**Cytatherm CT-D4 Dry Plasma Thawer**

- **Thaws up to 4 Plasma Bags (450 ml) of fresh frozen plasma (FFP) at a time**
- **Water never touches the plasma bag – contained water system isolates the plasma bags & operator away from circulating water; significantly less likely to compromise sterility**
- **Uses a patented massaging action to agitate and circulate the thawing plasma inside of the plasma bag – no unreliable mechanical parts involved**
- **Bright white, corrosion-resistant, sanitary PVC construction is easy to clean & maintain**
- **Low maintenance burden – unit needs to be drained & cleaned once every three months**
- **Temperature setting from 25.0°C - 40.0°C (preset to 37.0°C) accurate to ±0.1°C**

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**Safety Features**
- Leak sensors trigger visual and audio alarms
- Primary and secondary overheat protection systems
- Audible and visual high temperature alarm with self test
- Thaw time fully programmable (to within 1 min)
- Thaw temperature fully programmable (to within 0.1°C)

**Ease of Use**
- Convenient loading; plasma bags are placed between bladders with recirculating water at thawing temperature
- Plasma bags remain visible throughout the thawing process to check progress

**Hygenic**
- No wet plasma bags or overwrap bags to promote bacterial growth
- Separate thawing compartments isolate leaks
- Air entering and leaving the units is filtered through a 0.1 micron air filter to prevent spreading contaminants and to help keep internal water in the bath clean

**Strengths**
- FDA Cleared and CE Marked
- Available in 115V or 230V
- 2 year warranty (warranty extensions available)
- Made in the USA
The CytoTherm CT-D4 Dry Plasma Thawer is a laboratory instrument that uses a patented thawing system (US Pat No. 7,722,839 B2) to thaw plasma while keeping the plasma bags dry throughout the thawing process. Tempered water from an isolated water bath is recirculated through a bladder. The frozen plasma bags are placed on one part of the bladder while the rest of the bladder is folded over to cover the plasma bags. The bladder is divided into segments which are pressurized at different times during the thawing process to gently massage the plasma bags. The pressurized bladder conforms to the shape of the plasma bags for efficient heat transfer and temperature uniformity, while the massaging action agitates and circulates the thawing contents of the plasma bag. The CT-D4 comes with a rack that will thaw up to 4 plasma bags (450 ml) at a time (or 2 larger 1,000 ml bags at a time). Plasma bag leakage is isolated to one of two separate sections and if a leak is detected, the thawing stops and an alarm sounds. The contained water system isolates the plasma bags & operator away from the circulating water and is significantly less likely to compromise sterility.

Since 1980, CytoTherm has been a leader in the field of countertop Plasma Thawing machines. Applying years of expertise in fluid agitation and precise temperature control, CytoTherm has developed an entire family of Wet and Dry Plasma Thawers to meet any Plasma Thawing need. CytoTherm also produces the CT-4T.6C, the only countertop Plasma Thawer specifically designed for rapidly manufacturing Cryoprecipitated AHF.

CytoTherm Family Of Plasma Thawers

<table>
<thead>
<tr>
<th>Type</th>
<th>CT-4S</th>
<th>CT-4T</th>
<th>CT-D4</th>
<th>CT-DR</th>
<th>CT-4T.6C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Plasma Thawer</td>
<td>Plasma Thawer</td>
<td>Dry Plasma Thawer</td>
<td>Dry Plasma Thawer</td>
<td>Plasma Thawer for Manufacturing Cryoprecipitated AHF</td>
</tr>
<tr>
<td>Max Plasma Bag Capacity</td>
<td>4 x 600 ml</td>
<td>12 x 450 ml**</td>
<td>4 x 450 ml or 2 x 1,000 ml</td>
<td>6 x 450 ml or 3 x 1,000 ml</td>
<td>12 x 450 ml</td>
</tr>
<tr>
<td>Max Plasma Bag Size</td>
<td>600 ml</td>
<td>450 ml</td>
<td>1,000 ml</td>
<td>1,000 ml</td>
<td>450 ml</td>
</tr>
<tr>
<td>Thaw Time*</td>
<td>14 min</td>
<td>12 min</td>
<td>15 min</td>
<td>16 min</td>
<td>About an Hour</td>
</tr>
<tr>
<td>Temperature Setting</td>
<td>25.0°C - 40.0°C (Preset to 37.0°C†)</td>
<td>25.0°C - 40.0°C (Preset to 37.0°C†)</td>
<td>25.0°C - 40.0°C (Preset to 37.0°C†)</td>
<td>25.0°C - 40.0°C (Preset to 37.0°C†)</td>
<td>5.0°C - 20.0°C (Preset to 6.0°C)</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±0.1°C</td>
<td>±0.1°C</td>
<td>±0.1°C</td>
<td>±0.1°C</td>
<td>±0.1°C</td>
</tr>
<tr>
<td>Dimensions (W x D x H)</td>
<td>9in x 21in x 14in 23cm x 54cm x 35cm</td>
<td>20in x 23in x 14in 51cm x 59cm x 35cm</td>
<td>14in x 21in x 14in 35cm x 53cm x 35cm</td>
<td>21in x 22in x 14in 54cm x 56cm x 35cm</td>
<td>36in x 26in x 18in 91cm x 66cm x 46cm</td>
</tr>
<tr>
<td>Electrical</td>
<td>115/230V, 50/60Hz 770 Watts</td>
<td>115/230V, 50/60Hz 770 Watts</td>
<td>115/230V, 50/60Hz 900 Watts</td>
<td>115/230V, 50/60Hz 770 Watts</td>
<td>115/230V, 50/60Hz 1270 Watts</td>
</tr>
</tbody>
</table>

* Full load of 300 ml plasma bags with 250 ml of plasma, frozen at -22°C. ** With extra accessory corral for 6 units. Part# C4T-CORS.
† World Health Organization (WHO) Clinical Use Of Blood Handbook, pg 29. “Before use, [plasma] should be thawed in the blood bank in water which is between 30°C to 37°C. Higher temperatures will destroy clotting factors and proteins.”