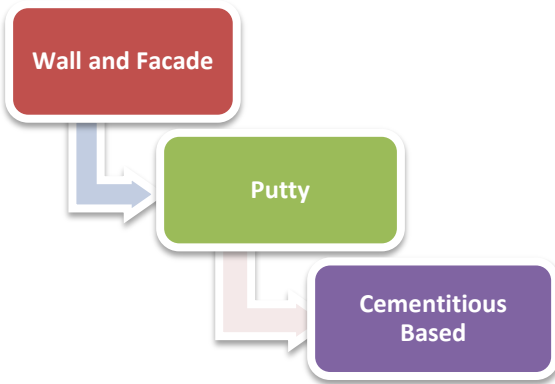


FAMILY TREE



PRODUCT DESCRIPTION

NASA Putty Plus is a polymer modified cementitious skim coat, smooth finishing and wall putty plaster specially designed to be over painted by decorative paints in internal and external applications. Cemcoat Putty composed of unique composition of cement, limestone, dry powders, selected polymers and special hydrophobic additives which when mixed with water produces a creamy paste suitable for plastering and filling small cracks and pinholes on vertical and overhead surfaces in dry or humid conditions.

FIELD OF APPLICATION

Area Type	: <input checked="" type="checkbox"/> Dry	<input checked="" type="checkbox"/> Semi-wet	<input type="checkbox"/> Submerged
Type of Application	: <input checked="" type="checkbox"/> Horizontal	<input checked="" type="checkbox"/> Vertical	

AREA OF APPLICATION

- Fitting continuous burning fires, or for use on any surface which is exposed to high temperatures.
- Filling small cracks, scratches and pinholes.
- Skim coat and smooth putty over fairfaced concrete and cement based plaster to provide a smooth surface ready to be painted.
- Building and repairing fire backs.
- Mending cracked and broken bricks in grates and stoves.
- Pointing between metals and bricks.

PROPERTIES

• Pre-mixed, Easy to apply provides a smooth surface that can be easily hand sanded.	• Shrinkage controlled.
• Flexible, resists cracking.	• High resistance to weather conditions.
• Excellent adhesion.	• Low absorption to water.
• Can be used over sand cement plaster and concrete as thick putty.	• Thixotropic properties, suitable for vertical applications.
• Resistant to high temperatures and is both air and heat setting.	• Provides an excellent protection for the decorative painting layer against moisture.
• Easily applied by troweling.	• Easily applied by scraper or putty knife.

PREPARATION

Working Conditions	: 5°C to 40°C.
Substrate	: Stir contents lightly without adding water, avoid over mixing as it may cause air entrapment. Do not mix with any other material. Joints and all surfaces should be dry and clean.

MIXING

Mixing Speed	: 400 – 600 rpm.
Process	: To ensure proper mixing, a mechanically powered mixer or drill fixed with suitable paddle should be used. 11 - 11.5 litres of clean water for each 20 kg bag should be added to clean container. The powder is then added slowly to the water while mixing continuously with low speed mixer/drill (400 - 600 rpm). Mixing time should be continued until uniform consistency is obtained. Leave the mix for 5 minutes and stir again.

This Technical Data Sheet is prepared based on extensive research and practical experience. With the varieties of the materials and conditions of application is out of our control, Apollo assumes no responsibility for the obtained results and / or damages caused by the usage of this product. Apollo Technical Service family is always available at your disposal for any advice and directions that might be required.

APPLICATION

Application Method	: Scraper, Trowel or scraper.
Thickness	: Up to 3 mm.
Coverage / Yield	: Approximately 22.5 m ² per 20 kg bag @ 1 mm thickness depending on joint dimensions.
Position	: The described process is suitable for vertical & horizontal application.
Priming	: Not Required.
Process	: The suitable thickness of application is up to 3 mm per coat using stainless steel scraper or putty knife. If higher thickness is required another layer should be applied after the first layer has initially set using wet on wet technique. At higher applied thicknesses, small hair cracks may appear. After full drying (24 hours), the surface should be smoothed using fine sand paper.
Cleaning	: All tools / equipment shall be cleaned immediately after use with fresh water.

PACKING

Standard Package	: NASA Putty Plus FRP Available in 5 & 20 kg buckets.
Custom Package	: Special packages can be arranged for large requirements.
How to Order	: Specify the Product Name followed with a hyphen and package size.

STORAGE CONDITION

Shelf Life	: A shelf life of 12 months from date of manufacture if stored at temperatures between 2°C and 40°C in original unopened bags.
Temperature	: 2°C and 40°C.
Points of Attention	: Store in shaded area and properly sealed in its original packing.

TECHNICAL PROPERTIES

PROPERTY	STANDARD	VALU
Standard:	BS EN 123506, BS EN 123908, BS 63197, BS 63193, BS 1881208, ASTM C109, ASTM C1202 & ASTM C157, ISO, EN 13501-1 B (in accordance with the European classification) test method	
Component:		Single component
Form:		Smooth, creamy, lump free paste
Colour:		Standard Coloured
Bulk density:		1.3 ± 0.1 g/cm ³
Final setting time:	ASTM C191	8 - 9 hr
Working time:		60 - 90 min
Flammability:		Non flammable
pH Value:		11-13

ATTENTION

PPE	: It is recommended to use full PPE while working with the product to avoid any possibility of irritation to skin or eyes. In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advice if necessary.
Hazardous Classification	: Non-Hazardous transportation.
Fire	: Non-flammable.



NASA Putty Plus

NASA Putty Plus – 5,20kg– ASTM

Water resistant, high performance cementitious skim coat and smooth putty plaster for internal and external applications

APOLLO AT THE GLANCE

Apollo is confident with the technical solutions and high quality end products served to the customers.

Apollo invites you to explore other services and products:

- | | | |
|--|--------------------------------------|--------------------------------------|
| • R&D and manufacturing custom solutions | • Adhesives | • Bonding Agents Systems |
| • Building Finishing Systems | • Concrete Admixture | • Concrete Repair Systems |
| • Flooring Systems | • Grouts & Anchoring Systems | • Painting & Putty Systems |
| • Protective Coatings | • Sealant & Jointing Solutions | • Structural Strengthening Solutions |
| • Surface Treatment Solutions | • Tile Adhesive & Grouting Solutions | • Waterproofing Systems |

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