# 4 In Millennium™ Basic, DP, RDX, 19.5G, Shaped Charge

## Technical Drawing

![Diagram of a shaped charge with dimensions and parts labeled]

### Technical Information

**APPLICATION:**
Shaped charge for oilfield use

**PERFORATING SYSTEM SPECIFICATION (w/ hot finish steel):**
- Diameter: 4 inch (101.6 mm) OD
- Collapse rating: 20,000 psi (1,379 bar)
- Tensile rating: 218,000 lb (98,883 kg)

**EXPLOSIVES:**
- Booster: Pure RDX, 1g
- Main load: Desensitized RDX, 18.5 g
- Density: > 1.5 g/cm³

**TEMPERATURE LIMITS:**
- 325 F / 162 C for 1 h
- 260 F / 126 C for 24 h
- 225 F / 107 C for 100 h

**PERFORMANCE:**
Manufacturing quality control data:
- Hole Diameter: 0.49 in (12.4 mm)
- Penetration: 27.5 in (698 mm)

**SHELF LIFE:**
10 years when stored unopened in original packaging. Storage temperature:
- 0 C / 32 F min
- 54 C / 130 F max

**DISPOSAL:**
Dispose of product not suitable for oilfield use according to applicable laws and regulations.

## Packing Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity per box</td>
<td>50 pieces</td>
</tr>
<tr>
<td>Gross weight per box</td>
<td>15.95 kg (35.16 lb)</td>
</tr>
<tr>
<td>Net weight per box</td>
<td>13.00 kg (28.66 lb)</td>
</tr>
<tr>
<td>NEC per box</td>
<td>0.9750 kg</td>
</tr>
<tr>
<td>Box dim.</td>
<td>45.7 x 30.5 x 12.7 cm</td>
</tr>
<tr>
<td></td>
<td>18 x 12 x 5 in</td>
</tr>
<tr>
<td>Package type</td>
<td>Trays with desiccant</td>
</tr>
<tr>
<td></td>
<td>enclosed by vacuum bag,</td>
</tr>
<tr>
<td></td>
<td>then placed inside</td>
</tr>
<tr>
<td></td>
<td>fibreboard box</td>
</tr>
<tr>
<td>Product Designation</td>
<td>HES-APRV-004</td>
</tr>
</tbody>
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