

This is an excerpt from:

2016
EDITION

**Standard Test Methods
for Metal Powders and
Powder Metallurgy
Products**

**Standard 06: Method for
Determination of Acid Insoluble
Matter in Iron and Copper
Powders**



Metal Powder Industries Federation

Standard Test Methods for Metal Powders and Powder Metallurgy Products

Introduction & Scope

The Metal Powder Industries Federation (MPIF) is a voluntary-membership, not-for-profit trade association formed by the members of the PM and particulate materials industry to promote the advancement of the metal powder producing and consuming industries and the practice of powder metallurgy and particulate materials technologies. MPIF is a federation of six trade associations, each of which is concerned with some aspect of powder metallurgy (PM), metal injection molding (MIM), metal powders or particulate materials: the Powder Metallurgy Parts Association (PMPA), Metal Powder Producers Association (MPPA), Refractory Metals Association (RMA), Powder Metallurgy Equipment Association (PMEA), Isostatic Pressing Association (IPA), and the Metal Injection Molding Association (MIMA).

MPIF standards cover five categories:

1. PM Nomenclature
2. Powder (Material) Test Method Standards (Testing Procedures)
3. Materials Standards/Specifications for PM Structural Parts, PM Self-Lubricating Bearings, PF Steel and MIM Parts
4. Product (Parts) Test Method Standards (Testing Procedures)
5. PM Press Safety Standards (ANSI/MPIF)

Certain trade associations within MPIF have established standards committees composed of technical people who are responsible for developing standards within their area of expertise and proposing them to the MPIF membership. Before a standard can be issued as an official MPIF standard, it must be approved by the MPIF corporate, voting membership as a whole. The standards contained in this book have all been adopted under this procedure.

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Metal Powder Industries Federation
105 College Road East
Princeton, New Jersey 08540-6692 U.S.A.
TEL: (609) 452-7700
FAX: (609) 987-8523
E-mail: info@mpif.org
Website: mpif.org



Method for

Determination of Acid Insoluble Matter in Iron and Copper Powders

MPIF Standard 06

Issued 1948

Revised 1954, 1964, 1974, 1983, 1988, 1997, 2004, 2010, 2015



STANDARD

06

1. SCOPE

- 1.1 This standard describes an analytical method for determination of the acid insolubles content of elemental iron and copper metal powders.
- 1.2 The acid insolubles referred to are compounds that are not completely soluble in ordinary mineral acids. These are generally considered to be silica and silicates, carbides, alumina, clays, other refractory oxides, or difficult-to-dissolve oxides that may be present in the raw material from which the powders are made or were introduced in their manufacturing process. This method excludes insoluble material that is volatile or combustible at the specified ignition temperature.
- 1.3 The values stated in SI units are to be regarded as the standard. The inch-pound units in parentheses were converted in accordance with IEEE/ASTM Standard SI 10. They may be approximate and are only for information.
- 1.4 *This standard may involve hazardous materials, operations and equipment. This standard does not purport to address all of the potential safety problems associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and to determine the applicability of regulatory limitations prior to use.*

APPENDIX

- A1. COMPARABLE STANDARDS
ASTM E194
ISO 4496