

DIN EN ISO 8098:2023-04 (E)

Cycles - Safety requirements for bicycles f or young children (ISO 8098:2023)

Contents		Page
European foreword		4
Foreword		5
Introduction		6
1	Scope	7
2	Normative references	7
3	Terms and definitions	7
4	Requirements and test methods	9
4.1	Brake tests and strength tests — Special requirements	9
4.1.1	Brake tests to which special requirements apply	9
4.1.2	Strength tests to which special requirements apply	9
4.1.3	Numbers and condition of specimens for the strength tests	9
4.1.4	Tolerances	10
4.1.5	Fatigue test	10
4.1.6	Plastic material test ambient temperature	10
4.1.7	Impact test	10
4.2	Toxicity	10
4.3	Sharp edges	11
4.4	Security and strength of safety-related fasteners	11
4.4.1	Security of screws	11
4.4.2	Minimum failure torque	11
4.4.3	Quick-release devices	11
4.4.4	Foot location devices	11
4.4.5	Folding bicycle mechanism	11
4.5	Crack detection methods	11
4.6	Exposed protrusions	11
4.7	Brakes	12
4.7.1	Braking-systems	12
4.7.2	Hand-operated brakes	12
4.7.3	Attachment of brake assembly and cable requirements	14
4.7.4	Brake-block and brake-pad assemblies — Security test	15
4.7.5	Brake adjustment	15
4.7.6	Back-pedal brake	15
4.7.7	Braking-system — Strength tests	15
4.7.8	Braking performance	16
4.8	Steering	18
4.8.1	Handlebar — Dimensions and end fittings	18
4.8.2	Handlebar grips and end plugs	18
4.8.3	Handlebar-stem — Insertion depth mark or positive stop	20
4.8.4	Steering stability	20
4.8.5	Steering assembly — Static strength and security tests	20
4.8.6	Handlebar and stem assembly — Fatigue test	24
4.9	Frames	26
4.9.1	Frame and front fork assembly — Impact test (falling mass)	26
4.9.2	Frame and front fork assembly — impact test (falling frame)	27
4.10	Front fork	28
4.10.1	General	28

4.10.2	Front fork — Bending fatigue test.....	28
4.11	Wheel and tyre assembly.....	29
4.11.1	Wheel and tyre assembly — Rotational accuracy.....	29
4.11.2	Wheel and tyre assembly — Clearance.....	30
4.11.3	Wheel and tyre assembly — Static strength test.....	31
4.11.4	Wheels — Wheel retention.....	31
4.11.5	Tyre inflation pressure.....	32
4.11.6	Wheel and tyre assembly — Overpressure test.....	32
4.12	Pedals and pedal/crank drive system.....	32
4.12.1	Pedal tread.....	32
4.12.2	Pedal clearance.....	33
4.12.3	Pedal — Impact test.....	33
4.12.4	Pedal/pedal-spindle — Dynamic durability test.....	34
4.12.5	Drive system static strength test.....	35
4.12.6	Crank assembly — Fatigue tests.....	36
4.13	Saddles and seat-posts.....	37
4.13.1	Limiting dimensions.....	37
4.13.2	Seat-post — Insertion-depth mark or positive stop.....	37
4.13.3	Saddle and seat-post security test.....	38
4.13.4	Saddle — Static strength test.....	38
4.13.5	Saddle and seat-post assembly fatigue test.....	39
4.14	Chain-wheel and belt-drive protective device.....	40
4.15	Stabilizers.....	41
4.15.1	Mounting and dismounting.....	41
4.15.2	Dimensions.....	41
4.15.3	Vertical load test.....	42
4.15.4	Longitudinal load test.....	42
4.16	Luggage carriers.....	43
4.17	Lighting systems and reflectors.....	43
4.17.1	Front and rear light.....	43
4.17.2	Reflectors.....	43
4.17.3	Wiring harness.....	44
4.18	Warning device.....	44
5	Instructions.....	44
6	Marking.....	45
6.1	Requirement.....	45
6.2	Durability test.....	46
6.2.1	Requirement.....	46
6.2.2	Test method.....	46
Annex A (informative) Steering geometry.....		47
Annex B (informative) Verification of free fall velocity.....		48
Bibliography.....		49