

# Technical Data Sheet



Not more than 1000 g in any Shot Hole in Degree I Mines or 565 g in any Shot Hole in Degree II & Degree III Mines



# **Description & Application**

Supercoal 5 is a detonator sensitive packaged emulsion explosive. The Director General of Mines safety (DGMS) has approved Supercoal 5 as a P5 type permitted explosive for use in Degree I, II and III gassy coal mines /seams.

The emulsion has firm putty like consistency. It is plastic wrapped with steel wire end clips. Cartridges are identified individually as P5 Permitted explosive with product name, cartridge dimensions and name of manufacturer printed on each cartridge.

Supercoal 5 is a water resistance packaged explosive for use in all applications that require the use of a P5 classified explosive.

#### **Technical Specifications**

Nominal Density (g/cc)	1.15 <sup>±</sup> 0.05
Relative Weight Strength*	70 %
Relative Bulk Strength*	95 %
Minimum Velocity of Detonation (Km/Sec)	3.5 +/- 0.4

<sup>\*</sup>Compared to ANFO@ 0.85 g/cc

# **Packaging**

Net Explosive Box weight is nominally 25 Kgs and standard cartridge sizes as below:

Diameter (mm)	Nominal length (mm)	Nominal Mass (gm)	Cartridges per case
32	180	150	166
32	200	200	125

#### **Recommendations for Use**

- Suitable for use in watery holes.
- To be used in gassy coal mines/seams of I/II/III degree for blasting in coal of the Solid Blasting, after it has been depillaring operations.

## **Charging**

- Maximum energy of blasthole can be achieved by tamping the explosive with a wooden tamping rod.
- Do Not use metal instrument to tamp explosives.
- Do Not tamp primer cartridge containing a detonator.
- The maximum charge per shot hole for P5 type permitted explosives must not exceed 1000 grams in Degree I mines and 565 grams in Degree II & III mines.

## **Priming & Initiation**

The recommended initiator for Supercoal 5 is a No. 6 strength, DGMS approved, non-incendive short delay detonator.

#### **Important**

Detonating Cords are not recommended for use with Supercoal 5.

## Safety

The post detonation fume characteristics and non incendivity of Supercoal 5 make it suitable for blasting in underground coal applications. User should ensure that adequate ventilation is provided prior to re-entry to the blast site.

Avoid extremes of shock, heat, friction or mechanical impact to prevent pre-mature initiation.



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# **Sleep Time within Blastholes**

The undamaged product may be charged and fired several days later in dry holes (provided the product remains within its recommended shelf life).

If the explosives packaging is damaged, the sleep-time in a blasthole is influenced by the extent of damage to the packaging and by the nature of any water present.

### **Storage & Handling**

For the best results, store under moderate temperatures and dry conditions in a well ventilated, approved magazine.

If stored in cool, dry, well ventilated magazine and handled properly, the shelf life of Supercoal 5 is 6 months from the date of manufacturing. However exposure to hot or cold extremes may cause the product to deteriorate prematurely.

All regulations pertaining to the handling and use of such explosives apply.

# **Shipping Information**

**Authorised Name** 

of Explosive : SUPERCOAL 5

Proper Shipping Name : EXPLOSIVE, BLASTING, TYPE E

Class / Div. : 1.1D UN No. : 0241

### **Disposal**

The undamaged product may be charged and fired several days later in dry holes (provided the product remains within its recommended shelf life).

If the explosives packaging is damaged, the sleep-time in a blasthole is influenced by the extent of damage to the packaging and by the nature of any water present.

#### Disclaimer

Use of these products by anyone who lacks adequate training, experience & supervision may kill or injure. It is expressly understood that any technical advice furnished by SIIL with reference to the use of its Products is given gratis & SIIL assumes no obligation or liability for the advice given or results obtained, & all such advice being given is accepted at Customer's risk.

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\*Images are just for reference and can be changed without any intimations.

**Solar Industries India Limited** 

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