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

GB/T 47248-2026

Road vehicles - Safety chains for trailers up to 3.5 t

道路车辆 3.5 t以下挂车用安全链

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1 Scope

GB/T 47248-2026 is the Chinese national standard covering the safety chain on a light trailer - the last connection between trailer and towing vehicle if the coupling fails, with its strength, its attachment and the length that keeps the drawbar off the road. First edition, in force since 1 October 2026. It was issued on 31 March 2026 and takes effect on 1 October 2026, as a first edition. The document is under the responsibility of the Ministry of Industry and Information Technology. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This Document specifies the classification, technical requirements, test methods, inspection, and marking of safety chains for trailers. This Document applies to the design, manufacture, and installation of steel safety chains for trailers with a gross mass of

2 Normative References

The provisions in following documents become the essential provisions of this Document through reference in this Document. For the dated documents, only the versions with the dates indicated are applicable to this Document; for the undated documents, only the latest version (including all the amendments) is applicable to this Document.

GB/T 13912 Metallic coatings - Hot dip galvanized coatings on fabricated iron and steel articles - Specifications and test methods

GB/T 20946-2007 Short link chain for lifting purposes - General conditions of acceptance

3 Terms and Definitions

For the purposes of this Document, the terms and definitions given in GB/T 20946-2007 and the following apply.

3.1 Safety chain A safety device with protective function used to ensure that a trailer shall not separate in the event of accidental uncoupling. [Source: GB/T 22550-2023, 3.6.16, modified]

3.2 Trailer gross mass The sum of the trailer's curb weight and its rated load.

3.3 Safety chain fixed point A structure that is used to secure the safety chain, which is attached to the trailer drawbar, towing vehicle towing bracket, or other components that meet strength requirements, by means of welding or bolting.

3.4 Proof force The force that is borne by the entire chain during the manufacturing and verification process of the safety chain.

3.5 Breaking force The maximum tensile force that a safety chain can withstand before it breaks during a static tensile test. [Source: GB/T 20946-2007, 3.7, modified]

4 Classification

Safety chains are classified into 4 categories. The category codes and applicable trailer gross mass shall comply with the provisions of Table 1. Table 1 -- Correspondence between safety chain category codes and trailer gross mass

5.1 Dimensions

5.1.1 Chain link dimension The schematic diagram of chain link structure is shown in Figure 1; the main dimensions shall comply with the provisions of Table 2. Unit. kg Safety chain category codes Trailer gross mass (GM) Table 3 - Proof force and breaking force of safety chain

5.2.4 Anti-corrosion treatment The safety chain shall be protected against corrosion by galvanizing or passivation.

5.3 Performance

5.3.1 Min. breaking force After heat treatment, the finished chain shall be subjected to a min. breaking force no less than that specified in Table

3. The results of the safety chain breaking force test shall comply with the relevant provisions of

6.5 in GB/T 20946-2007.

5.3.2 Total ultimate elongation The total ultimate elongation of the safety chain shall not exceed 30%.

5.4 Installation

5.4.1 The safety chain shall be visually inspected before use; it shall not be deformed or damaged.

5.4.2 After the towing vehicle is connected to the trailer, the safety chain shall not affect the normal connection of the mechanical connection device or the normal operation of the braking system (if any).

5.4.3 One end of each of the two safety chains shall be reliably and symmetrically connected to the fixed points on both sides of the centerline of the trailer drawbar. The technical requirements and test methods for the fixed points shall comply with the provisions of Appendix A.

5.4.4 The safety chain shall cross below the connector before being connected to the towing vehicle's tow bracket or other structural member meeting strength requirements.

5.4.5 The safety chain shall not be connected to the fasteners securing the towing vehicle's fixed connecting ball; for tow brackets with detachable tow arms, the safety chain shall be connected to the non-detachable structure of the tow bracket.

5.4.6 When the centerlines of the towing vehicle and trailer are aligned, the length or tension of each safety chain connected to both the towing vehicle and trailer shall be the same; and consistent with the minimum safety chain length required for normal steering of the vehicle-trailer combination.

5.4.7 Safety chains should be connected to the towing vehicle and trailer using shackles; and the minimum ultimate strength of the shackle shall be no less than the minimum breaking force of the safety chain.

6 Test Methods

6.1 Chain link and weld zone dimensions The dimensions of the safety chain links and weld zone shall be measured using vernier calipers.

6.2 Surface corrosion protection The test of the galvanized anti-corrosion coating on the surface of the safety chain shall be carried out in accordance with the method of GB/T 13912.

6.3 Min. breaking force

6.3.1 Preparation of sample The number of samples shall be determined according to the safety chain category code. For category code 10, take 5 samples; for other category codes, take 4 samples.

6.3.2 Test methods The test method shall be carried out according to the provisions of 6.3 in GB/T 20946-2007. Loading shall be performed at a rate not exceeding $20 \text{ N}/(\text{mm}^2 \cdot \text{s})$ until the sample breaks; and the breaking force value shall be recorded.

6.4 Total ultimate elongation After sampling according to the requirements of

6.3.1 and testing according to the method of 6.3.2, the total ultimate elongation shall be calculated according to the method specified in

6.3.5 of GB/T 20946-2007.