

## Carbon disulfide CS<sub>2</sub>

### 1. General characterization

Carbon disulfide is a colorless volatile liquid, insoluble in water and denser than this, with aromatic odor when is pure, but with an unpleasant smell like that of cabbage when is in a rough state, due to some impurities. It is a very important solvent for bromine, iodine, sulfur, phosphorous, fats, resins etc.

### 2. Air pollutant effects on human health

- carbon disulfide produces poisoning, penetrating easily through skin or respiratory mucosa;
- acute intoxication is manifested by flushing, state of euphoria, followed by loss of consciousness, coma with respiratory paralysis;
- chronic intoxication by inhalation of repeated low doses will be manifested by symptoms such as headache, visual and auditory disorders, partial loss of memory (amnesia), inflammation of nerves and blood vessels.

### 3. Air pollutant effects on ecosystems

- studies performed on animals have shown effects related to the toxicity of carbon sulfide on the target organs (central nervous system, blood, liver, eyes) at a chronic exposure;
- tests that implied acute exposure performed on rats, mice, rabbits, have demonstrated that carbon sulfide has a low acute toxicity at inhalation and a moderate acute toxicity at ingestion;
- effects on organism development, including skeletal malformation, embryonic toxicity, functional and behavioral disorders have been noticed in a lot of studies on animals within a wide range of exposure.

**4. Limit values** agreed between Romania and Bulgaria for the border area, for being used within a transboundary context

Carbon disulfide CS <sub>2</sub>	Limit value averaged over 1h	15 µg/m <sup>3</sup>
	Limit value averaged over 24h	8 µg/m <sup>3</sup>