseases, determines irritability, migraines, lack of coordination, nausea, dizziness, confusion, reduces the ability to concentrate.

-the segment of the population which is most affected by exposure to carbon monoxide is represented by: children and the elderly, persons with respiratory and cardiovascular diseases, anemic individuals, smokers.

3. Air pollutant effects on ecosystems

At the concentrations usually monitored in atmosphere it has no effects on plants, animals or environment.

4. Specific Index*:*

CO Concentration Range [mg/m^3]	Specific Index
0-2.99	1
3-4.99	2
5-6.99	3
7-9.99	4
10-14.99	5
>15	6