

# Herculite LX

## Product Description

Herculite LX is a high strength hemihydrate plaster ( $\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$ ) produced from high purity gypsum mineral. This product is manufactured from a naturally occurring mineral and therefore variations in colour are to be expected.

## Applications

For use where high strength, surface hardness and dimensional accuracy are required. Typical applications are copy milling, precision patterns, block moulds, motor trade tooling, moulds for epoxy resin patterns, fibrous plasterwork and for glass reinforced gypsum panels.

## Technical Data

The technical data outlined represents typical figures only. For further details, please contact Formula directly.

|                        |              |              |
|------------------------|--------------|--------------|
| Plaster to water ratio | 2.5:1        | 100/40       |
| by weight              | 2.5kg/litre, | 3lb 2oz/pint |

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|--|------------|
| Initial Vicat setting time<br>@ pwr of 2.5:1 | 35 minutes |
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| Minimum compressive strength,<br>2 hours after setting<br>@ pwr of 2.5:1 | 15.0MN/m <sup>2</sup> |
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| Minimum compressive strength, dry<br>@ pwr of 2.5:1 | 32.0MN/m <sup>2</sup> |
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| Maximum linear expansion,<br>2 hours after setting<br>@ pwr of 2.5:1 | 0.07% |
|--|-------|

Unless otherwise stated, Formula's standard test methods apply. To obtain a copy of the test methods used, please contact Formula directly.

The plaster to water ratios quoted are those used in Formula's standard test methods and are not necessarily those used in practice. The precise consistency to use will need to be adjusted to suit the individual application. Changes to plaster to water ratios will influence product performance, particularly setting time and strength.

Plaster based products are not recommended for conditions where they are likely to be located externally or in any way subjected to weathering or excessive dampness.

Herculite LX is exceptionally strong and durable, has negligible expansion on setting and gives an excellent surface finish when cast.

## Mixing Procedure

The plaster and water should be accurately measured prior to mixing to ensure consistent results. The proportion to achieve a pourable mix is 2.5kg/litre. The plaster should be sprinkled into the water and allowed to soak for at least two minutes before mixing. Mechanical mixing is preferable for large mixes and stirring should be at low speed. Care should be taken to avoid forming a deep vortex which will tend to entrain air into the mix.

## Building up on existing patterns

Herculite LX is especially recommended for building up on existing patterns and it is advisable to make all large patterns which have major changes in section, by this method. A cast with variation in thickness of, say, 50mm to 400mm will inevitably warp due to differential expansion of the plaster mass during setting. The built up thickness should therefore be kept even with 50mm being satisfactory. This is done as follows :-

The master is surrounded by a 50mm edging to form a dam and guide. A mix is made, allowed to stand for approximately ten minutes, and then re-stirred until the mix begins to cream. A thin coat of this mix is applied with a brush to cover the pattern surface

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and to exclude air bubbles. A stronger mix is then applied and sisal fibre, previously soaked in plaster, is laid on. Alternate layers of a stronger plaster mix and fibre are applied until the desired thickness is reached. Do not allow the plaster to set between successive applications.

When stored under dry conditions, this product will have a shelf life of three months from the date of manufacture that is displayed on each sack.

Absorption of moisture can result in changes to physical properties, including a reduction in the set strength of plasters and also a lengthening of setting time. To help protect the product during use, open or part used bags should be carefully folded and closed.

Each bag is date stamped and stocks should be rotated so that the oldest material is used first.

For further technical information or advice on any matter relating to a BPB Formula product, please contact Formula directly.

## Supply Details

Unless otherwise stated, BPB Formula industrial plasters and gypsum minerals are available in 25Kg, 35Kg, 40Kg or 50Kg paper sacks depending upon manufacturing location. Other pack options such as IBC (bulk bags) and bulk product in road tanker may also be available. The company contracts solely upon its conditions of sale, copies of which are available on request. Advice as to merchant outlets for industrial products may be obtained by contacting the sales offices listed.

## Health and Safety

Health and Safety information sheets are available for all BPB Formula Industrial Plasters and Gypsum Minerals and can be obtained by contacting the sales offices listed.

*General health and safety information is printed on each sack.*

No liability is accepted for injury to any person or loss or damage to property by improper use of the product. All information has been provided in good faith but the information may be subject to change.

Any instruction manuals or other literature provided with the product or in respect of the product at any time thereafter are correct at the time of supply but may be updated at a later date. Should the user of the product at any time be unsure about the contents or currency of any such information manuals or other literature then contact should be made with BPB Formula.

## Information

For further information including technical service and health & safety enquiries please contact

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