

# DIN EN 16890:2021-08 (E)

## Children's furniture - Mattresses for cots and cribs - Safety requirements and test methods (includes Amendment :2021)

---

<b>Contents</b>		<b>Page</b>
European foreword .....		4
1	Scope .....	5
2	Normative references .....	5
3	Terms and definitions .....	5
4	General test conditions .....	6
4.1	Preliminary preparation .....	6
4.2	Application of forces .....	6
4.3	Tolerances .....	6
5	Test equipment .....	6
5.1	Measuring table .....	6
5.2	Stops .....	7
5.3	Square aluminium alloy tube .....	7
5.4	Loading pad .....	7
5.5	Test template for determination of the indentation depth .....	8
5.6	Spherical load for determination of the indentation depth .....	9
5.7	Test foam .....	9
5.8	Small parts cylinder .....	9
5.9	Feeler gauge .....	10
5.10	Cone .....	10
5.11	Probe .....	11
6	Chemical hazards .....	11
7	Fire and thermal hazards (see A.3) .....	11
8	Mechanical hazards .....	11
8.1	Entrapment hazards from gaps and openings (see A.4) .....	11
8.1.1	Entrapment hazards between the mattress and the sides .....	11
8.1.2	Body entrapment hazards .....	12
8.1.3	Entanglement hazards (see A.4.3) .....	13
8.2	External suffocation hazards (see A.4.4) .....	13
8.2.1	"Labels and decals on the mattress" .....	13
8.2.2	Plastic packaging .....	13
8.2.3	Firmness .....	14
8.3	Choking and internal suffocation hazards (see A.4.5) .....	16
8.3.1	Small parts .....	16
8.3.2	Accessibility to filling materials .....	17
8.4	Hazards due to edges and protrusions (see A.4.6) .....	20
8.5	Structural integrity (see A.4.7) .....	20
8.5.1	Shrinkage .....	20
8.5.2	Hazards due to deformation of the filling .....	20
9	Product information (see A.4.8) .....	21
9.1	Marking .....	21
9.2	Purchase information .....	21
9.3	Instruction for use .....	22

<b>Annex A (informative) Rationales</b> .....	<b>24</b>
<b>A.1 General</b> .....	<b>24</b>
<b>A.2 Chemical hazards (Clause 6)</b> .....	<b>24</b>
<b>A.3 Thermal hazards (Clause 7)</b> .....	<b>24</b>
<b>A.4 Mechanical hazards (Clause 8)</b> .....	<b>25</b>
<b>A.4.1 General</b> .....	<b>25</b>
<b>A.4.2 Entrapment hazards (8.1)</b> .....	<b>25</b>
<b>A.4.3 Entanglement hazards (8.1.3)</b> .....	<b>25</b>
<b>A.4.4 Suffocation hazards (8.2)</b> .....	<b>25</b>
<b>A.4.5 Choking and ingestion hazards (8.3)</b> .....	<b>25</b>
<b>A.4.6 Hazardous edges and protrusions (8.4)</b> .....	<b>26</b>
<b>A.4.7 Structural integrity (8.5)</b> .....	<b>26</b>
<b>A.4.8 Product information (Clause 9)</b> .....	<b>26</b>
<b>Annex B (informative) Colorants</b> .....	<b>27</b>
<b>B.1 Rationale</b> .....	<b>27</b>
<b>B.2 Colorants</b> .....	<b>27</b>
<b>B.3 Colour fastness to perspiration</b> .....	<b>27</b>
<b>Annex C (informative) A-deviations</b> .....	<b>28</b>
<b>! Annex ZA (informative) Relationship between this European Standard and the safety requirements of Directive 2001/95/EC aimed to be covered</b> .....	<b>30</b>
<b>Bibliography</b> .....	<b>35</b>