Appendix O: List of Explosive Materials

The following notice was copied from an information bulletin located on the Internet. It provides a list of the materials that are considered to be explosive by the Bureau of Alcohol, Tobacco, and Firearms.

Department of the Treasury Bureau of Alcohol, Tobacco, and Firearms [Notice No.] Commerce in Explosives

Pursuant to the provisions of Section 841(d) of Title 18, United States Code, and 27 CFR 55.23, the Director, Bureau of Alcohol, Tobacco, and Firearms, must publish and revise at least annually in the Federal Register a list of explosives determined to be within the coverage of 18 U.S.C. Chapter 40, Importation, Manufacture, Distribution and Storage of Explosive Materials. This Chapter covers not only explosives, but also blasting agents and detonators, all of which are defined as explosive materials in section 841(c) of Title 18, United States Code. Accordingly, the following is the 1989 List of Explosive Materials subject to regulation under 18 U.S.C. Chapter 40, which includes both the list of explosives (including detonators) required to be published in the Federal Register and blasting agents. The list is intended to also include any and all mixtures containing any of the materials in the list. Materials constituting blasting agents are marked by an asterisk. While the list is comprehensive, it is not all inclusive. The fact that an explosive material may not be on the list does not mean that it is not within the coverage of the law if it otherwise meets the statutory definitions in Section 841 of Title 18, United States Code. Explosive materials are listed alphabetically by their

common names followed by chemical names and synonyms in brackets. This revised list supersedes the List of Explosive Materials dated December 29, 1988 (53 FR 52561) and will be effective as of (the date of publication in the *Federal Register*).

List of Explosive Materials

A

Acetylides of heavy metals

Aluminum containing polymeric propellant

Aluminum ophorite explosive

Amatex

Amatol

Ammonal

Ammonium nitrate explosive mixtures (cap sensitive)

*Ammonium nitrate explosive mixtures (non cap sensitive)

Aromatic nitro-compound explosive mixtures

Ammonium perchlorate having particle size less than 15 microns

Ammonium perchlorate composite propellant

Ammonium picrate [picrate of ammonia, Explosive D]

Ammonium salt lattice with isomorphously substituted inorganic salts

*ANFO [ammonium nitrate-fuel oil]

R

Baratol

Baronol

BEAF [1, 2-bis (2, 2-difluoro-2- nitroacetoxyethane)]

Black powder

Black powder based explosive mixtures

*Blasting agents, nitro-carbo-nitrates, including non cap sensitive slurry and water-gel explosives

Blasting caps

Blasting gelatin

Blasting powder

BTNEC [bis (trinitroethyl) carbonate]

BTNEN [bis (trinitroethyl) nitramine]

BTTN [1,2,4 butanetriol trinitrate]

Butyl tetryl

C

Calcium nitrate explosive mixture

Cellulose hexanitrate explosive mixture

Chlorate explosive mixtures

Composition A and variations

Composition B and variations

Composition C and variations

Copper acetylide

Cyanuric triazide

Cyclotrimethylenetrinitramine [RDX]

Cyclotetramethylenetetranitramine [HMX]

Cyclonite [RDX]

Cyclotol

D

DATB [diaminotrinitrobenzene]

DDNP [diazodinitrophenol]

DEGDN [diethyleneglycol dinitrate]

Detonating cord

Detonators

Dimethylol dimethyl methane dinitrate composition

Dinitroethyleneurea

Dinitroglycerine [glycerol dinitrate]

Dinitrophenol

Dinitrophenolates

Dinitrophenyl hydrazine

Dinitroresorcinol

Dinitrotoluene-sodium nitrate explosive mixtures

DIPAM

Dipicryl sulfone

Dipicrylamine

DNDP [dinitropentano nitrile]

DNPA [2,2-dinitropropyl acrylate]

Dynamite

E

EDDN [ethylene diamine dinitrate]

EDNA

Ednatol

EDNP [ethyl 4,4-dinitropentanoate]

Erythritol tetranitrate explosives

Esters of nitro-substituted alcohols

EGDN [ethylene glycol dinitrate]

Ethyl-tetryl

Explosive conitrates

Explosive gelatins

Explosive liquids

Explosive mixtures containing oxygen releasing inorganic salts and hydrocarbons

Explosive mixtures containing oxygen releasing inorganic salts and nitro bodies

Explosive mixtures containing oxygen releasing inorganic salts and water insoluble fuels

Explosive mixtures containing oxygen releasing inorganic salts and water soluble fuels

Explosive mixtures containing sensitized nitromethane

Explosive mixtures containing tetranitromethane (nitroform)

Explosive nitro compounds of aromatic hydrocarbons

Explosive organic nitrate mixtures

Explosive powders

F

Fulminate of mercury Fulminate of silver Fulminating gold Fulminating mercury Fulminating platinum Fulminating silver

G

Gelatinized nitrocellulose Gem-dinitro aliphatic explosive mixtures Guanyl nitrosamino guanyl tetrazene Guanyl nitrosamino guanylidene hydrazine Guncotton

Н

Heavy metal azides

Hexanite

Hexanitrodiphenylamine

Hexanitrostilbene

Hexogen [RDX]

Hexogene or octogene and a nitrated N-methylaniline

Hexolites

HMX [cyclo-1,3,5,7-tetramethylene-2,4,6,8-tetranitramine; Octogen]

Hydrazinium nitrate/hydrazine/aluminum explosive system Hydrazoic acid

Ι

Igniter cord Igniters Initiating tube systems

K

KDNBF [potassium dinitrobenzo-furoxane]

L

Lead azide
Lead mannite
Lead mononitroresorcinate
Lead picrate
Lead salts, explosive
Lead styphnate [styphnate of lead, lead trinitroresorcinate]
Liquid nitrated polyol and trimethylolethane
Liquid oxygen explosives

M

Magnesium ophorite explosives
Mannitol hexanitrate
MDNP [methyl 4,4-dinitropentanoate]
MEAN [monoethanolamine nitrate]
Mercuric fulminate
Mercury oxalate
Mercury tartrate
Metriol trinitrate
Minol-2 [40% TNT, 40% ammonium nitrate, 20% aluminum]
MMAN [monoethylamine nitrate]; methylamine nitrate
Mononitrotoluene-nitroglycerin mixture
Monopropellants

N

NIBTN [nitroisobutametriol trinitrate] Nitrate sensitized with gelled nitroparaffin Nitrated carbohydrate explosive Nitrated glucoside explosive Nitrated polyhydric alcohol explosives

Nitrates of soda explosive mixtures

Nitric acid and a nitro aromatic compound explosive

Nitric acid and carboxylic fuel explosive

Nitric acid explosive mixtures

Nitro aromatic explosive mixtures

Nitro compounds of furane explosive mixtures

Nitrocellulose explosive

Nitroderivative of urea explosive mixture

Nitrogelatin explosive

Nitrogen trichloride

Nitrogen tri-iodide

Nitroglycerine [NG, RNG, nitro, glyceryl trinitrate, trinitroglycerine]

Nitroglycide

Nitroglycol (ethylene glycol dinitrate, EGDN)

Nitroguanidine explosives

Nitroparaffins Explosive Grade and ammonium nitrate mixtures

Nitronium perchlorate propellant mixtures

Nitrostarch

Nitro-substituted carboxylic acids

Nitrourea

O

Octogen [HMX]
Octol [75% HMX, 25% TNT]
Organic amine nitrates
Organic nitramines

P

PBX [RDX and plasticizer]

Pellet powder

Penthrinite composition

Pentolite

PYX (2,6-bis(picrylamino)-3,5-dinitropyridine

Perchlorate explosive mixtures

Peroxide based explosive mixtures

PETN [nitropentaerythrite, pentaerythrite tetranitrate, pentaerythritol tetranitrate]

Picramic acid and its salts

Picramide

Picrate of potassium explosive mixtures

Picratol

Picric acid (manufactured as an explosive)

Picryl chloride

Picryl fluoride

PLX [95% nitromethane, 5% ethylenediamine]

Polynitro aliphatic compounds

Polyolpolynitrate-nitrocellulose explosive gels

Potassium chlorate and lead sulfocyanate explosive

Potassium nitrate explosive mixtures

Potassium nitroaminotetrazole

R

RDX [cyclonite, hexogen, T4, cyclo-1,3,5,-trimethylene-2,4,6,-trinitramine; hexahydro-1,3,5-trinitro-*S*-triazine]

S

Safety fuse

Salts of organic amino sulfonic acid explosive mixture

Silver acetylide

Silver azide

Silver fulminate

Silver oxalate explosive mixtures

Silver styphnate

Silver tartrate explosive mixtures

Silver tetrazene

Slurried explosive mixtures of water, inorganic oxidizing salt, gelling agent,

fuel and sensitizer (cap sensitive)

Smokeless powder

Sodatol

Sodium amatol

Sodium azide explosive mixture

Sodium dinitro-ortho-cresolate

Sodium nitrate-potassium nitrate explosive mixture

Sodium picramate

Squibs

Styphnic acid explosives

\mathbf{T}

Tacot [tetranitro-2,3,5,6-dibenzo-1,3a,4,6a-tetrazapentalene]

TATB [triaminotrinitrobenzene]

TEGDN [triethylene glycol dinitrate]

Tetrazene [tetracene, tetrazine, l(5-tetrazolyl)-4-guanyl tetrazene hydrate]

Tetranitrocarbazole

Tetryl [2,4,6 tetranitro-*N*-methylaniline]

Tetrytol

Thickened inorganic oxidizer salt slurried explosive mixture

TMETN (trimethylolethane trinitrate)

TNEF [trinitroethyl formal]

TNEOC [trinitroethylorthocarbonate]

TNEOF [trinitroethyl orthoformate]

TNT [trinitrotoluene, trotyl, trilite, triton]

Torpex

Tridite

Trimethylol ethyl methane trinitrate composition

Trimethylolthane trinitrate-nitrocellulose

Trimonite

Trinitroanisole

Trinitrobenzene

Trinitrobenzoic acid

Trinitrocresol

Trinitro-meta-cresol

Trinitronaphthalene

Trinitrophenetol

Trinitrophloroglucinol

Trinitroresorcinol

Tritonal

\mathbf{U}

Urea nitrate

W

Water bearing explosives having salts of oxidizing acids and nitrogen bases, sulfates, or sulfamates (cap sensitive)

Water-in-oil emulsion explosive compositions

\mathbf{X}

Xanthamonas hydrophilic colloid explosive mixture

For further information contact:

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