For further information please contact:
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Chlorub
CHLORINATED RUBBER
INTRODUCTION

Chlorub is a chemically inert material with excellent film forming properties and can be used extensively in an expanding range of applications. It is a non-flammable, non-toxic, tasteless white powder, a fast physically drying binder, it has extremely low chemical reactivity and can freely dissolve in solvents. It is extensively used in paints, adhesives and printing inks.

GENERAL PROPERTIES

Description

Chlorub is chemically unreactive and shows a high degree of impermeability to water and water vapour; its films are characterised by their excellent resistance to corrosive influences. These and other very valuable properties make Chlorinated Rubber important to the paint industry because it is superior in many respects to more conventional resins. It can be used as a sole resin or to upgrade formulations containing conventional types, such as alkyls. In the adhesives field Chlorub has had a marked effect on the bonding properties of Polychloroprene and Nitrile-rubber based adhesives. Water and flame resistant coatings can be provided for packaging and textile industries.

Chlorub is available in various viscosity grades. All are free flowing white powders that contain a small amount of stabilizer. All grades contain less than 0.5% w/w carbon tetra chloride (CTC).

Grades of Chlorub

<table>
<thead>
<tr>
<th>Grade</th>
<th>Viscosity mPas</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>11-15</td>
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<tr>
<td>20</td>
<td>18-27</td>
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<tr>
<td>40</td>
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<tr>
<td>170</td>
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* Viscosity is determined by Ostwald Viscometer on a 20% w/w solution in toluene at 25°C.

In general, lower viscosity grades are used in printing inks and spray paints, when low viscosity solutions are required with maximum solid content, whereas grade-20 is a general purpose grade. Higher viscosity grades are used in special purpose adhesives and textile coatings.

PACKING AND STORAGE

Chlorub is packed in 20 kgs. net in multi ply paper bags with inner PE liner depending upon grade.

Chlorub should be stored in a cool and dry place.

PHYSICAL PROPERTIES

- Chlorine content: Min. 64% w/w
- Appearance: White powder
- Taste: None
- Toxicity: Non-toxic
- Odour: None
- Moisture content: 0.2 Max.
- Specific gravity: Approx. 1.6
- Bulk density: 350-500 kg./m³, varies with grade
- Stability on heating: Decomposition is appreciable above 130°C. In air it chars and decomposes without melting.
- Resistance to bacterial growth: Unmodified chlorub based coatings do not support bacterial growth.

APPLICATIONS OF CHLORUB

Usage of Chlorub can broadly be classified in the following categories:

A. Paints

Main usage of Chlorub in the paint industry are for:
1. Maintenance paints on steel structure
2. Traffic paints
3. Fire retardant coatings
4. Swimming pool paints
5. Marine paints
6. High build paints

Chlorub is also used in primers for steel work and pipe-line coatings. Other uses include lacquers for wood and paper coatings besides concrete curing lacquers.

B. Adhesives

Chlorub is mainly used in polychloroprene based adhesives for footwear and other applications in rubber to metal bonding adhesive systems.

C. Printing Inks

Low viscosity grades of Chlorub are used in printing ink formulations due to their ability to impart the following properties:
1. Rapid solvent release
2. Good rub resistance
3. Chemical resistance
4. Low permeability to water vapour

Chlorub is commonly used in applications for rotogravure inks for packaging and printing of high quality publications, hot foil stamping and overprint varnishes.

For further information kindly refer to the supplementary technical brochures on applications in the above categories. Alternatively, more details on guidelines for various formulations for the above applications can be provided by us on specific request.
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