

## Pentex™ 25FF



### Description

*Pentex™ 25FF* is a NG-free, small-hole primer. It is intended mainly for use in tunnel rounds, since it is suitable for use with modern charging equipment using either bulk emulsions such as *Subtek™* and *Civec™* or packaged ANFO *Exan™*.

*Pentex™ 25FF* consists of an orange plastic tube filled with PETN based plastic explosive. The PETN gives the product more energy and a higher and more even detonation velocity compared with conventional dynamites. Since *Pentex™ 25FF* does not contain nitroglycerin, it does not cause the headaches associated with the handling of NG products, especially on skin contact.

### Application

*Pentex™ 25FF* makes charging work easier, for it contributes to quick and rational handling. The detonator is inserted into the primer quickly and easily. The primer cartridge is then inserted into the charging hose to be deposited at the bottom of the hole during the actual charging sequence.

### Special Characteristics:

- High velocity of detonation
- High density
- Safe and simple handling
- No additional tool necessary

### Recommendations for Use

- Use the oldest products in magazines first.
- Store appropriately according to explosives and magazines regulation.

### Technical Properties

| Product                                   | Pentex™ 25FF |
|---|--------------|
| Nominal cartridge diameter (mm)           | 15           |
| Nominal cartridge length (mm)             | 150          |
| Net explosive weight (g)                  | 25           |
| Shell colour                              | orange       |
| Density (g/cm <sup>3</sup> ) <sup>1</sup> | 1.45 - 1.50  |
| Detonation velocity (m/s) <sup>2</sup>    | >6300        |
| Explosion energy (MJ/kg) <sup>3</sup>     | 4.3          |
| Oxygen balance (%)                        | -12          |
| Gas volume (l/kg)                         | 727          |
| Water resistance                          | Excellent    |
| Weight strength (%) <sup>4</sup>          | 127          |
| Detonator sensitive down to (°C)          | -20          |
| Impact sensitivity (J)                    | 15.0         |

### Priming and Initiation

Use only detonators with a strength equivalent to Ref. Det. #3 (EN 13763-15) or stronger (at least 600 mg PETN base charge).

### Ground Temperature

These products are available for use in ground temperatures - 20 °C to a maximum of +40 °C. If your application requires you to operate outside this temperature range, please contact a DEXPLOC representative.

### Packaging

*Pentex™ 25FF* boosters are available in the following packaging:

| Gross weight cartridge (g) | Gross weight box (kg) | Cartridge per box (items) |
|----------------------------|-----------------------|---------------------------|
| 29                         | 16                    | 500                       |

## **Storage and Handling**

### **Product Classification**

Authorised Name: *Pentex™ 25FF*  
Proper Shipping Name: BOOSTER without detonator  
UN No.: 0042  
Classification: 1.1D  
EC Type Approval: BAM 0589

### **Storage**

*Pentex™ 25FF* should be stored in a suitably licensed magazine for Class 1.1D explosives.

*Pentex™ 25FF* boosters have a storage life of 2 years in stable, temperate conditions.

*Pentex™* boosters are best stored at ambient temperatures of 0 °C to +40 °C.

### **Safety**

*Pentex™ 25FF* boosters contain explosives, which can be initiated by intense impact, friction or heat. As with all high explosives, *Pentex™ 25FF* boosters should be handled and stored with care.

DO NOT use these boosters with any detonator, which cannot be completely contained within the booster. If this is not observed, damage to the detonator may occur during charging which may lead to a premature detonation.

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### Notes:

1. Nominal Density Only.
2. VOD will depend on application including explosive density, blasthole diameter and degree of confinement. The VOD range is based on minimum unconfined and calculated ideal.
3. Explosion energy, Oxygen balance & Gas volume are calculated with IDEX 4.4
4. For cartridge products, the relative weight strength (MJ/kg) is always compared to dynamites as the base = 100 % (theoretically, the weight strength between different types of dynamites – can vary with small margins, depending of the calculation methods of the different manufacturers).