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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 18029.13-2008

Wheelchair -- Part 13: Determination of friction of test surface

轮椅车 第13部分：测试表面摩擦系数的测定

(English Translation)

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Foreword

GB/T 18029 "wheelchair" consists of the following components.

- Part 1. Determination of static stability Determination of dynamic stability of electric wheelchairs. --- Part 2
- Part 3. Determination of brakes Determination of energy consumption. --- Part 4
- Part 5. Determination of dimensions, mass and turning space Determination of electric wheelchairs maximum speed, acceleration and deceleration. --- Part 6
- Part 7. seat and wheel size measurement method
- Part 8. static strength, impact strength and fatigue strength requirements and test methods
- Part 9. climatic test methods of electric wheelchairs Determination of electric wheelchair obstacle Ability. --- Part 10
- Part 11. Test dummies
- Part 13. Determination of the test surface coefficient of friction
- Part 14. electric wheelchairs and power control systems - Requirements and test methods
- Part 15. information dissemination, and labeling requirements documents issued
- Part 16. Block (by) pad flame retardancy requirements and test methods
- Part 17. electric wheelchair controller interface
- Part 18. The downstairs unit
- Part 19. Wheeled mobile device for a motor vehicle

- Part 20. Determination of standing wheelchairs Performance
- Part 21. Electromagnetic compatibility requirements and test methods
- Part 22. Adjusting program
- Part 23. Requirements and test methods for stair climbing device caregiver operation
- Part 24. Requirements and test methods occupant operated stair climbing device
- Part 25. Battery and charger requirements and test methods
- Part 26. Terminology this part identical with ISO 7176-13. 1989 "Wheelchairs - Part 13. Determination of the test surface coefficient of friction" (in English).

This section proposed by the People's Republic of China Ministry of Civil Affairs.

This part of the National Rehabilitation and special equipment Standardization Technical Committee on Persons with Disabilities (SAC/TC148) centralized.

This section drafted by. National Rehabilitation Aids Research Center, Shanghai Hubang Medical Devices Co., Ltd. Foshan Dongfang Medical Equipment Factory have Limited, Shanghai wheelchair depot.

1 Scope

This section GB/T 18029 specifies the rough test plane (if not polished concrete surface) of the friction coefficient measuring methods. Such as If the method specified in this section for testing smooth or polished surface, the measured coefficient of friction over the entire test plane should be a constant value.

The wheelchair several test items (such as GB/T 18029.1, GB/T 18029.3, ISO 7176-2, ISO 7176-6 and ISO 7176-10) requires the surface coefficient of friction in the range specified in this section.

2 Normative references

The following documents contain provisions which, through reference GB/T 18029 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, we are encouraged to reach agreement under this section all parties that proposed to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 1681 vulcanized rubber resilience Determination (GB/T 1681-1991, eqv ISO 4662. 1986) GB/T 6031 vulcanized rubber or thermoplastic rubber hardness measurement (10 ~ 100IRHD) (GB/T 6031-1998, idt ISO 48.

1994)

GB/T 14729 Wheelchairs term (GB/T 14729-2000, eqv ISO 6440. 1985) GB/T 20739 Rubber Products Storage Directory (GB/T 20739-2006, ISO 2230:2002, IDT)

3 Terms and Definitions

GB/T 14729 terms and definitions given in the following terms and definitions apply to this section.

Pavement, flooring, wheelchair support surface or testing platform.

Principle 4

The coefficient of friction between the wheelchair and the wheelchair depends on the test plane of the tire and the test plane. In order to have a comparable level test Test results compare different stage of wheelchairs, this part of the determination of the coefficient of friction using standard defines the test surface, this process with the measured wheel Chair car unrelated.

This method is tested on a test surface of the block at a predetermined speed to pull a standard rubber in contact with the surface.

5.1 Test Block

Test pieces shall be made of a solid steel block, the size shown in Figure 1, the bottom surface should be flat.

Arc end test block shall be mounted circular or similar fasteners to the test surface of the block downward 50mm position parallel to the test Pull the surface of this test blocks.

Test block, and the quality of rubber glued to the bottom of the ring should be $5\text{kg} \pm 0.05\text{kg}$.

GB/T 18029.13-2008/ISO 7176-13. 1989