

# DIN EN ISO 25762:2012-04 (E)

## Plastics - Guidance on the assessment of the fire characteristics and fire performance of fibre-reinforced polymer composites (ISO 25762:2009)

---

<b>Contents</b>		<b>Page</b>
Foreword .....		3
Introduction .....		4
<b>1</b>	<b>Scope .....</b>	<b>5</b>
<b>2</b>	<b>Normative references .....</b>	<b>5</b>
<b>3</b>	<b>Terms, definitions and abbreviated terms .....</b>	<b>6</b>
<b>3.1</b>	<b>General .....</b>	<b>6</b>
<b>3.2</b>	<b>Types of material .....</b>	<b>7</b>
<b>4</b>	<b>Fibre reinforcement .....</b>	<b>8</b>
<b>4.1</b>	<b>Form .....</b>	<b>8</b>
<b>4.2</b>	<b>Fibre content .....</b>	<b>8</b>
<b>4.3</b>	<b>Core materials .....</b>	<b>8</b>
<b>4.4</b>	<b>Production methods .....</b>	<b>8</b>
<b>5</b>	<b>Fire characteristics .....</b>	<b>9</b>
<b>5.1</b>	<b>Reaction to fire .....</b>	<b>9</b>
<b>5.1.1</b>	<b>General .....</b>	<b>9</b>
<b>5.1.2</b>	<b>Combustibility .....</b>	<b>9</b>
<b>5.1.3</b>	<b>Ignitability .....</b>	<b>9</b>
<b>5.1.4</b>	<b>Rate of heat release .....</b>	<b>9</b>
<b>5.1.5</b>	<b>Flame spread .....</b>	<b>9</b>
<b>5.1.6</b>	<b>Smoke .....</b>	<b>10</b>
<b>5.1.7</b>	<b>Toxicity .....</b>	<b>10</b>
<b>5.2</b>	<b>Structural performance .....</b>	<b>10</b>
<b>5.2.1</b>	<b>General .....</b>	<b>10</b>
<b>5.2.2</b>	<b>Walls and ceilings .....</b>	<b>11</b>
<b>5.2.3</b>	<b>Floors .....</b>	<b>11</b>
<b>5.2.4</b>	<b>Structural integrity of fibre-reinforced composites on exposure to fire .....</b>	<b>11</b>
<b>6</b>	<b>Fire test methods .....</b>	<b>12</b>
<b>6.1</b>	<b>Assessment of fire hazard .....</b>	<b>12</b>
<b>6.2</b>	<b>Fire tests for determining performance requirements .....</b>	<b>12</b>
<b>6.3</b>	<b>Applicability of standard fire test methods to FRP composites .....</b>	<b>12</b>
<b>6.4</b>	<b>Large-scale tests .....</b>	<b>13</b>
<b>6.5</b>	<b>Standard fire tests for conformity purposes .....</b>	<b>13</b>
<b>Annex A (informative)</b>	<b>Heat release measurements on FRP composites .....</b>	<b>14</b>
<b>Annex B (informative)</b>	<b>Typical results given for glass-fibre-reinforced polymer composites by ISO and EN fire test methods .....</b>	<b>16</b>
<b>Annex C (informative)</b>	<b>Recommendations for the handling and storage of fibre-reinforced polymer composites .....</b>	<b>24</b>
<b>Annex D (informative)</b>	<b>Procedure in the event of fire involving fibre-reinforced polymer composites .....</b>	<b>26</b>

<b>Annex E (informative) Mounting and fixing of test specimens of fibre-reinforced polymer composites .....</b>	<b>27</b>
<b>Bibliography .....</b>	<b>31</b>