i. Dinitrogen trioxide;
ii. Nitrogen dioxide/dinitrogen tetroxide;
iii. Dinitrogen pentoxide;
iv. Inhibited Red Fuming Nitric Acid (IRFNA);
v. Compounds composed of fluorine and one or more of other halogens, oxygen or nitrogen.

b. Polymeric substances:
1. Carboxy-terminated polybutadiene (CTFB);
2. Hydroxy-terminated polybutadiene (HTFB);
3. Glycidyl azide polymer (GAP);
4. Polybutadiene-acrylic acid (PBAA)
5. Polybutadiene-acrylic acid-acrylonitrile (PBAN).

c. Composite propellants including molded glue propellants and propellants with nitrated bonding;

d. Other high energy density propellants such as Boron Slurry, having an energy density of 40 X 10^6 joules/kg or greater;

e. Other propellant additives and agents:
1. Bonding agents, as follows:
i. tris (1-(2-methyl)aziridinyl) phosphine oxide (MAPO)
ii. trimesoyl-1(2-ethyl) aziridine (HX-868, BITA);
iii. "Tepanol" (HX0878), Reaction product of tetraethlylenepentamine, acrylonitrile and glycidol;
iv. "Tapan" (HX-879), Reaction product of tetraethlylenepentamine and acrylonitrile;
v. Polyfunctional aziridene amides with isophthalic, trimesic, isocyanuric or trimethyladipic backbone also having a 2-methyl or 2-ethyl aziridine group (HX-752, HX-874 and HX-877);
2. Curing agents and catalysts as follows:
i. Triphenyl bismuth (TPB);
ii. Isophorone diisocyanate (IPDI);
3. Burning rate modifiers as follows:
i. Catocene;
ii. N-butyl-ferrocene;
iii. Butacene;
iv. Other ferrocene derivatives;
4. Nitrate esters and nitrato plasticizers as follows:
i. Triethylene glycol dinitrate (TEGDN);
ii. Trimethylolethane trinitrate (TMETC);
iii. 1,2,4-butanetriol trinitrate (BTTN);
iv. Diethylene glycol dinitrate (DEGDN);
5. Stabilizers, as follows:
i. 2-nitrodiphenylamine;
ii. N-methyl-p-nitroaniline;

6005. Production technology, or "production equipment" (including its specially designed components) for:

6005. a. Production, handling or acceptance testing of liquid propellants or propellant constituents described in Item 6004.;

b. Production, handling, mixing, curing, casting, pressing, machining, extruding or acceptance testing of solid propellants or propellant constituents in Item 6004.

Notes to Item 6005.:

1. Batch mixers or continuous mixers covered by (b) above, both with provision for mixing under vacuum in the range of zero to 13.326 kPa and with temperature control capability of the mixing chamber, are the following:
Batch mixers having:
a. A total volumetric capacity of 110 litres (30 gallons) or more; and
b. At least one mixing/kneading shaft mounted off centre.
Continuous mixers having:
a. Two or more mixing/kneading shafts; and
b. Capability to open the mixing chamber.
2. The following equipment is included in 6005.b. above:
a. Equipment for the production of atomized or spherical metallic powder in a controlled environment;
b. Fluid energy mills for grinding or milling ammonium perchlorate, RDX, HMX.

6006. Equipment, "technical data" and procedures for the production of structural composites "usable in" the systems in Item 6001., as follows, and specially designed components, and accessories and specially designed software therefor:

6006. a. Filament winding machines of which the motions for positioning, wrapping and winding fibers are coordinated and programmed in three or more axes, designed to fabricate composite structures or laminates from fibrous and filamentary materials, and coordinating and programming controls;

b. Tape-laying machines of which the motions for positioning and laying tape and sheets are coordinated and programmed in two or more axes, designed for the manufacture of composite airframes and missile structures;

c. Interlacing machines, including adapters and modification kits for weaving, interlacing and braiding fibers designed to fabricate composite structures, except textile machinery which has not been modified for the above end uses;

d. Equipment designed or modified for the production of fibrous and filamentary materials, as follows:
1. Equipment for converting polymeric fibers (such as polyacrylonitrile, rayon or polycarbosilane) including special provision to strain the fibre during heating;
2. Equipment for the vapour deposition of elements or compounds on heated filament substrates; and
3. Equipment for the wet-spinning of refractory ceramics (such as aluminum oxide);

e. Equipment designed or modified for special fibre surface treatment or for producing prepregs and preforms;

f. Technical data (including processing conditions) and procedures for the regulation of temperature, pressures or atmosphere in autoclaves or hybroclaves when used for the production of composites or partially precessed composites.

Notes to Item 6006.:

1. Examples or components and accessories for the machines covered by this entry are moulds, mandrels, dies, fixtures and tooling for the preform pressing, curing, casting, sintering or bonding of composite structures, laminates and manufactures thereof.
2. Equipment covered by sub-item 6006.e includes but is not limited to rollers, tension stretchers, coating equipment, cutting equipment and clicker dies.

6007. Pyrolytic deposition and densification equipment and "technology", as follows:

6007. a. "Technology" for producing pyrolytically derived materials formed on a mould, mandrel or other substrate from precursor gases which decompose in the 1,300 C to 2,900 C temperature range at pressures of 130 Pa (1 mm Hg) to 20 kPa (150 mm Hg) including technology for the composition or precursor gases, flow-rates, and process control schedules and parameters;

b. Specially designed nozzles for the above processes;

c. Equipment and process controls, and specially designed software therefor, designed or modified for densification and pyrolysis of structural composite rocket nozzles and reentry vehicle nose tips.

Notes to Item 6007.:

1. Equipment included under 6007.c. above are isostatic presses having all of the following characteristics:
a. Maximum working pressure of 69 MPa (10,000 psi) or greater;
b. Designed to achieve and maintain a controlled thermal environment of 600 C or greater; and
c. Possessing a chamber cavity with an inside diameter of 254 mm (10 inches) or greater.
2. Equipment included under 6007.c. above are chemical vapour deposition furnaces designed or modified for the densification of carbon-carbon composites.

6008. Structural materials "usable in" the systems in Item 6001., as follows:

6008. a. Composite structures, laminates, and manufactures thereof, including resin impregnated fibre prepregs and metal coated fibre preforms therefor, specially designed for use in the systems in Item 6001. and the subsystems in Item 6002. made either with organic matrix or metal matrix utilizing fibrous or filamentary reinforcements having a specific tensile strength greater than 7.62 X 10 m (3 X 10 inches) and a