



# ORBITALA

*who dares wins*

## PRODUCT: CL-20

**Chemical name:** CL-20 (hexanitrazaisowurzitane)

**Chemical formula:**  $C_6H_6N_{12}O_{12(s)}$

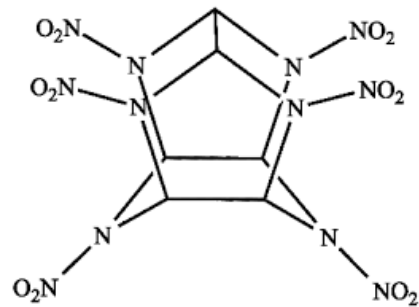
**Particle sizes:** According to MIL specs

**Coarse:** 150  $\mu m$

**Medium:** 20/50  $\mu m$

**Fine:** 5  $\mu m$

**Purity:** > 95%



## CHARACTERISTIC:

**Melting point:** 247 °C

**Density:** 2.02 – 2.04

**Heat of formation:** 372 kJ/mole

**Auto-ignition temperature:** 220 °C

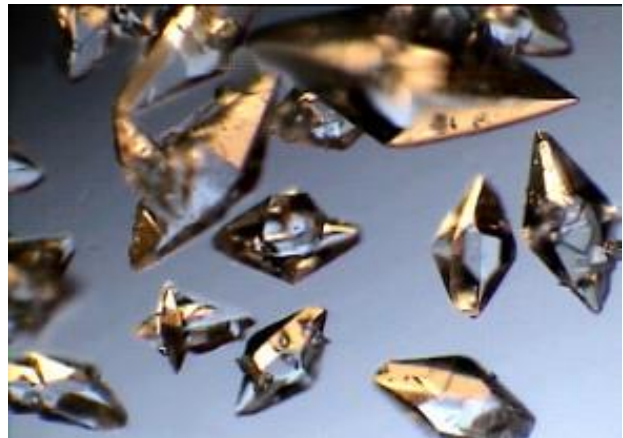
**Vacuum stability:** < 1 cm<sup>3</sup>/g

**Acidity:** < 0.2 meq/100g

**Detonation velocity:** 10 000 m/s

**Friction sensitivity (ISF):** 80 N

**Impact sensitivity (ISI):** 2 J



## USES:

According to its high heat of formation and density, CL-20's performance is approximately 20% higher than standard explosives. The high burning rate is useful for high impulse energetic material for rocket motor applications like boosters. CL-20 is used as filler in rocket propellants, high explosives and high energetic aluminized and minimum smoke composite propellant manufacturing.