VIVEK EARTHING PVT. LTD.
Expert Advice & Reliable Solutions.

# BFC (Back Fill Compound) Datasheet

## Material Description:

• **Material:** A combination of Graphite, Carbon, Bentonite, and Magnesium Sulphate.
• **Standards:** Conforms to industry standards ensuring high performance and safety.

## Specifications:

| Quality Level | Composition |
|---|---|
| Standard | Bentonite, etc. |
| Elite | Carbon, Bentonite, etc. |
| Advance | Graphite, Carbon, Bentonite, etc. |
| Premium | Graphite, Carbon, Bentonite, Magnesium Sulphate, etc. |

## Key Properties:

• **Optimal Conductivity:** Superior grounding performance for stable power distribution.
• **Durability:** Enhanced strength and long-term protection.
• **Resistance:** High resistance to corrosion and environmental degradation.

## Applications:

- **Improving Conductivity**:
  BFC enhances the conductivity between the earthing electrode and the surrounding soil. This is particularly useful in areas with high soil resistivity, such as rocky or sandy terrain.

- **Moisture Retention**:
  It retains moisture around the electrode for extended periods, ensuring consistent grounding performance even in dry conditions.

- Some BFCs have anti-corrosive properties, protecting the earthing electrode from degradation and extending its lifespan.
- **Stabilizing Earthing Resistance**:
  By providing a consistent low-resistance path, BFC minimizes fluctuations in earthing resistance due to environmental changes, such as seasonal variations.
- **Sensitive Installations**:
  BFC is vital for critical infrastructure like telecom towers, data centers, and power stations, where stable grounding is essential for safety and equipment performance.

## Application Process:

- **Site Preparation**:
  Dig a pit for the earthing electrode as per design specifications (usually 3-5 meters deep).
- **Electrode Placement**:
  Install the electrode (e.g., copper or GI rod) at the center of the pit.
- **BFC Application**:
  Mix the BFC with water (if required) to form a slurry or use it in its dry form, depending on the manufacturer's instructions. Pour it around the electrode to fill the pit evenly.
- **Compaction**:
  Compact the BFC to remove air gaps and ensure good contact between the electrode and the compound.
- **Backfilling**:
  Cover the pit with soil after applying the BFC.

## Advantages:

• **Safety:** Protects electrical systems from surges and faults.
• **Performance:** Ensures uninterrupted power and system stability.
• **Compliance:** Meets international standards for reliability and safety.

## Quality Assurance:

- Thoroughly tested for material strength and durability.
- Certified anti-corrosion treatment for extended life.
- Supplied with material test certificates (MTC) for assurance.

**Vivek Earthing Pvt. Ltd. An ISO 9001 - 2015 Certified Company**

This datasheet provides detailed information about the **BFC(Back Fill Compound)** in various sizes, ensuring all relevant technical and application-specific details are covered for users and installers.