

Chalk Down Lime – Lime Putty

Aqueous suspension of Calcium diHydroxide Ca(OH)₂.
Non-hydraulic, superfine-grade CL90 mature lime putty.
High-Calcium, high-alkaline and versatile traditional lime putty binder from pure carboniferous limestone quicklime.

White in colour with a Superfine texture/consistency.

Contents:

Lime Putty [Calcium diHydroxide Ca(OH)₂] BS EN 459-1
N.B. May contain trace amounts of silica sand due to production process

NB. It is strongly recommended to use a competent builder or plasterer who is experienced in using lime with the requisite skills, technique and specialist qualifications and experience to carry out the job.

Uses:

Lime putty binder to be blended with appropriate sand/aggregate suitable for sympathetic conservation repairs laying and pointing, plastering and rendering onto various porous substrates. Lime Putty can also be used to make traditional limewash and protective sheltercoats.

NB. Lime Putty is only recommended for internal use.

Availability & Handling:

25kg sealed bag | 800ltr bulk bag IBC
Standard grade: **Ex stock - Minimum 90 days matured.**
WARNING! Take care when lifting 25kg bags.

Environment:

Lime Putty is a sustainable product from naturally occurring materials with minimal environmental impact.

Storage:

Store frost free. Lime putty products have an indefinite shelf life which matures when kept sealed and airtight.

Transport, Spills, Disposal & Recycling:

Non-hazardous to transport. Keep bag sealed and in an upright position. Non-flammable - clear/mop up into normal waste be aware of slip hazard. Do not enter into general drains/watercourse.

Re-use bag or recycle (LDPE4)

Manufacture:

Processed from Carboniferous Limestone - Tradical® Q Quicklime (Calcium oxide CaO combined with water H₂O).
Lime putty is ideal when working with softer substrates and fabric where a slower and more flexible set is required.

BS EN Standards:

Materials used to provide maximum vernacular suitability and workability and conform to the following standards:

BS EN 459-1:2015 Building Lime

Tradical® Q – EN459-1 CL90-Q (R5, P1)
High Calcium Quicklime - Calcium Oxide (CaO)
Supplier/source: **Lhoist UK ex Hindlow, Buxton.**
Material Type: Carboniferous Limestone

Chemical Analysis:

Lime Putty (High Calcium Quicklime - Calcium Oxide CaO combined with water H ₂ O)	
Chemical Analysis (Dry Basis)	Typical % Mass
Calcium diHydroxide Ca(OH) ₂	96.62%
Calcium Carbonate CaCO ₃	2.00%
Magnesium Oxide MgO	0.27%
Iron + Aluminium Oxide Fe ₂ O ₃ + Al ₂ O ₃	0.12%
Silicon Dioxide SiO ₂	0.42%
Lime Putty is manufactured from Tradical® Q quicklime which conforms to BSEN 459:1 Building Lime - CL90-Q	

Physical Analysis:

Lime Putty (High Calcium Quicklime - Calcium oxide CaO combined with water H ₂ O)	
Physical Analysis	Typical % Mass
Bulk Densities kg/m ³	1340
pH	12.7

Coverage:

Lime Putty - Mortar & Plaster				
Unit/size	Base Coat	Top Coat	Laying	Pointing
25kg	1m ²	4m ²	0.5m ²	4m ²
1000kg	50m ²	150m ²	20m ²	150m ²
Estimated coverages are approximations only and will vary depending on type, suitability and quality of the substrate.				

WARNING! LIME IS CAUSTIC, STORE FROST FREE AND AIRTIGHT.

Traditional slaked lime putty products i.e Lime Mortar should not be used or stored in temperatures of 5°C and falling, or above 25°C unless care is taken to protect work from freezing or drying out too fast until full carbonation has taken place.

Benefits & Performance:

- Ready to use versatile mature lime putty binder.
- Consistent product proportions and quality.
- Bulk and small quantities available delivered to site.
- Uses the best quality raw materials most suited to the local and regional vernacular.
- Lime putty products 'breathe' and are flexible, working in harmony with historic buildings or structures.
- Lime products have improved workability due to a high pure lime content and can be re-worked up until set.
- Products can be kept indefinitely if stored airtight.
- Lime products have excellent vapour permeability.
- Using less CO₂ in their manufacture lime products are kinder to the environment.

Preparation:

Pour off any excess lime water from the top of the bag and decant to use later to plasticise (if required). Reseal the bag at the end of use and re-cover with water to make airtight.

Application:

Mixing Mortar/Plaster:

Mix in a roller pan mixer, forced-action mixer or whisk. If knocking up by hand use a larry, hoe or the back of a shovel in a bath to temper until fully mixed. Gauge by volume, with dry sand and don't add water and ideally leave mortar/plaster or render for up to 2 weeks to sour before using. Then remix or 'knock up' to plasticise before use. A standard mix ratio is 1:2 (lime putty:sand) for most mortar, base coat plaster & render works. Richer mixes of 1:1.5 (lime putty:sand) are used in top coat plasterwork and gauged brickwork or ashlar stonework for tighter joints. Natural Hair or Polypropylene fibre (PPF) can be added to plaster or render for tensile strength and reinforcement when plastering onto laths or masonry.

NB. Only add natural hair immediately before use.

Making Limewash:

Add 3 parts clean water to 1 part lime putty and whisk until fully mixed, repeat whisking every few minutes. Limewash should be the consistency of a dilute emulsion and not drop off from the brush.

NB. Lime Putty may require sieving to make a superfine grade limewash.

Decoration:

It is always recommended to protect lime plastered surfaces with a breathable paint or traditional limewash. Allow up to 4 weeks before decorating new lime plaster. Use a diluted coat of paint or limewash first onto new plaster to let it soak in.

Aftercare & Protection:

Provide ventilation for new lime work to carbonise. Avoid using industrial heaters or dehumidifiers as this may accelerate drying and prevent carbonation. A low heat source can be used carefully in a cold/damp conditions. As a guide allow up to a year for a standard mortar/plaster mix to dry and fully carbonise in normal conditions.

Gauged Lime Mortar/Plaster:



Lime Mortar/Plaster can be gauged with Pozzolan up to 10% or 9:1 (Lime Mortar/Plaster:Pozzolan) by volume to accelerate the set.

NB. Do not add cement, gypsum, PVA, modern additives or plasticisers.

Please note:

Our quality lime putty is produced from a naturally occurring raw material and on occasion may differ slightly from batch to batch in colour and texture. Every effort is made to produce a consistent product as part of our own factory controlled procedures and quality control but it is strongly recommended to test with a small amount of material in situ to assess suitability and performance and purchase adequate amounts of product from the same batch to fulfil any job. Chalk Down Lime Ltd can NOT guarantee the colour and texture of our lime putty.

Health & Safety: Full Health & Safety info contained within: Lime Putty - Safety Data Sheet (SDS)

Lime Putty (Calcium Hydroxide) Ca(OH) ₂	
CAS No. 1305-62-0	EINECS No. 215-137-3
 Danger H318 Causes serious eye damage	Precautionary Statements P102 Keep out of reach of children. P280 Wear protective gloves, eye/face protection. P305 + P351 + P338 If in eyes rinse cautiously with water for several minutes and immediately get medical assistance. P302 + P352 If on skin, wash affected parts immediately with plenty of soap and water.
 Warning Skin Irritation 2 Eye Damage 1 H315 Causes skin irritation STOT SE 3 H335 May cause respiratory irritation	

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