

# Miscellaneous Materials

Miscellaneous Materials CGR offers **cork, graphite, metals** and other miscellaneous materials to deliver a true customization capabilities for our customers.

# Properties of Asbestos

- More tensile strength than steel.
- High thermal stability.
- Electrical resistance.
- Non-flammable.
- Has no detectable smell or taste.
- They are all solids that do not move through soil and are insoluble in water.
- Its color will vary according to type, and metallic composition.
- Flexible so that it can be spun and woven like cotton.

# Uses of asbestos

Uses of asbestos include a **wide range of products, primarily for heat and sound insulation, roofing and flooring.** Some of the most common asbestos uses were: roofing materials. patching and spackling compound. brake pads and lining. cements. toasters and other heat-related household items. floor tiles.

# Properties of glass wool

Gases possess poor thermal conduction properties compared to liquids and solids and thus make good insulation material if they can be trapped in materials so that much of the heat that flows through the material is forced to flow through the gas. In order to further augment the effectiveness of a gas (such as air) it may be disrupted into small cells which cannot effectively transfer heat by natural convection. Natural convection involves a larger bulk flow of gas driven by buoyancy and temperature differences

# Uses of glass wool

- Glass wool is a thermal insulation material consisting of intertwined and flexible glass fibers, which causes it to "package" air, resulting in a low density that can be varied through compression and binder content (as noted above, these air cells are the actual insulator). Glass wool can be a loose-fill material, blown into attics, or together with an active binder, sprayed on the underside of structures, sheets, and panels that can be used to insulate flat surfaces such as cavity wall insulation, ceiling tiles, curtain walls, and ducting. It is also used to insulate piping and for soundproofing.

# Properties of thermocol

- These are mainly used as cold insulation for piping and cold storage construction. ... properties, it can also provide **acoustic insulation** and is **fire retardant**.

# Uses of thermocol

Thermocol are primarily utilized to manufacture **disposable trays, cups, packaging materials, containers**, etc.

Thermocol are also used to make loose packaging products known as packing peanuts and insulation boards for floors, walls, and roofs in buildings. With so many uses the production and demand of thermocol is increasing at a faster pace.

# Properties of cork

The amazing natural properties of cork. Cork is a pretty extraordinary material and that is why it has so many uses. The key to cork's many properties is its **honeycomb cell structure**. Each cell is a 14-sided polyhedron filled with air with an extremely strong and flexible membrane that is **waterproof and airtight**.



# Uses of cork

- Cork makes a very good noise and thermal insulator.
- Cork is used to make pin boards that are commonly found in offices and homes.
- Cork is a very important material for fishing.
- Sometimes cork is added to concrete to improve the qualities of the product.
- The core of cricket balls and baseballs is made from cork.

# Properties of mica

- Mica has an estimable electrical, physical, mechanical and thermal pertinacity properties. It has **high transparency, optical clarity, flatness, non-breakability and heat resistancy.**

# Uses of mica

- Ground mica is used in gypsum wallboard as a wadding to remove its imperfections...
- It is used in paints to improve their quality and add shine.
- It is added to plastic products to strengthen their mechanical properties.
- It is added to rubber products like tires, as it can serve as an anti-sticking agent.

# Tool and die material

- Jump to search Tool and die makers are a class of machinists in the manufacturing industries. Variations on the name including tool maker, toolmaker, die maker, diemaker, mold maker, moldmaker or tool jig and die-maker depend on which area of concentration or industry an individual works in.
- Tool and die makers work primarily in toolroom environments—sometimes literally in one room but more often in an environment with flexible, semipermeable boundaries from production work.

# Materials for bearing metals

- Babbitt: SAE 11 Babbitt is used for bearings which are subjected to heavy pressures.
- Copper-Lead Alloys: Copper alloys having a high lead content 20 to 50% are of special interest.
- Plastics: Celoron, Formica and Micarta bearings are made from a special woven duck impregnated...

# Spring materials

The spring material can be broadly classified into groups such as high carbon spring steel, alloy spring steel, stainless steel, phosphor bronze and copper base alloys.

# Materials for nuclear energy

- "Nuclear materials" most commonly refers to fissile materials that are capable of sustaining a chain reaction in a process that releases energy called nuclear fission. The materials include isotopes of **uranium, thorium, and plutonium.**

# Refractory materials

- A refractory material or refractory is a **heat-resistant material**: that is, a mineral that is resistant to decomposition by heat, pressure, or chemical attack, most commonly applied to a mineral that retains strength and form at high temperatures.