

## C06 EXPLOSIVES; MATCHES

## C06B EXPLOSIVE OR THERMIC COMPOSITIONS (blasting F42D); MANUFACTURE THEREOF; USE OF SINGLE SUBSTANCES AS EXPLOSIVES (compounds in general C01, C07 or C08) [2]

Notes

- (1) This subclass covers:
- compositions which are:
    - (a) explosive: compositions included are those containing both a fuel and sufficient oxidiser so that, upon initiation, they are capable of undergoing a chemical change of a relatively high rate of speed, resulting in the production of usable force for blasting, firearms, propelling missiles, or the like; [2]
    - (b) thermic: compositions included have (i) a consumable fuel component which consists of any element which is a metal, B, Si, Se or Te, or mixtures, intercompounds, or hydrides thereof; and (ii) in combination an oxidant component which is either a metal oxide or a salt (organic or inorganic) capable of yielding a metal oxide on decomposition; [2]
    - (c) fuels for rocket engines and intended for reaction with an oxidant, excluding air, in order to provide thrust for motive power purposes; [2]
    - (d) for use in affecting the explosion environment, e.g. for neutralising the poisonous gases of explosives, for cooling the explosion gases, or the like; [2]
  - methods or apparatus for preparing or treating such compositions not otherwise provided for; [2]
  - methods of using single substances as explosives. [2]
- (2) In this subclass, the following term is used with the meaning indicated:
- “nitrated” covers compounds having a nitro group or a nitrate ester group. [2]
- (3) Methods or apparatus for preparing or treating such compositions are classified according to the particular components of the compositions. [2]

Subclass Index

## EXPLOSIVE OR THERMIC COMPOSITIONS

Containing nitrated derivatives

inorganic..... 31/00

organic..... 25/00, 41/00

Containing nitrides or fulminates..... 35/00, 37/00

Containing chlorates or perchlorates..... 29/00

Containing metal..... 27/00, 33/00

Containing phosphorus ..... 39/00

Other compositions ..... 23/00, 43/00

Compositions defined by the structure or arrangement of the components..... 45/00, 47/00

## USE OF A SINGLE SUBSTANCE AS AN

EXPLOSIVE..... 49/00

MANUFACTURE ..... 21/00

**21/00 Apparatus or methods for working-up explosives, e.g. forming, cutting, drying**

25/16 . . . the other compound being a nitrated aromatic [2]

25/18 . the compound being nitrocellulose present as 10% or more by weight of the total composition [2]

25/20 . . with a non-explosive or a non-thermic component [2]

25/22 . . with a nitrated aromatic compound [2]

25/24 . . with nitroglycerine [2]

25/26 . . . with an organic non-explosive or an organic non-thermic component [2]

25/28 . the compound being nitrocellulose present as less than 10% by weight of the total composition [2]

25/30 . . with nitroglycerine [2]

25/32 . the compound being nitrated pentaerythritol [2]

25/34 . the compound being a nitrated acyclic, alicyclic or heterocyclic amine [2]

25/36 . the compound being a nitroparaffin [2]

25/38 . . with other nitrated organic compound [2]

25/40 . . with two or more nitroparaffins present [2]

Note

In groups C06B 23/00 to C06B 49/00, in the absence of an indication to the contrary, a composition is classified in the last place that provides for an ingredient. [2]

**23/00 Compositions characterised by non-explosive or non-thermic constituents [2]**

23/02 . for neutralising poisonous gases from explosives produced during blasting [2]

23/04 . for cooling the explosion gases [2]

**25/00 Compositions containing a nitrated organic compound [2]**

25/02 . the nitrated compound being starch or sugar [2]

25/04 . the nitrated compound being an aromatic [2]

25/06 . . with two or more nitrated aromatic compounds present [2]

25/08 . . . at least one of which is nitrated toluene [2]

25/10 . the compound being nitroglycerine [2]

25/12 . . with other nitrated organic compound [2]

25/14 . . . the other compound being a nitrated aliphatic diol [2]

**27/00 Compositions containing a metal, boron, silicon, selenium or tellurium or mixtures, intercompounds or hydrides thereof, and hydrocarbons or halogenated hydrocarbons [2]****29/00 Compositions containing an inorganic oxygen-halogen salt, e.g. chlorate, perchlorate [2]**

29/02 . of an alkali metal [2]

- 29/04 . . . with an inorganic non-explosive or an inorganic non-thermic component [2]
- 29/06 . . . the component being a cyanide; the component being an oxide of iron, chromium or manganese [2]
- 29/08 . . . with an organic non-explosive or an organic non-thermic component [2]
- 29/10 . . . the component being a dye or a colouring agent [2]
- 29/12 . . . with carbon or sulfur [2]
- 29/14 . . . with iodine or an iodide [2]
- 29/16 . . . with a nitrated organic compound [2]
- 29/18 . . . the compound being nitrated toluene or a nitrated phenol [2]
- 29/20 . . . the compound being nitrocellulose [2]
- 29/22 . the salt being ammonium perchlorate [2]
- 31/00 Compositions containing an inorganic nitrogen-oxygen salt [2]**
- 31/02 . the salt being an alkali metal or an alkaline earth metal nitrate [2]
- 31/04 . . . with carbon or sulfur [2]
- 31/06 . . . with an organic non-explosive or an organic non-thermic component [2]
- 31/08 . . . with a metal oxygen-halogen salt, e.g. inorganic chlorate, inorganic perchlorate [2]
- 31/10 . . . with carbon or sulfur [2]
- 31/12 . . . with a nitrated organic compound [2]
- 31/14 . . . the compound being an aromatic [2]
- 31/16 . . . the compound being a nitrated toluene [2]
- 31/18 . . . the compound being a nitrated phenol, e.g. picric acid [2]
- 31/20 . . . the compound being nitroglycerine [2]
- 31/22 . . . the compound being nitrocellulose [2]
- 31/24 . . . with other explosive or thermic component [2]
- 31/26 . . . the other component being nitroglycerine [2]
- 31/28 . the salt being ammonium nitrate [2]
- 31/30 . . . with vegetable matter; with resin; with rubber [2]
- 31/32 . . . with a nitrated organic compound [2]
- 31/34 . . . the nitrated compound being starch or sugar [2]
- 31/36 . . . with other explosive or thermic component [2]
- 31/38 . . . the nitrated compound being an aromatic [2]
- 31/40 . . . with an organic non-explosive or an organic non-thermic component [2]
- 31/42 . . . with other explosive or thermic component [2]
- 31/44 . . . the compound being nitroglycerine [2]
- 31/46 . . . with a vegetable matter component, e.g. wood pulp, sawdust [2]
- 31/48 . . . with other explosive or thermic component [2]
- 31/50 . . . the other component being a nitrated organic compound [2]
- 31/52 . . . the compound being nitrocellulose present as 10% or more by weight of the total composition [2]
- 31/54 . . . with other nitrated organic compound [2]
- 31/56 . . . the compound being nitrocellulose present as less than 10% by weight of the total composition [2]

- 33/00 Compositions containing particulate metal, alloy, boron, silicon, selenium or tellurium with at least one oxygen supplying material which is either a metal oxide or a salt, organic or inorganic, capable of yielding a metal oxide [2]**
- 33/02 . with an organic non-explosive or an organic non-thermic component [2]
- 33/04 . the material being an inorganic nitrogen-oxygen salt [2]
- 33/06 . the material being an inorganic oxygen-halogen salt [2]
- 33/08 . with a nitrated organic compound [2]
- 33/10 . . the compound being an aromatic [2]
- 33/12 . the material being two or more oxygen-yielding compounds [2]
- 33/14 . . at least one being an inorganic nitrogen-oxygen salt [2]
- 35/00 Compositions containing a metal azide [2]**
- 37/00 Compositions containing a metal fulminate [2]**
- 37/02 . with a nitrated organic compound or an inorganic oxygen-halogen salt [2]
- 39/00 Compositions containing free phosphorus or a binary compound of phosphorus, except with oxygen [2]**
- 39/02 . with an inorganic oxygen-halogen salt [2]
- 39/04 . . with a binary compound of phosphorus, except with oxygen [2]
- 39/06 . with free metal, alloy, boron, silicon, selenium or tellurium [2]
- 41/00 Compositions containing a nitrated metallo-organic compound [2]**
- 41/02 . the compound containing lead [2]
- 41/04 . . with an organic explosive or an organic thermic component [2]
- 41/06 . . . with an inorganic explosive or an inorganic thermic component [2]
- 41/08 . . with a metal azide or a metal fulminate [2]
- 41/10 . . with other nitrated metallo-organic compound [2]
- 43/00 Compositions characterised by explosive or thermic constituents not provided for in groups C06B 25/00 to C06B 41/00 [2]**
- 45/00 Compositions or products which are defined by structure or arrangement of component or product (explosive charges of particular form or shape F42B 1/00, F42B 3/00) [2]**
- 45/02 . comprising particles of diverse size or shape [2]
- 45/04 . comprising solid particles dispersed in solid solution or matrix [2]
- 45/06 . . the solid solution or matrix containing an organic component [2]
- 45/08 . . . the dispersed solid containing an inorganic explosive or an inorganic thermic component [2]
- 45/10 . . . the organic component containing a resin [2]
- 45/12 . having contiguous layers or zones [2]
- 45/14 . . a layer or zone containing an inorganic explosive or an inorganic thermic component [2]
- 45/16 . . . the layer or zone containing at least one inorganic component from the group of azide, fulminate, phosphorus and phosphide [2]
- 45/18 . comprising a coated component (particles dispersed in a matrix C06B 45/04; coated explosive charges F42B) [2]

45/20	. . the component base containing an organic explosive or an organic thermic component [2]	47/00	<b>Compositions in which the components are separately stored until the moment of burning or explosion, e.g. "Sprengel"-type explosives; Suspensions of solid component in a normally non-explosive liquid phase, including a thickened aqueous phase [2]</b>
45/22	. . . the coating containing an organic compound [2]	47/02	. the components comprising a binary propellant [2]
45/24	. . . . the compound being an organic explosive or an organic thermic component [2]	47/04	. . a component containing a nitrogen oxide or acid thereof [2]
45/26	. . . . . the compound being a nitrated toluene [2]	47/06	. . a component being a liquefied normally gaseous material supplying oxygen (C06B 47/04 takes precedence) [2]
45/28	. . . the component base containing nitrocellulose and nitroglycerine [2]	47/08	. . a component containing hydrazine or a hydrazine derivative [2]
45/30	. . the component base containing an inorganic explosive or an inorganic thermic component [2]	47/10	. . a component containing free boron, an organic borane or a binary compound of boron, except with oxygen [2]
45/32	. . . the coating containing an organic compound [2]	47/12	. . a component being a liquefied normally gaseous fuel [2]
45/34	. . . . the compound being an organic explosive or an organic thermic component [2]	47/14	. comprising a solid component and an aqueous phase [2]
45/36	. . the component base containing both an organic explosive or thermic component and an inorganic explosive or thermic component [2]	49/00	<b>Use of single substances as explosives [2]</b>

**C06C DETONATING OR PRIMING DEVICES; FUSES** (ammunition fuzes F42C); **CHEMICAL LIGHTERS; PYROPHORIC COMPOSITIONS [2]**

5/00	<b>Fuses, e.g. fuse cords</b>	7/00	<b>Non-electric detonators; Blasting caps; Primers</b>
5/04	. Detonating fuses	7/02	. Manufacture; Packing
5/06	. Fuse igniting means; Fuse connectors	9/00	<b>Chemical contact igniters; Chemical lighters</b>
5/08	. Devices for the manufacture of fuses	15/00	<b>Pyrophoric compositions; Flints</b> (chemical lighters C06C 9/00; alloys in general C22C)

**C06D MEANS FOR GENERATING SMOKE OR MIST; GAS-ATTACK COMPOSITIONS; GENERATION OF GAS FOR BLASTING OR PROPULSION (CHEMICAL PART)** (fuels C10) [2]

3/00	<b>Generation of smoke or mist (chemical part)</b> (compositions used as biocides, pest repellants or attractants, or plant growth regulators A01N, e.g. A01N 25/18)	5/04	. by auto-decomposition of single substances
		5/06	. by reaction of two or more solids
		5/08	. by reaction of two or more liquids
		5/10	. by reaction of solids with liquids
5/00	<b>Generation of pressure gas, e.g. for blasting cartridges, starting cartridges, rockets</b> (explosive compositions containing an oxidizer, fuels for rocket engines intended for reaction with an oxidant other than air C06B)	7/00	<b>Compositions for gas-attacks</b>
5/02	. by decompressing compressed, liquefied, or solidified gases		

**C06F MATCHES; MANUFACTURE OF MATCHES**

1/00	<b>Mechanical manufacture of matches</b>	1/06	. Dipping, coating, impregnating, or drying of matches (dipping or coating in general B05C, B05D; impregnating in general B27K; drying in general F26B) [2]
1/02	. Cutting match splints (independently of other operations B27L 9/00)	1/08	. Carrier bars
1/04	. Filling match splints into carrier bars; Discharging matches	1/10	. . Guiding means for carrier bars
		1/12	. Filling matches into boxes (packaging in general B65B)

**C06F**

- 1/14 . Manufacture of ignition strips
- 1/16 . Manufacture of matches connected together, e.g. in bands or blocks
- 1/18 . Printing on matches or match-boxes when combined with match manufacture
- 1/20 . Applying strike-surfaces, e.g. on match-boxes, on match-books
- 1/22 . Assembling matches
- 1/24 . Safety devices against fire
- 1/26 . Machines for complete match manufacture

**3/00 Chemical features in the manufacture of matches**  
(ignition compositions C06B)

- 3/02 . Wooden strip for matches or substitute therefor
- 3/04 . . Chemical treatment before or after dipping, e.g. dyeing, impregnating
- 3/08 . Strike-surface compositions

**5/00 Matches** (match-books A24F 27/12)

- 5/02 . Permanent matches
- 5/04 . Wax matches