



TNT

Trinitrotoluene — Castable High Explosive (UN 0209)

TNT (Trinitrotoluene) is a widely used castable high explosive known for its excellent thermal stability, melt-cast capability, and consistent detonation properties. It serves as a foundational energetic material for military, demolition, and munition-filling applications.

SWORD Energetics supplies TNT in pressed flake or molten-castable form, meeting MIL-DTL-248D and STANAG specifications. Its low sensitivity, cost-effectiveness, and compatibility with other energetic compounds make it ideal for filling artillery shells, aerial bombs, demolition charges, and composite explosive blends such as Amatol and Composition B.

PERFORMANCE SPECS

Velocity of Detonation	6,900m/s
Density	1.60g/cm ³
Detonation Pressure	21.0 GPa
Heat of Explosion	4,650 kJ/kg
Oxygen Balance	-74.0%
Impact Sensitivity	15 J
Friction Sensitivity	240 N
Melting Point	80.8°C

PACKAGING INFO

Packaging Type	Steel Drum or Cast Charge Block
Weight Per Unit	25kg (flake) or 5kg (block)
Units Per Pallet	12 drums or 50 blocks
Pallet Weight	300–600kg
Drum Dimensions	16" dia × 24" height
Shelf Life	10+ years
Storage Conditions	≤30°C, low humidity

HAZARD CLASSIFICATION

UN Number	0209
Hazard Class	1.1D
Compatibility Group:	D



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