- Other organic high explosives not listed in this Note yielding detonation pressures of 250 kilobars or more that will remain stable at temperatures of 523 K (250\$C) or higher for periods of 5 minutes or longer;
- Any other UN Class 1.1 solid propellant not listed in this Note with a theoretical specific impulse (under standard conditions) of more than 250 seconds for non-metallised, or more than 270 seconds for aluminised compositions;
- Any UN Class 1.3 solid propellant with a theoretical specific impulse of more than 230 seconds for non-halogenised, 250 seconds for non-metallised and 266 seconds for metallised compositions;
- Any other gun propellants not listed in this Note having a force constant of more than 1,200 kJ/kg;
- Any other explosive, propellant or pyrotechnic notlisted in this Note that can sustain a steady-state burning rate of more than 38 mm per second under standard conditions of 68.9 bar pressure and 294 K(21°C);
- Elastomer modified cast double based propellants (EMCDB) with extensibility at maximum stress of more than 5% at 233 K (-40°C).
- 2. "Additives" include the following:
  - a. Glycidylazide Polymer (GAP) and its derivatives;
  - b. Polycyanodifluoroaminoethyleneoxide (PCDE);
  - c. Butanetrioltrinitrate (BTTN);
  - d. Bis-2-fluoro-2,2-dinitroethylformal (FEFO);
  - e. Butadienenitrileoxide (BNO);
  - f. Catocene, N-butyl-ferrocene and other ferrocene derivatives;
  - g. Bis(2,2-dinitropropyl) formal and acetal;
  - h. 3-nitraza-1,5-pentane diisocyanate;
  - Energetic monomers, plasticisers and polymers containing nitro, azido, nitrate, nitraza ordifluoroamino groups;
  - j. 1,2,3-Tris[1,2-bis(difluoroamino)ethoxy] propane; Tris vinoxy propane adduct (TVOPA);
  - k. Bisazidomethyloxetane and its polymers;
  - Nitratomethylmethyloxetane or poly (3-Nitratomethyl, 3-methyl oxetane); (Poly-NIMMO) (NMMO);
  - m. azidomethylmethyloxetane (AMMO) and its polymers;
  - n. Polynitroorthocarbonates;
  - o. Tetraethylenepentamineacrylonitrile (TEPAN); cyanoethylated polyamine and its salts;
  - p. Tetraethylenepentamineacrylonitrileglycidol
  - (TEPANOL); cyanoethylated polyamine adducted with glycidol and itssalts;
  - q. Polyfunctional aziridine amides: with isophthalic, trimesic (BITA); butylene imine trimesamideisocyanuric; or trimethyladipic backbone structures and 2-methyl or 2-ethyl substitutions on the aziridine ring;
  - r. Basic copper salicylate; lead salicylate;
  - s. Lead beta resorcylate;
  - t. Lead stannate, lead maleate, lead citrate;
  - u. Tris-1-(2-methyl)aziridinyl phosphine oxide (MAPO);bis(2-methyl aziridinyl) 2-(2hudeoxymeroperatu) propulatino phosphine oxide
  - hydroxypropanoxy) propylamino phosphine oxide (BOBBA 8); and other MAPOderivatives;
  - v. bis(2-methyl aziridinyl) methylamino phosphine oxide (Methyl BAPO);
  - w. Organo-metallic coupling agents, specifically:
    - Neopentyl [diallyl] oxy, tri [dioctyl] phosphatotitanate ; also known as titanium IV, 2,2[bis2-propenolatomethyl, butanolate or tris [dioctyl]phosphato-O], or LICA 12;
    - Titanium IV, [(2-propenolato-1) methyl, N-propanolatomethyl] butanolato-1, also known as tris[dioctyl]pyrophosphato or KR3538;
    - Titanium IV, [(2-propenolato-1)methyl, N-propanolatomethyl] butanolato-1, also known as tris(dioctyl)phosphate or KR3512;
  - x. FPF-1 poly-2,2,3,3,4,4-hexafluoropentane-1,5-diolformal;
  - y. FPF-3 poly-2,4,4,5,5,6,6-heptafluoro-2-tri-fluoromethyl-
  - 3- oxaheptane-1,7-diol formal;
    z. Polyglycidylnitrate or poly (Nitratomethyl oxirane);(Poly-GLYN) (PGN);
  - aa. Hydroxyl terminated polybutadiene (HTPB) with ahydroxyl functionality of less than 2.16, a hydroxyl

value of less than 0.77 meq/g, and a viscosity at  $30^{\circ}$ Cof less than 47 poise;

- bb. Lead-copper chelates of beta-resorcylate or salicylates;
- cc. Triphenyl bismuth (TPB);
- dd. Bis-2-hydroxyethylglycolamide (BHEGA);
- ee. Superfine iron oxide (Fe<sub>2</sub>0<sub>3</sub> hematite) with a specific surface area more than 250 m/g and an average particle size of 0.003 micrometre or less;
- ff. N-Methyl-p-Nitroaniline.
- "Aircraft" fuels embargoed by sub-item d. are finished products not their constituents;
- Sub-item d. includes military materials containing thickeners for hydrocarbon fuels specially formulated for use in flamethrowers or incendiary munitions, such as metal stearates or palmates (also known as octol) and M1,M2, M3 thickeners.
- 5. "Precursors" include the following:
  - a. Guanidine nitrate;
  - b. 1,2,4 trihydroxybutane (1,2,4-butanetriol);
  - c. 1,3,5-trichlorobenzene;
  - d. Bischloromethyloxetane (BCMO);
  - Low (less than 10,000) molecular weight, alcoholfunctionalised, poly(epichlorohydrin); poly(epichlorohydrindiol) and triol;
  - f. Propyleneimide, 2-methylaziridine;
  - g. 1,3,5,7 tetraacetyl-1,3,5,7,-tetraaza cyclo-octane(TAT);
  - h. Dinitroazetidine-t-butyl salt;
  - i. Hexabenzylhexaazaisowurtzitane (HBIW);
  - j. Tetraacetyldibenzylhexaazaisowurtzitane (TAIW);
  - k. 1,4,5,8 Tetraazadecaline.
- This Item does not embargo those "precursors" that are industrial chemicals, not embargoed elsewhere in the International Lists, widely available in international markets.
- This Item does not embargo the following substances when not compounded or mixed with military explosives or powdered metals:
  - a. Ammonium picrate;
  - b. Black powder;
  - c. Hexanitrodiphenylamine;
  - d. Difluoroamine (HNF<sub>2</sub>);
  - e. Nitrostarch;
  - f. Potassium nitrate;
  - g. Tetranitronaphthalene;
  - h. Trinitroanisol;
  - i. Trinitronaphthalene;
  - j. Trinitroxylene;
  - k. Fuming nitric acid non-inhibited and not enriched;
  - 1. Trinitrophenylmethylnitramine (tetryl);
  - m. Acetylene;
  - n. Propane;
  - o. Liquid oxygen;
  - p. Hydrogen peroxide in concentrations of less than 85%;q. Misch metal;
  - r. N-pyrrolidinone; 1-methyl-2-pyrrolidinone;
  - s. Dioctylmaleate;
  - t. Ethylhexylacrylate;
  - u. Triethylaluminium (TEA), trimethylaluminium (TMA), andother pyrophoric metal alkyls and aryls of lithium, sodium, magnesium, zinc and boron;
  - v. Nitrocellulose;
  - w. Nitroglycerin (or glyceroltrinitrate, trinitroglycerine) (NG);
  - x. 2,4,6-trinitrotoluene (TNT);
  - y. Ethylenediaminedinitrate (EDDN);
  - z. Pentaerythritoltetranitrate (PETN);
  - Lead azide, normal and basic lead styphnate, and primary explosives or priming compositions containing azides or azide complexes;
  - bb. Triethyleneglycoldinitrate (TEGDN);
  - cc. 2,4,6-trinitroresorcinol (styphnic acid);
  - dd. Diethyldiphenyl urea; dimethyldiphenyl urea;methylethyldiphenyl urea [Centralites];
  - ee. N,N-diphenylurea (unsymmetrical diphenylurea);
  - ff. Methyl-N,N-diphenylurea (methyl unsymmetricaldiphenylurea);
  - gg. Ethyl-N,N-diphenylurea (ethyl unsymmetricaldiphenylurea);
  - hh. 2-Nitrodiphenylamine (2-NDPA);
  - ii. 4-Nitrodiphenylamine (4-NDPA);