

## OCTOGEN, HMX

Octogen, Cyclotetramethylenetetranitramine,  $C_4H_8N_8O_8$  (Mr 296.2)

*Appearance: fine white powder*

*Class 1.1D, UN 0226*

*Transport RID/ADR, IMDG*

*Crystal density, g/cm<sup>3</sup>: 1.908*

*Detonation velocity, m/s: 9.100*

*Oxygen balance, % (m/m): -21,6*

*Heat of explosion, kJ/kg: 6.192*

*Impact sensitivity, N/m: 7,4*

*Friction sensitivity, N: 120*

### *Technical specification*

1. Color and appearance	crystalline white powder, without mechanical impurities		
2. Content of HMX, % (m/m), min	98		
Content of RDX, % (m/m), max	2		
3. Insoluble in acetone, % (m/m), max	0,05		
4. Melting point °C, minimum	277		
5. Ash, % (m/m), max	0,03		
6. Acidity as CH <sub>3</sub> , COOH, % (m/m), max	0,02		
7. Crystal modification	β		
8. Particle size % (m/m), passes through sieves, mm	Grade I	Grade II	Grade III
2,360	-	100	100
1,700	100	min 99	min 85
0,500	90±10	-	20±15
0,300	60±25	40±15	-
0,150	20±15	20±10	max 15
0,075	10±10	10±10	-