

# DIN EN 71-8:2018-03 (E)

## Safety of toys - Part 8: Activity toys for domestic use

---

<b>Contents</b>		<b>Page</b>
European foreword .....		5
<b>1</b>	<b>Scope .....</b>	<b>7</b>
<b>2</b>	<b>Normative references .....</b>	<b>7</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>8</b>
<b>4</b>	<b>Requirements .....</b>	<b>11</b>
<b>4.1</b>	<b>General (see A.2) .....</b>	<b>11</b>
<b>4.1.1</b>	<b>Assembly .....</b>	<b>11</b>
<b>4.1.2</b>	<b>Static strength .....</b>	<b>11</b>
<b>4.1.3</b>	<b>Maximum height (see A.3) .....</b>	<b>11</b>
<b>4.1.4</b>	<b>Corners and edges (see A.4) .....</b>	<b>11</b>
<b>4.1.5</b>	<b>Protruding parts .....</b>	<b>11</b>
<b>4.1.6</b>	<b>Diameter of ropes and other means of suspension .....</b>	<b>12</b>
<b>4.1.7</b>	<b>Water accumulation (see A.14) .....</b>	<b>12</b>
<b>4.2</b>	<b>Barriers, handrails and ladders and similar means of access to activity toys .....</b>	<b>12</b>
<b>4.2.1</b>	<b>Barriers and handrails preventing a child from falling down (see 6.5.1, A.5) .....</b>	<b>12</b>
<b>4.2.2</b>	<b>Ladders and similar means of access to activity toys (see A.6) .....</b>	<b>12</b>
<b>4.3</b>	<b>Entrapment (see A.7) .....</b>	<b>14</b>
<b>4.3.1</b>	<b>Entrapment of head and neck .....</b>	<b>14</b>
<b>4.3.2</b>	<b>Entrapment of clothing and hair .....</b>	<b>15</b>
<b>4.3.3</b>	<b>Entrapment of feet .....</b>	<b>16</b>
<b>4.3.4</b>	<b>Entrapment of fingers .....</b>	<b>16</b>
<b>4.4</b>	<b>Stability of activity toys other than slides, swings and activity toys with crossbeams, and see-saws .....</b>	<b>16</b>
<b>4.4.1</b>	<b>General .....</b>	<b>16</b>
<b>4.4.2</b>	<b>Stability of activity toys with a free height of fall of 600 mm or less .....</b>	<b>17</b>
<b>4.4.3</b>	<b>Stability of activity toys with a free height of fall of more than 600 mm .....</b>	<b>17</b>
<b>4.5</b>	<b>Slides (see A.8) .....</b>	<b>17</b>
<b>4.5.1</b>	<b>General .....</b>	<b>17</b>
<b>4.5.2</b>	<b>Stability of slides .....</b>	<b>17</b>
<b>4.5.3</b>	<b>Retaining sides for slides (see A.9) .....</b>	<b>17</b>
<b>4.5.4</b>	<b>Starting, sliding and run-out sections on slides .....</b>	<b>18</b>
<b>4.6</b>	<b>Swings (see A.10) .....</b>	<b>21</b>
<b>4.6.1</b>	<b>Stability of swings and other activity toys with crossbeams .....</b>	<b>21</b>
<b>4.6.2</b>	<b>Static strength of crossbeams, swing devices and suspension connectors .....</b>	<b>22</b>
<b>4.6.3</b>	<b>Swings intended for children under 36 months .....</b>	<b>22</b>
<b>4.6.4</b>	<b>Minimum clearance between adjacent swing elements, and adjacent structures .....</b>	<b>22</b>
<b>4.6.5</b>	<b>Lateral stability of swing elements .....</b>	<b>23</b>
<b>4.6.6</b>	<b>Minimum clearance between swing elements and the ground (see A.11) .....</b>	<b>24</b>
<b>4.6.7</b>	<b>Suspension connectors and swing devices .....</b>	<b>24</b>
<b>4.6.8</b>	<b>Impact, geometry and design of swing elements .....</b>	<b>25</b>
<b>4.7</b>	<b>See-saws .....</b>	<b>26</b>
<b>4.7.1</b>	<b>Stability of see-saws .....</b>	<b>26</b>
<b>4.7.2</b>	<b>Seat/stand height .....</b>	<b>26</b>
<b>4.7.3</b>	<b>Restraint of motion .....</b>	<b>26</b>
<b>4.7.4</b>	<b>Pinching and crushing of fingers and toes .....</b>	<b>26</b>
<b>4.7.5</b>	<b>Hand supports .....</b>	<b>26</b>
<b>4.8</b>	<b>Carousels and rocking activity toys (see A.12) .....</b>	<b>27</b>
<b>4.9</b>	<b>Paddling pools .....</b>	<b>27</b>

4.9.1	Static strength of paddling pools with non-inflatable walls .....	27
4.9.2	Paddling pools with inflatable walls .....	27
5	Warnings, markings, and instructions .....	27
5.1	Warnings and markings .....	27
5.1.1	General .....	27
5.1.2	Paddling pools .....	27
5.2	Assembly and installation instructions .....	28
5.3	Maintenance .....	29
6	Test methods .....	29
6.1	General .....	29
6.2	Stability .....	30
6.2.1	Stability of activity toys with a free height of fall of 600 mm or less (see 4.4.2 and 4.8) .....	30
6.2.2	Stability of activity toys with a free height of fall of more than 600 mm (see 4.4.3) .....	32
6.2.3	Stability of slides (see 4.5.2) .....	32
6.2.4	Stability of swings and other activity toys with crossbeams (see 4.6.1) .....	33
6.2.5	Stability of see-saws (see 4.7.1) .....	34
6.3	Static strength .....	35
6.3.1	General .....	35
6.3.2	Strength of activity toys other than swings and paddling pools (see 4.1.2 and 4.8) .....	35
6.3.3	Strength of swings (see 4.6.2) .....	37
6.4	Dynamic strength of barriers and handrails (see 4.2.1) .....	37
6.4.1	Principle .....	37
6.4.2	Apparatus .....	37
6.4.3	Procedure .....	38
6.5	Test for head and neck entrapment (see 4.3.1) .....	38
6.5.1	Head and neck entrapment in accessible completely bound openings (see 4.2.1, 4.3.1 a) and 4.3.1 c)) .....	38
6.5.2	Head and neck entrapment in partially bound and V-shaped openings (see 4.3.1 d)) .....	42
6.6	Toggle test (see 4.3.2) .....	47
6.6.1	Principle .....	47
6.6.2	Apparatus .....	47
6.6.3	Procedure .....	48
6.7	Measurements of sliding and run-out sections on slides (see 4.5.4) .....	50
6.7.1	Measurement of inclination of the sliding section on slides (see 4.5.4 f)) .....	50
6.7.2	Measurement of the minimum angle along the sliding section and the run-out section on slides (see 4.5.4 g)) .....	50
6.8	Diameter of ropes and other means of suspension (see 4.1.6) .....	51
6.9	Determination of impact from swing elements (see 4.6.8.2) .....	52
6.9.1	Principle .....	52
6.9.2	Apparatus .....	52
6.9.3	Preparations .....	54
6.9.4	Testing .....	54
6.10	Static load test for paddling pools with non-inflatable walls (see 4.9.1) .....	56
6.11	Measurement of the height of falling protection of swings with double seats and examination of gaps between the swing seat and the falling protection .....	56
Annex A (informative)	Rationale .....	58
A.1	Activity toys (see scope) .....	58
A.2	General requirements (see 4.1) .....	58
A.3	Maximum height (see 4.1.3) .....	58
A.4	Corners and edges (see 4.1.4) .....	58
A.5	Barriers (see 4.2) .....	58
A.6	Ladders and similar means of access to activity toys (see 4.2.2) .....	59
A.7	Entrapment (see 4.3) .....	59
A.8	Slides (see 4.5) .....	59
A.9	Retaining sides for slides (see 4.5.3) .....	60
A.10	Swings (see 4.6) .....	60
A.11	Clearance between swing elements and the ground for crossbeams with a maximum height of 1 200 mm (see 4.6.6) .....	61

<b>A.12</b>	<b>Rocking activity toys and similar toys (see 4.8)</b> .....	<b>61</b>
<b>A.13</b>	<b>Stability of swings and other activity toys with crossbeams (see 6.2.4.1.1)</b> .....	<b>61</b>
<b>A.14</b>	<b>Drowning hazards (see 4.1.7)</b> .....	<b>61</b>
<b>A.15</b>	<b>Warnings (see Clause 5)</b> .....	<b>62</b>
<b>Annex B (informative)</b>	<b>Significant technical changes between this European Standard and the previous version</b> .....	<b>63</b>
<b>Annex ZA (informative)</b>	<b>Relationship between this European Standard and the essential requirements of Directive 2009/48/EC aimed to be covered</b> .....	<b>65</b>
<b>Bibliography</b>	.....	<b>66</b>