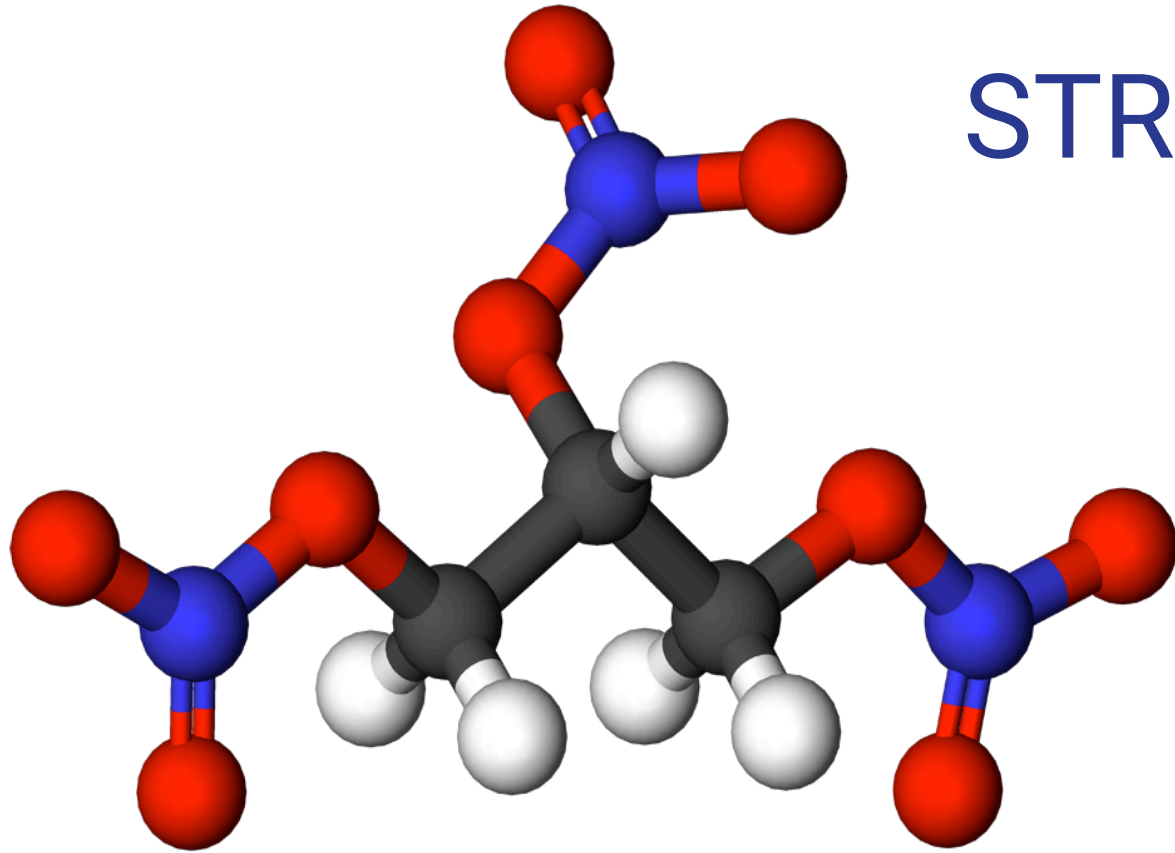


Molecule Monday

STRUCTURE

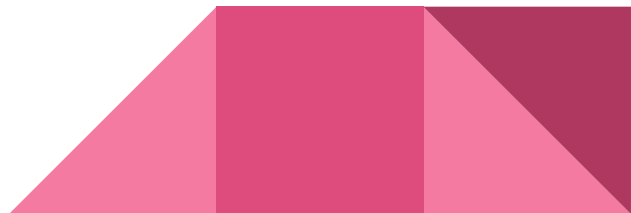


NAMES & FORMULA

Chemical Formula: $\text{C}_3\text{H}_5\text{N}_3\text{O}_9$

IUPAC Name: Propane-1,2,3-triyl trinitrate

Other names 1,2,3-Tris(nitrooxy)propane



Properties

Molar Mass: 227.09 g/mol

Density : 1.6 g/mL

Melting Point: 14 °C (57 °F; 287 K)

Boiling Point: 50 °C (122 °F; 323 K) explodes

Slightly soluble in water

Soluble in acetone, ether, benzene, alcohol



INFORMATION

- an oily liquid that may explode when subjected to heat, shock or flame.
- Developed as a blasting explosive
- is used as a medicine for angina pectoris, a painful symptom of ischemic heart disease
- used as an ingredient in military propellants for use in firearms
- has been used in conjunction with hydraulic fracturing, a process used to recover oil and gas from shale formations.
- on detonation it produces practically no visible smoke
- can cause severe headaches that can incapacitate people



NITROGLYCERINE

