

Annex 8

The Soviet Army's chemical warfare agents

The standard chemical munitions placed on display contain the following CW agents: mustard gas/lewisite mixture, viscous lewisite, sarin, viscous soman, VX, viscous VX and CS (table 1).

These agents are used in the following equipment:

Mustard gas/lewisite mixture - aerial bombs and spray tanks;

Viscous lewisite - tube artillery shells;

Sarin - tube and rocket artillery shells and aerial bombs;

Viscous soman - spray tanks;

VX - tube and rocket artillery shells and tactical missile warheads;

Viscous VX - tactical missile warheads;

CS - chemical hand-grenades.

There are no binary chemical weapons in the Soviet Army.

Mustard gas/lewisite mixture.

The mustard gas/lewisite mixture is a dark brown liquid with a sharp, unpleasant odour.

Physico-chemical characteristics:

Boiling point:	Above 200°C
Freezing point:	-48.5 -50°C
Density:	1.428x10 <sup>3</sup> kg/m <sup>3</sup>
Volatility:	1.53x10 <sup>-3</sup> kg/m <sup>3</sup>
Dynamic viscosity:	8.7x10 <sup>-3</sup> Pa.s
Surface tension:	4.4x10 <sup>-2</sup> kg/s <sup>2</sup>
Diffusion coefficient:	5.83x10 <sup>-6</sup> m <sup>2</sup> /s.

The toxicological characteristics of this preparation are determined by the properties of its constituents, which are nerve and paralysing agents producing marked blister effects:

Ineffective dose on the skin of a rabbit:	0.0005 mg/cm <sup>2</sup>
Minimum effective dose on the skin of a rabbit:	0.005 mg/cm <sup>2</sup>