

Product specific requirements: 107. Knives, Table Cutlery

Version: 3.0  
Last update: 07.04.2022

Material	Products	Remark
Metal, Except Precious Metals: silver and gold incl.alloy	Cutlery: Forks, Knives and Spoons; Knives; Jack-knife	Not applicable for children < 36 Mth



No	Parameter	Method	Reference	Requirement																																																																																								
<b>General requirements</b>																																																																																												
1	Workmanship	In House	-	Product and its components has to meet the requirements on design and quality according to information offered by producer; No damages on material: - Without major defects - Without scratches, dents, cracks, marred or discolored surface - Without components missing, deformed or fractured - With finished edges and seams - With proper and uniform adhesion in wooden parts - Without flash and consistent in size, color and form for plastic parts																																																																																								
2	Design	In House	-	Free from burrs or splinters: - Without pits or burrs and weld smoothly filed / grounded - Evenly aligned in seams and components - Between the individual components of product may not have any gaps which exceed 0.3 mm																																																																																								
3	Labelling	ISO 8442-1 ISO 8442-2	-	The sample shall comply with the labelling requirement of ISO 8442-1; ISO 8442-2 • Marking & Labelling Part 2. Requirements For Stainless Steel And Silver-Plated Cutlery																																																																																								
4	Labelling	In House	SR 817.023.21/ 2001/95/EC	• The name or trade name and the address or registered office of the party that is responsible for placing the materials or articles on the market • Net quantity of the contents in terms of weight, measure or numerical count (Metric & EU Standard) or a combination Place: Directly on the product, or if technically not possible - on a label / leaflet.																																																																																								
5	Labelling	In House	SR 817.023.21/ 2001/95/EC	a) Product identification information b) General safety c) Warning and safety instructions. d) Operating or care instructions e) Special instructions and precautions on how to use the final product if necessary  - in a clearly visible place; - in easily readable and indelible writing; - in at least one official language (GE/IT/FR).  Place: Directly on the product or packaging or label or on a leaflet.																																																																																								
6	Instruction manual	In House	SR 817.023.21	Special instructions (usage, assembly, safe operation, maintenance, necessary warnings and other useful instructions) and precautions on how to use the final product if necessary. .																																																																																								
7	Claim Verification	In House	-	Must comply with all claims (including accessories, if any).																																																																																								
<b>Chemical requirements</b>																																																																																												
<b>Metals and alloys</b>																																																																																												
8	Lead/ Cadmium/ Arsen (total content)	ICP-MS	SR 817.023.21	< 0,05 % Lead < 0,01% Cadmium < 0,03% Arsen;																																																																																								
9	Lead	ICP-MS	SR 814.81	Allowed alloy of brass (messing); Lead total content < 0,5%																																																																																								
10	Tin (mandatory risk analysis)	ICP-MS	SR 817.023.21	Products from Tin (min. 97 % Tin); < 0,05 % Lead < 0,01% Cadmium																																																																																								
11	Tin as Alloy (mandatory risk analysis)	ICP-MS	SR 817.023.21	Sn 99,85 % < 0,01 % Lead < 0,01% Cadmium																																																																																								
12	Specific Metal Release	EN 13130 / ICP and ICP-MS	Not regulated in CH Manor requirement to follow Resolution CM/Res (2013)9	Highly recommended to follow requirements to 21 Elements according to CM/RES (2013)9 Resolution CM/Res (2013)9 on metals and alloys used in food contact materials and articles:  <table border="1"> <thead> <tr> <th>No</th> <th>W</th> <th>Element (food)</th> <th>SRL (mg/kg)</th> </tr> </thead> <tbody> <tr><td>1</td><td></td><td>Aluminium</td><td>5</td></tr> <tr><td>2</td><td></td><td>Antimony</td><td>0.04</td></tr> <tr><td>3</td><td></td><td>Arsenic</td><td>0.002</td></tr> <tr><td>4</td><td></td><td>Barium</td><td>1.2</td></tr> <tr><td>5</td><td></td><td>Beryllium</td><td>0.01</td></tr> <tr><td>6</td><td></td><td>Cadmium</td><td>0.005</td></tr> <tr><td>7</td><td></td><td>Chromium</td><td>0.250</td></tr> <tr><td>8</td><td></td><td>Cobalt</td><td>0.02</td></tr> <tr><td>9</td><td></td><td>Copper</td><td>4</td></tr> <tr><td>10</td><td></td><td>Iron</td><td>40</td></tr> <tr><td>11</td><td></td><td>Lead</td><td>0.010</td></tr> <tr><td>12</td><td></td><td>Lithium</td><td>0.048</td></tr> <tr><td>13</td><td></td><td>Manganese</td><td>1.8</td></tr> <tr><td>14</td><td></td><td>Mercury</td><td>0.003</td></tr> <tr><td>15</td><td></td><td>Molybdenum</td><td>0.12</td></tr> <tr><td>16</td><td></td><td>Nickel</td><td>0.14</td></tr> <tr><td>17</td><td></td><td>Silver</td><td>0.08</td></tr> <tr><td>18</td><td></td><td>Thallium</td><td>0.0001</td></tr> <tr><td>19</td><td></td><td>Tin</td><td>100</td></tr> <tr><td>20</td><td></td><td>Vanadium</td><td>0.01</td></tr> <tr><td>21</td><td></td><td>Zinc</td><td>5</td></tr> </tbody> </table>	No	W	Element (food)	SRL (mg/kg)	1		Aluminium	5	2		Antimony	0.04	3		Arsenic	0.002	4		Barium	1.2	5		Beryllium	0.01	6		Cadmium	0.005	7		Chromium	0.250	8		Cobalt	0.02	9		Copper	4	10		Iron	40	11		Lead	0.010	12		Lithium	0.048	13		Manganese	1.8	14		Mercury	0.003	15		Molybdenum	0.12	16		Nickel	0.14	17		Silver	0.08	18		Thallium	0.0001	19		Tin	100	20		Vanadium	0.01	21		Zinc	5
No	W	Element (food)	SRL (mg/kg)																																																																																									
1		Aluminium	5																																																																																									
2		Antimony	0.04																																																																																									
3		Arsenic	0.002																																																																																									
4		Barium	1.2																																																																																									
5		Beryllium	0.01																																																																																									
6		Cadmium	0.005																																																																																									
7		Chromium	0.250																																																																																									
8		Cobalt	0.02																																																																																									
9		Copper	4																																																																																									
10		Iron	40																																																																																									
11		Lead	0.010																																																																																									
12		Lithium	0.048																																																																																									
13		Manganese	1.8																																																																																									
14		Mercury	0.003																																																																																									
15		Molybdenum	0.12																																																																																									
16		Nickel	0.14																																																																																									
17		Silver	0.08																																																																																									
18		Thallium	0.0001																																																																																									
19		Tin	100																																																																																									
20		Vanadium	0.01																																																																																									
21		Zinc	5																																																																																									

## Product specific requirements: 107. Knives, Table Cutlery

Version: 3.0  
Last update: 07.04.2022

Material	Products	Remark
Metall, Except Precious Metals: silver and gold incl.alloy	Cutlery: Forks, Knives and Spoons; Knives; Jack-knife	Not applicable for children < 36 Mth



No	Parameter	Method	Reference	Requirement																		
13	Sensory test	DIN 10955	(EU) 1935/2004	< 3																		
<b>Paints and varnishes</b>																						
14	Lead (Pb), total content	DIN EN ISO 11885, ICP-OES	SR 817.023.21	n.d. in coating 0.1%																		
15	Cadmium (Cd), total content	DIN EN ISO 11885, ICP-OES	SR 817.023.21	n.d. in coating 0.1%																		
<b>Product specific requirements</b>																						
<b>FUNCTIONAL TESTS</b>																						
16	Hygiene	ISO 8442-1	-	All surfaces intended to come into contact with food shall be easily cleanable under normal circumstances.																		
17	Drop Impact Test (for knives)	ISO 8442-1	-	Sample shall not produce, cracking or other abnormalities after 5 drops from a height of 120cm onto a hard floor. No functionality loss: not solve, break, rip or tear up.																		
18	Drop Impact Test (for cutlery only)	In House Method with reference to ISO 8442-1	-	Sample shall not produce, cracking or other abnormalities after 5 drops from a height of 120cm onto a hard floor. No functionality loss: not solve, break, rip or tear up.																		
<b>PHYSICAL CHARACTERISTICS</b>																						
19	Thickness of cutting edge	ISO 8442-1	-	Angle: < 40° Distance: between 1 mm from the tip of the cutting edge and > 25 mm from the handle: not thicker than 0.46 mm; Knife for chopping: not thicker than 0.6 mm (same cond); For items with length <100 mm, the measurements are made at a distance not less than 15 mm from the handle.																		
<b>PERFORMANCE TESTING</b>																						
20	Hardness of knife blades	ISO 8442-2 (7.4)	-	Martensitic stainless steel: min. 48 HRC Carving knife blade: min. 52 HRC																		
21	Sharpness and edge retention test	ISO 8442-5	-	Only for knives: The sample shall comply the requirement of ISO 8442-5																		
22	Dishwashing Test (If Applicable)	EN 12875-1	-	Table cutlery: Shall withstand 125 cycles of dishwashing cycles at hot setting without visible damage or colour change: Knives (for stainless-steel or only if claimed) 50 cycles																		
23	Hand Wash durability (if dishwasher is not applicable)	In-House Method	-	Shall exhibit no exterior surface degradation after being hand washed 10 times using a national brand liquid detergent at peak of 40±5°C, followed by rinse in cold water.																		
24	Moisture Content (%) (Wood Only)	In-House Method	-	Moisture content determined: 8 – 12%																		
25	Effects of Humidity (Wood Only)	In House Method	-	No change after 24 hours at 85% RH & 40°C																		
26	Strength of cuttings (for knives)	ISO 8442-1 (6.2) ISO 8442-2 (7.2)	-	Must fulfill the Norm, Paragraph 6.2; see exception; <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Klingenlänge mm</th> <th>Biegeprüfkraft N</th> </tr> </thead> <tbody> <tr> <td>bis 100</td> <td>20 ± 1</td> </tr> <tr> <td>über 100</td> <td>30 ± 1</td> </tr> </tbody> </table>	Klingenlänge mm	Biegeprüfkraft N	bis 100	20 ± 1	über 100	30 ± 1												
Klingenlänge mm	Biegeprüfkraft N																					
bis 100	20 ± 1																					
über 100	30 ± 1																					
27	Handle Strength (If Applicable)	ISO 8442-1 (6.3) ISO 8442-2 (7.3)	-	Table cutlery: Must fulfill the Norm ISO 8442-2 (7.3) Only for knives: Shall not detach or loosen after subjecting to appropriate tension and torque during actual use. ISO 8442-1 (6.3) <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Mass of item g</th> <th>Pulling force N</th> <th>Torque Nm</th> </tr> </thead> <tbody> <tr> <td>mass ≤ 40</td> <td>90 ± 1</td> <td>2,3</td> </tr> <tr> <td>40 &lt; mass ≤ 80</td> <td>180 ± 1</td> <td>4,5</td> </tr> <tr> <td>80 &lt; mass ≤ 150</td> <td>270 ± 1</td> <td>6,75</td> </tr> <tr> <td>150 &lt; mass ≤ 220</td> <td>360 ± 1</td> <td>9,0</td> </tr> <tr> <td>mass &gt; 220</td> <td>450 ± 1</td> <td>11,00</td> </tr> </tbody> </table>	Mass of item g	Pulling force N	Torque Nm	mass ≤ 40	90 ± 1	2,3	40 < mass ≤ 80	180 ± 1	4,5	80 < mass ≤ 150	270 ± 1	6,75	150 < mass ≤ 220	360 ± 1	9,0	mass > 220	450 ± 1	11,00
Mass of item g	Pulling force N	Torque Nm																				
mass ≤ 40	90 ± 1	2,3																				
40 < mass ≤ 80	180 ± 1	4,5																				
80 < mass ≤ 150	270 ± 1	6,75																				
150 < mass ≤ 220	360 ± 1	9,0																				
mass > 220	450 ± 1	11,00																				
28	Resistance To Corrosion	ISO 8442-1 (6.1) ISO 8442-2 (7.1)	-	Must fulfill the Norm: After 6 hours by t 60 °C + 4 C in 1% salt solution (Natriumchlorid)- no visible corrosion.																		
29	Effects of Extreme Temperature (If Applicable)	ISO 8442-1 (6.5)	-	Knives: Must fulfill the Norm, Paragraph 6.5; Table Cutlery: with reference to ISO 8442-1																		
30	Sprung fork guards (If Applicable only for jack-knife)	ISO 8442-2 (5.5)	-	Must fulfill the Norm: must have a snap closure																		