

Note if no member country has filed an objection within 8 weeks of the receipt of complete information on the case.

2008. Military explosives and fuels, as follows, and "additives", "precursors" and "stabilisers" therefor:

2008. a. "Military high explosives";
b. "Military propellants";
c. "Military pyrotechnics";
d. Military high-energy solid or liquid fuels, including aircraft fuels specially formulated for military purposes.

NOTE:

It is understood that this sub-item embargoes finished products only and does not embargo constituents.

NOTES:

1. "Military high explosives", "military propellants" and "military pyrotechnics" include substances and mixtures which contain any of the following:
 - a. Spherical aluminium powder of particle size 60 micrometres or less manufactured from material with an aluminium content of 99% or more; For technology to achieve sphericity and uniform particle size, see also Category 1025.1.)
 - b. Metal fuels in particle sizes less than 60 micrometres whether spherical, atomized, spheroidal, flaked or ground, manufactured from material consisting of 99% or more of any of the following: zirconium, boron, magnesium and alloys of these; beryllium; fine iron powder with average particle size of 3 micrometres or less produced by reduction of iron oxide with hydrogen;
 - c. Perchlorates, chlorates and chromates composited with powdered metal or other high energy fuel components;
 - d. Nitroguanidine (NQ);
 - e. Compounds composed of fluorine and one or more of the following: other halogens, oxygen, nitrogen;
 - f. Carboranes; decaborane; pentaborane and derivatives;
 - g. Cyclotetramethylenetetranitramine (HMX); octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazine; 1,3,5,7-tetranitro-1,3,5,7-tetraza-cyclooctane; (octogen, octogene);
 - h. Hexanitrostilbene (HNS);
 - i. Diaminotrinitrobenzene (DATB);
 - j. Triaminotrinitrobenzene (TATB);
 - k. Triaminoguanidinenitrate (TAGN);
 - l. Any explosive with a detonation velocity greater than 8,700 m/s or a detonation pressure greater than 340 kilobars;
 - m. Other organic high explosives not listed in this Note yielding detonation pressures of 250 kilobars or greater that will remain stable at temperatures of 523 K (250°C) or higher for periods of 5 minutes or longer;
 - n. Titanium subhydride of stoichiometry TiH 0.65-1.68;
 - o. Dinitrotyrosoluril (DNGU, DINGU); tetranitrotyrosoluril (TNGU, SORGUYL);
 - p. Any other UN Class 1.1 solid propellant not listed in this Note with a theoretical specific impulse (under standard conditions) greater than 250 seconds for non-metallised, or greater than 270 seconds for aluminised compositions;
 - q. Any UN Class 1.3 solid propellant with a theoretical specific impulse greater than 230 seconds with non-halogenised, 250 seconds for non-metallised and 266 seconds for metallised compositions;
 - r. Tetranitrobenzotriazolobenzotriazole (TACOT);
 - s. Diaminohexanitrobiphenyl (DIPAM);
 - t. Picrylaminedinitropyridine (PYX);
 - u. 3-nitro-1,2,4-triazol-5-one (NTO or ONTA);
 - v. Hydrazine in concentrations of 70% or more; hydrazine nitrate; hydrazine perchlorates; unsymmetrical dimethyl hydrazine; monomethyl hydrazine; symmetrical dimethylhydrazine;
 - w. Ammonium perchlorate;
 - x. Cyclotrimethylenetrinitramine (RDX); cyclonite; T4; hexahydro-1,3,5-trinitro-1,3,5-triazine; 1,3,5-trinitro-1,3,5-triaza-cyclohexane; (hexogen, hexogene);
 - y. Hydroxylammonium nitrate (HAN); hydroxylammonium perchlorate (HAP);
 - z. Any other gun propellants not listed in this Note having a force constant greater than 1,200 kJ/kg;
 - aa. Any other explosive, propellant or pyrotechnic not listed in this Note that can sustain a steady-state burning rate

greater than 38 mm per second under standard conditions of 68.9 bar pressure and 294 K (21°C);

- bb. Elastomer modified cast double based propellants (EMCDB) with extensibility at maximum stress greater than 5% at 233 K (-40°C);
- cc. Chemicals designed for propulsive loads:
 1. Propellant substances: Hydroxyl terminated polybutadiene (HTPB) with ferrocene additives such as butacene, having the following characteristics: Hydroxy index (Meq/g) less than 0.77; Viscosity (poise) less than 47; Functionality OH less than 2.16;
 2. Polymeric substances: Hydroxyl terminated polybutadiene (HTPB) having the following characteristics: Hydroxy index (Meq/g) less than 0.77; Viscosity (poise) less than 47; Functionality OH less than 2.16;
 3. All high yield fuels such as boron mixtures capable of releasing energy equal to or more than 40 x 10⁶ J/kg;
 4. Fuels or semi-propellants for ramjets and rocket-ramjets.
2. "Additives" include the following:
 - a. Glycidylazide Polymer (GAP) and its derivatives;
 - b. Polycyanodifluoroaminoethyleneoxide (PCDE);
 - c. Butanetrioltrinitrate (BTNT);
 - 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-nitro-1,5-pentane diisocyanate;
 - i. Energetic monomers, plasticisers and polymers containing nitro, azido, nitrate, nitraza or difluoroamino groups;
 - j. 1,2,3-Tris[1,2-bis(difluoroamino)ethoxy] propane; Tris vinyloxy propane adduct (TVOPA);
 - k. Bisazidomethyloxetane and its polymers;
 - l. Bischloromethyloxetane;
 - m. Polynitroorthocarbonates;
 - n. Tetraethylenepentamineacrylonitrile (TEPAN); cyanoethylated polyamine;
 - o. Tetraethylenepentamineacrylonitrileglycidol (TEPANOL); cyanoethylated polyamine adducted with glycidol;
 - p. Polyfunctional aziridine amides: with isophthalic, trimesic BITA or trimethyladipic backbone structures and 2-methyl or 2-ethyl substitutions on the aziridine ring;
 - q. Basic copper salicylate; lead salicylate;
 - r. Lead beta resorcyate;
 - s. Lead stannate, lead maleate, lead citrate;
 - t. Tris-1-(2-methyl)aziridinyl phosphine oxide (MAPO) and its derivatives;
 - u. Organo-metallic coupling agents, specifically: Neopentyl [diallyl] oxy, tri [diocetyl] phosphate titanate [titanium IV, 2,2[bis 2-propenolate-methyl, butanolate, tris [diocetyl] phosphate-O], LICA 12; Titanium IV, [(2-propenolate-1) methyl, N-propanolatomethyl] butanolate-1, tris[diocetyl]pyrophosphate, KR3538; Titanium IV, [(2-propenolato-1)methyl, N-propanolatomethyl] butanolate-1, tris(dioctyl)phosphate, KR3512.
3. "Precursors" include the following:
 - a. Guanidine nitrate;
 - b. 1,2,4 trihydroxybutane (1,2,4-butanetriol);
 - c. 1,3,5-trichlorobenzene;
 - d. Polynitroorthocarbonates;
 - e. Bischloromethyloxetane;
 - f. Low (less than 10,000) molecular weight, alcohol-functionalised, poly(epichlorohydrin); poly (epichlorohydrindiol);
 - g. Propylimine.
4. This Item does not embargo those "precursors" which are industrial chemicals, not embargoed elsewhere in the International Lists, widely available in international markets.
5. "Stabilisers" include N-Methyl-p-nitroaniline.
6. This Item does not embargo the following substances when not compounded or mixed with other "military high explosives" or powdered metals:
 - a. Ammonium picrate;
 - b. Black powder;
 - c. Hexanitrodiphenylamine;