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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC

## **OF CHINA**

# 中华人民共和国国家标准

GB/T 11376-1997

eqv ISO 9717: 1990

# Phosphate conversion coatings for metals

# 金属的磷酸盐转化膜

Issued on July 25, 1997 Implemented on February 01, 1998

Issued by State Bureau of Technical Supervision

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### Foreword

This standard is revision of GB 11376-89 based on ISO 9717: 1990 Phosphate conversion coatings for metals — Method of specifying requirements. It is equivalent to this International Standard on technical contents, writing rules comply with GB/T 1.1-1993.

Added FOREWORD and INTRODUCTION of ISO 9719 according to regulation and format in GB/T 1.1-1993. In specific technical detail, listed Clause 4 "Coating classification code" in previous standard into annex of this standard; meanwhile, added Clause 8 "Heat treatment after coating" and Clause 9 "After treatment". In normative references, added GB 12609-90 *Electrodeposited metallic coatings and related finishes-Sampling procedures for inspection by attributes*.

This standard will replace previous GB 11376-89 *Phosphate conversion coatings for metals* from implementation date.

Annex A, B, C, C, E, F, G, H and J of this Standard are informative annex.

This Standard is proposed by Ministry of Machine-Building Industry of the People's Republic of China.

This Standard is under the jurisdiction of National Technical Committee on Metallic and Non-metallic Coating of Standardization Administration of China.

The responsible drafting organization is Wuhan Material Protection Research Institute of Ministry of Machine-Building Industry.

The chief drafting staff of this standard includes Chen Diqin and Du Wenlan.

This standard is issued on June, 1989 for the first time.

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#### **ISO Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 9717 was prepared by Technical Committee ISO/TC 107, Metallic and other inorganic coatings.

Annexes A, B, C, D, E, F, G, H and J of this International Standard are for information only.

# NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

### Phosphate conversion coatings for metals

GB/T 11376-1997

eqv ISO 9717: 1990

Replace GB 11376-89

### Introduction

Phosphate conversion coatings are applied to ferrous metals, aluminium, zinc, including zinc plated steel, cadmium and their alloys, either as an end finish or as an intermediate layer for other coatings.

They are intended to

a) impart corrosion resistance;

b) improve adhesion to paints and other organic finishes;

- c) facilitate cold forming operations such as wire drawing, tube drawing and extrusion;
- d) modify surface frictional properties so as to facilitate sliding.

A general description of the principle processes are given for guidance in annex A. Recommendations for coating and after-treatment for each end use are given in annex B, annex C, annex D and annex E (Informative annex).

#### 1 Scope

This Standard describes a method of specifying requirements for phosphate conversion coatings, intended primarily for application to ferrous metals, aluminium, zinc, cadmium and their alloys.



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