

Dry Ice

Dry Ice, also referred to as the Solid form of Carbon Dioxide (CO_2), is used extensively as a cooling agent. Dry Ice, also referred to as the Solid form of Carbon Dioxide (CO_2), is used extensively as a cooling agent. Solidified Carbon dioxide forms when the temperature of liquid Carbon Dioxide drops below 56.6°C . This solid form has a snow like appearance and can be compressed in the form of blocks to deliver dry ice. Solid CO_2 forms in vessels and pipelines when conditions are under the triple point of water and the appearance many not resemble like snow.



Dry Ice, also referred to as the Solid form of Carbon Dioxide (CO_2), is used extensively as a cooling agent. Dry Ice also finds its use in various industrial applications such as blast cleaning, degassing of flammable vapors and fitting of cylinder liners. Dry Ice is manufactured by us (Prime Gases) at our Chennai facility with an installed capacity of 1.5 Tons per day. Presently, we are in the process of expanding our capacity by an additional 1 ton per day, thereby leveraging on a total installed capacity of 2.5 Tons per day. The Dry Ice at Prime Gases is manufactured in blocks of the following specifications- 10"x 7.5"x 7.5" of 10 Kg. Prime Gases is equipped to manufacture customized blocks according to the desired specification needs of the customers.

Uses:

Both Liquid and solid forms of Carbon Dioxide find their use as extensively used refrigerants in the food industry for the transportation and storage of dairy products such as ice creams and other frozen foods. Owing to its property of propellant and acidity regulator, it is also used in the packaging of food stuffs under a protected atmosphere. It is also applied as a cryogenic fluid in freezing or chilling operations or as dry ice for controlling of temperature during the distribution of foodstuffs.

Dry ice is used as an effective preservative that can be used to arrest and prevent activity of insects in containers consisting of grains and grain related products. As dry ice displaces oxygen, without affecting the taste and quality of such foods, it is used extensively in storage and preservation of food products.

Dry ice, when placed in water, accelerates the process of sublimation, thereby creating dense, low sinking clouds of smoke like fog. This effect is applied in various instances such as fog machines, theatres, haunted house attractions and night clubs to create dramatic effects

One of the prime uses of dry ice is in the process of blast cleaning, where pellets of dry ice are shot out of a nozzle along with compressed air, to utilize the power of the speed of pellets along with the sublimation effect. The result is the effective removal of residues from industrial equipment. Dry ice blasting is preferred over other methods such as sandblasting, steam blasting, water blasting and solvent blasting.

Dry ice is a hazard free agent used in the cleaning of containment tankers. Dry ice displaces oxygen from containment tanks, thereby reducing the risk of flammable vapors from igniting and exploding.

Dry ice is a preferred cost effective element used in the shrinking and fitting of metal parts.

Dry ice can be used to clean dirt and soot from electronics without making them wet or using chemicals.