

36.02

36.02 - Prepared explosives, other than propellant powders.

This heading covers mixtures of chemical substances the combustion of which produces a more violent reaction than that produced by propellant powders. Combustion produces an extremely large release of gas at a high temperature, creating an enormous pressure within a very short period. Phlegmatising agents are often added to these products to reduce their sensitivity to shock or friction.

The heading includes :

- (1) **Explosives consisting of mixtures based on nitrates of glycerol (nitroglycerol) and ethylene glycol (nitroglycol).** These products are commonly called dynamites and often contain other substances such as nitrocellulose (gun-cotton), ammonium nitrate, peat, wood flour, sodium chloride or granulated aluminium.
- (2) **Explosives consisting of mixtures based on other organic nitrates or on nitro-compounds,** such as compositions based on TNT (2,4,6-trinitrotoluene), hexogen, octogen, tetryl (N-methyl-N,2,4,6-tetranitroaniline), pentrite (pentaerythritol tetranitrate, PETN) or TATB (1,3,5-triamino-2,4,6-trinitrobenzene).

The TNT-based mixtures include hexolites (TNT + hexogen) and pentolites (TNT + PETN) phlegmatised either by a wax or by a polymeric binder.

- (3) **Explosives consisting of mixtures based on ammonium nitrate** sensitised by products other than a nitrate of glycerol or of a glycol. Together with the dynamites referred to in Item (1) above, these are widely used in mines, quarries and on civil engineering sites.

This group includes :

- (a) Ammonals, amatols and ammonium nitrate fuel oil (ANFO);
- (b) Specifically cartridge, nitrated explosives;
- (c) Slurry explosives, consisting of a mixture of alkali nitrates and water, sensitised with an amino nitrate or finely powdered aluminium;
- (d) "Emulsion" explosives, consisting of an aqueous solution of alkali nitrates, emulsified in mineral oils.
- (4) **Explosives consisting of mixtures based on chlorates or perchlorates,** for example the cheddites used in mines and quarries.
- (5) **Primary or initiating compositions,** which are much more sensitive in the dry state to shock and friction than the explosives of the types mentioned in the previous four groups. They are mixtures based mainly on lead azide or the trinitroresorcinate (or styphnate) of lead, and tetrazene. These explosives are generally used in the preparation of percussion, friction or flame primers for propellant charges or of detonators for explosives.

All these explosives may be presented as powders, granules, pastes, slurries, emulsions or as more or less dry gels, either in bulk or in the form of charges or cartridges.

This heading **does not cover** separate chemically defined compounds even though they may be explosive. These chemicals are usually included in Chapter 28 or 29, e.g., inorganic nitrates (heading 28.34), mercury fulminate (heading 28.52), trinitrotoluene (heading 29.04) and trinitrophenol (heading 29.08).