

Lucid Colloids Ltd.

CarpexTM Guar Gums & Derivatives for Carpets

Carpex[™] series products are specially developed thickeners for applications in the dyeing and printing of carpets and piled goods such as blankets. **Carpex[™]** is manufactured at Lucid's state-of-the-art manufacturing site at Jodhpur , Rajasthan, India. Lucid is in the hydrocolloids and thickener business since 1958 and has vast experience in manufacture and application of thickeners for carpet and other pile goods.

Carpex[™] products are modified / derivatised galactomannans, having high purity and good thickening, flow and filtration properties. They are compatible with most chemicals, auxiliaries and dyestuffs used in the dyeing and printing of polyamide, polyacrylic and wool carpets and blankets, tufted loop-pile and cut-pile. These products are modified to achieve specific properties like ease of dispersibility, dry-flow characteristics, good printing rheology and excellent solution flow characteristics, excellent filterability through screens, anti-dusting, longer stock solution shelf life, ease of washability and biodegradability. **Carpex[™]** is available in a wide range of modifications - from low solids, high viscosity (more pseudoplastic, "short flow") to high solids, low viscosity (less pseudoplastic, "long flow"), the extent of pseudoplasticity being dependent on the particular grade of **Carpex[™]** best suited for the requirements of the user.

The choice of the **CarpexTM** grade of product depends upon various factors being employed by the user. Some of the factors that will determine this decision are:

- the dyeing and/or the printing technique.
- type of machinery.
- type of yarn and carpet construction.
- type of dyestuff and chemicals in the dyeing/ printing recipe.
- penetration, levelness and print sharpness desired.
- equipment available to make stock solutions and final dyeing/printing pastes.

The 2 basic grades in the **Carpex**[™] series are "**CP**", and "**CD**" series. These products are also available with dry free flowing properties under the nomenclature "**CPF**", and "**CDF**" and are particularly recommended for use with eductors, to ensure a smooth, continuous flow of the dry powder from a hopper, without "bridging" and "rat-holding" in the hopper. However, all "**F**" products tend to dust and due precautions must be employed when using these grades.

I] Carpex[™] CP SERIES

CP products are cold water soluble in a wide pH range –3.5 to 11.0. Care must be taken to avoid formation of lumps while incorporating the polymer into water. High speed stirring equipment is necessary, and the product must be slowly incorporated into the vortex created in the solution making tank. We recommend the use of **Carpex[™] CPF** series when eductors are used. In case high speed stirring and/or eductors are not being used, then the more dispersible grade like **Carpex[™] CD** should be preferred.

II] Carpex[™] CD SERIES

Stock solutions of **Carpex[™] CD** series can be prepared by dispersing in cold water under gentle stirring. High-speed stirring is not necessary as **Carpex[™] CD** series products have very good dispersibility and disperse rapidly without forming lumps at an alkaline pH. The pH of the dispersion should be about 9.5. **Carpex[™] CD** series will not swell at an alkaline pH. After stirring, the pH must be reduced to 5.0 by addition of a suitable mild acid, such as Acetic acid etc., to begin viscosity development and increase hydration rates. In case eductors are to be used, the CDF grade is suggested. **Carpex[™] CD** series products must not be alkalised again after the "acid shocking", else the paste will tend to gel. If the paste is required to be alkalised after acidification, the use of **Carpex[™] BCG-3 is** recommended.



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We recommend that users determine the correct grade required for their application by testing samples etc., as the most suitable grade will depend upon the quality required and the machinery and equipment being used. "Tailor-made" **Carpex[™]** products are possible for specific requirements, after studying users needs and process parameters.

Packing

This product is available in 25 kgs or 50 lbs net, multi-wall paper (open mouth or valve filled) bags with a suitable liner or coated paper as a moisture barrier. Other packing available on request (Plastic bags, Jumbo sacks etc.). Pallets also available on request.

Storage

Store product in a dry and cool place, away from heat and out of the sun. Once package is opened, consume within reasonable time. Store opened and unused packages after adequate resealing to avoid contamination and moisture ingress. Shelf life is 12 months from date of manufacture.

Safety, Health, Environment and Handling

See Material Safety Data Sheet. **Carpex[™]** products may contain preservatives to extend stock paste shelf life. It is possible that these preservatives may cause eye, throat, nose and skin irritation. It is therefore recommended that personnel handling **Carpex[™]** products adopt normal safety procedures when handling dry powder chemicals, such as gloves, eye, nose and mouth protection etc.

In event of irritation, wash the affected area immediately with lots of water. If accidentally ingested, drink lots of water and consult physician. **Carpex[™]** products are intended for industrial/technical applications only and must not be sold or used for any application intended for human and/or animal food/feed or skin applications. Care must be taken to avoid any accidental human and/or animal ingestion of the product due to the presence of chemicals and preservatives in the product.