

C06D

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

Definition statement

This place covers:

Chemical aspects of generating smoke or mist.

Generation of pressure gas, e.g. for blasting cartridges, starting cartridges, rockets.

Compositions for gas-attacks ,e.g. toxic, irritating or debilitating gas-compositions..

Relationships with other classification places

This subclass does not cover chemical compounds or their preparations as such, which subject matter is covered by classes [C01](#) (inorganic chemistry), [C07](#) (organic chemistry) and [C08](#) (organic macromolecular compounds).

References

Limiting references

This place does not cover:

Devices for generating heat, smoke, or fog in gardens, orchards, or forests, e.g. to prevent damage by frost	A01G 13/06
Compositions used as biocides, pest repellants or attractants, or plant growth regulators	A01N
E.g.	A01N 25/18

Informative references

Attention is drawn to the following places, which may be of interest for search:

Apparatus for generating gases	B01J 7/00
Inflatable occupant restraints or confinements characterized by the inflation source or means to control inflation fluid flow	B60R 21/26
Explosive compositions containing an oxidizer, fuels for rocket engines intended for reaction with an oxidant other than air	C06B
Fuels, e.g. natural or synthetic natural gas	C10
Rocket-engine plants, i.e. plants carrying both fuel and oxidant therefor; Control thereof	F02K 9/00
Non chemical aspects of generating combustion products of high pressure or high velocity	F23R
Smoke-pot projectors	F42B 5/155
Smoke-producing projectiles, missiles or mines	F42B 12/48

C06D 3/00

Generation of smoke or mist (chemical part) (compositions used as biocides, pest repellants or attractants, or plant growth regulators [A01N](#), e.g. [A01N 25/18](#))

Definition statement

This place covers:

Generation of smoke or mist, e.g.

- classic smokes are based on highly hygroscopic salts being acids and forming a water droplet fog with air humidity
- Demisting compositions.
- Weather modifying compositions such as making rain.
- with expanded graphite particles
- by combustion of pyrotechnic compositions comprising a chlorine donor (e.g. potassium chloride, sodium chloride, chlorinated rubber, condensed halogenated carbon compound) that will generate upon combustion abundants amounts of sublimable metal chlorides wich produce smoke
- by combustion of pyrothechnic composition with sublimation/vaporization of an organic dye
- by combustion of pyrotechnic composition comprising zinc oxide, ammonium chloride and polyvinyl chloride
- by combustion of pyrotechnic smoke generating composition comprising red phosphorous
- by incomplete combustion of aromatic compounds

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

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	C05B33/00 - C05B33/14
Compositions containing free phosphorus or a binary compound of phosphorus, except with oxygen	C06B 39/00 - C06B 39/06

C06D 5/00

Generation of pressure gas, e.g. for blasting cartridges, starting cartridges, rockets (explosive compositions containing an oxidizer, fuels for rocket engines intended for reaction with an oxidant other than air [C06B](#))

Definition statement

This place covers:

Generation of pressure gas

Relationships with other classification places

Explosive compositions containing an oxidizer, fuels for rocket engines intended for reaction with an oxidant other than air are classified in [C06B](#).

The compositions in [C06B](#) are mainly classified according to their chemical composition. In [C06B 47/00](#) monopropellants and bipropellants are classified according to their composition.

In [C06D 5/08](#) and [C06D 5/10](#), the compositions are classified according to their physical presence in the system like being a liquid or a solid and the compositions classified in those groups have to be suitable to produce a pressure gas.

C06D 5/02

by decompressing compressed, liquefied or solidified gases

Definition statement

This place covers:

CO₂ - blasting.

C06D 5/04

by auto-decomposition of single substances

Definition statement

This place covers:

Catalysts for the auto-decomposition

For example decomposition of hydrogen peroxide, hydrazine.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Compositions in which the components are separately stored until the moment of burning or explosion and one component contains hydrazine or a hydrazine derivative	C06B 47/08
--	----------------------------

C06D 5/06

by reaction of two or more solids

Definition statement

This place covers:

Pressure gas generation by reaction of two or more solids, e.g. compositions for inflatable vehicle safety bags (Airbags).

C06D 5/08

by reaction of two or more liquids

Definition statement

This place covers:

Pressure gas generation by reaction of two or more liquids, e.g.

diergols, bipropellant. Mixtures of oxygen and a C_xH_y compound.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Diergols, bipropellant	compound composed of two liquid propellants
------------------------	---

C06D 5/10**by reaction of solids with liquids****Definition statement**

This place covers:

Pressure gas generation by reaction of solids with liquids, e.g.

Hybrid propellants (lithergols)

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Lithergols	compound composed of one solid propellant and one liquid propellant
------------	---

C06D 7/00**Compositions for gas-attacks****Definition statement**

This place covers:

Gas-attacks compositions, e.g.

- non-lethal defense sprays comprising tear gas compositions
- nerve gas compositions
- pyrotechnic compositions for disseminating various compounds such as tear gas components