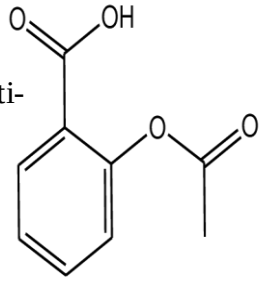
ACETYL SALICYLIC ACID



- Acetylsalicylic acid (ASA) belongs to the groups of medications called analgesics (pain relievers), antipyretics (fever reducers), anti-inflammatory (inflammation reducers), and platelet aggregation inhibitors (anti-clotting agents). It works by interfering with the dimethyl pthalateion of compounds in the body that cause pain, fever, inflammation, and blood clots.

- Acetylsalicylic acid (ASA) is used to relieve pain, fever, and inflammation in various conditions such as lower back and neck pain, the flu, common cold, burns, menstrual pain, headache, migraines, osteoarthritis, rheumatoid arthritis, sprains and strains, nerve pain, toothache, muscle pain, bursitis (inflammation of a bursa, a fluid-filled sac located around joints and near the bones), and following surgical and dental procedures.

- ASA is also used for rheumatic fever in combination with other medications. In these situations, ASA is used on an as-needed basis.

- Because of the anti-platelet (anti-clotting) properties of ASA, it may be used under the supervision of your doctor to:

- prevent a first nonfatal heart attack in people who are at increased risk of having a heart attack as determined by their doctor (factors that increase your risk of heart attack include: smoking, high blood pressure, high cholesterol, inactive lifestyle, stress, and being overweight)

- prevent a second heart attack or stroke

- reduce the risk of complications or death in people with unstable angina

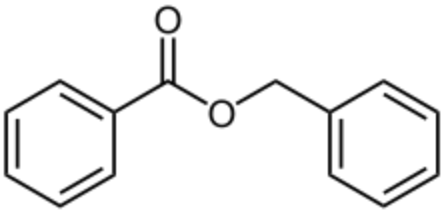
- reduce the risk of "mini-stroke" or transient ischemic attack (TIA)

- reduce the clotting properties of platelets for people who have had carotid artery surgery to prevent the recurrence of TIA and for people receiving hemodialysis through a silicone rubber access

- prevent blood clots for people who have had a total hip replacement

- ASA can also be used during a heart attack to reduce the risk of dying from the heart attack.

BENZYL BENZOATE



It is the ester of benzyl alcohol and benzoic acid. It forms either a viscous liquid or solid flakes and has a weak, sweet-balsamic odour. It occurs in a number of blossoms (e. g. tuberose, hyacinth) and is a component of Balsam of Peru and Tolu balsam.

Medical Uses:

- Benzyl benzoate is an effective and inexpensive topical treatment for human scabies.
- It has vasodilating and spasmolytic effects and is present in many asthma and whooping cough drugs.
- It is also used as an excipient in some testosterone-replacement medications (like Nebido) for treating hypogonadism.
- Benzyl benzoate is used as a topical acaricide, scabicide, and pediculicide in veterinary hospitals.

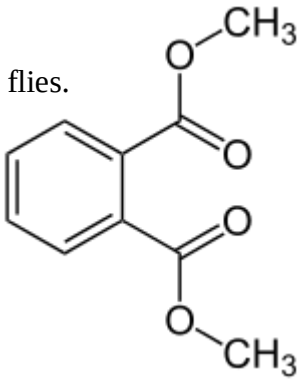
Non-medical Uses:

- Benzyl benzoate is used as a repellent for chiggers, ticks, and mosquitoes.
- It is also used as a dye carrier, solvent for cellulose derivatives, plasticizer, and fixative in the perfume industry.

DIMETHYL PHTHALATE

Dimethyl phthalate is an organic compound with molecular formula $(C_2H_3O_2)_2C_6H_4$. The methyl ester of phthalic acid, it is a colorless liquid that is soluble in organic solvents.

Uses:



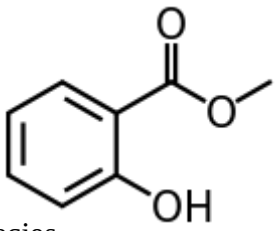
1. Dimethyl phthalate is raj as an insect repellent for mosquitoes and flies.
2. It is also an ectoparasiticide and has many other uses, including in solid rocket propellants, and plastics.
3. It is used as a plasticizer for cellulose acetate, polyvinyl fluoride coating repellent agents and solvents.
4. Dimethyl Phthalate is rodenticide rat poison, rat finished, chlorine mouse ketone

intermediates; it is also an important solvent.

5. The dimethyl pthalate is a plasticizer for variety of resin having a very strong dissolving power, is compatible with a variety of cellulose resin, rubber, vinyl resin. It displays good film-forming character, adhesion and water resistance.
6. It is usually used with diethyl phthalate in cellulose acetate film, varnish, transparent paper and molding powder dimethyl phthalate ion. A small amount of the dimethyl pthalate is used in nitrocellulose dimethyl pthalateion.
7. The dimethyl pthalate can also be used as nitrile rubber plasticizers, with good resistance to cold dimethyl pthalates. The dimethyl pthalate can be mixed with other plasticizers. It can overcome the high volatility, low-temperature crystallization and other shortcomings.
8. The dimethyl pthalates are also used as DEET oil (crude oil) and DDT solvents. The dimethyl pthalate is also used as gas chromatography stationary phase.

METHYL SALICYLATE

Methyl salicylate (oil of wintergreen or wintergreen oil) is an organic compound with the formula $C_6H_4(OH)(CO_2CH_3)$. It is the methyl ester of salicylic acid.



USES:

1. It is a colorless, viscous liquid with a sweet, fruity odor reminiscent of root beer, but often associatively called "minty," as it is an ingredient in mint candies. It is produced by many species of plants, particularly wintergreens.
2. It is also produced synthetically, used as a fragrance, in foods and beverages, and in liniments.
3. Methyl salicylate is used in high concentrations as a rubefacient and analgesic in deep heating liniments (such as Bengay) to treat joint and muscular pain. However, in the body it metabolizes into salicylates, including salicylic acid, a known NSAID.
4. Methyl salicylate is used in low concentrations (0.04% and under) as a flavoring agent in chewing gum and mints.
5. It is used as an antiseptic in Listerine mouthwash produced by the Johnson & Johnson company.
6. It provides fragrance to various products and as an odor-masking agent for some organophosphate pesticides.

7. Methyl salicylate is also used as a bait for attracting male orchid bees for study, which apparently gather the chemical to synthesize pheromones, and to clear plant or animal tissue samples of color, and as such is useful for microscopy and immuno histochemistry when excess pigments obscure structures or block light in the tissue being examined. This clearing generally only takes a few minutes, but the tissue must first be dehydrated in alcohol.
8. Additional applications include: used as a simulant or surrogate for the research of chemical warfare agent sulfur mustard, due to its similar chemical and physical properties, in restoring (at least temporarily) the elastomeric properties of old rubber rollers, especially in printers, and as a penetrating oil to loosen rusted parts.