

M.SC Semester III

Core Course XII

Environmental Chemistry

**TOPIC:-Unit IV, SPECIFIC HEALTH &
ENVIRONMENTAL REQUIREMENT**

Department of Chemistry

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SPECIFIC HEALTH & ENVIRONMENTAL REQUIREMENT

- THIS INCLUDES:-
 - a. Toxic chemicals.
 - b. Carcinogens & reproductive toxins.
 - c. Flammability.
 - d. Ozone depletion.
 - e. Toxicity to aquatic life.

CONTI.....

- **TOXIC CHEMICALS:-**

A solvent is considered to be toxic if-
oral $LD_{50} < 50\text{mg/kg}$.

Dermal $LD_{50} < 200\text{mg/kg}$.

- **CARCINOGENS & REPRODUCTIVE TOXINS:-**

Carcinogens are defined as those chemicals listed in current edition of “annual report on carcinogens”.

Reproductive are defined as those chemicals listed under ‘safe drinking water & toxic enforcement act’ of 1986.

CONTI.....

- **FLAMMIBILITY:**

The solvent in should not be flammable.

The flash point of chemical should be above 100°F.

- **OZONE DEPLETION:**

The solvent in use should not contain any-

CLASS-I/

CLASS-II ozone depleting substances listed in title VI of clean air act.

- **TOXICITY TO AQUATIC LIFE:** chemicals in use should not have any effect on aquatic animals.