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

GB/T 39714.1-2020

**Plastics - Polytetrafluoroethylene(PTFE) semi-finished products
- Part 1: Requirements and designation**

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Standardization Administration**

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Foreword

GB/T 39714 "plastic polytetrafluoroethylene (PTFE) semi-finished products" is divided into two parts:

---Part 1: Requirements and naming;

---Part 2: Sample preparation and performance measurement:

This part is Part 1 of GB/T 39714:

This section was drafted in accordance with the rules given in GB/T 1:1-2009:

This part uses the redrafting law to amend ISO 13000-1:2005 "Plastic polytetrafluoroethylene (PTFE) semi-finished products Part 1

Points: Requirements and Naming:

Compared with ISO 13000-1:2005, this part is different in structure: The specific adjustments are as follows:

--- Deleted abbreviated terms and symbols (see 3:2 of the ISO 13000-1:2005 version):

Compared with ISO 13000-1:2005, there are technical differences in this part: The terms of these differences have been passed on the outer margins:

The vertical single line (|) is marked: The main technical differences and their reasons are as follows:

---Regarding normative reference documents, this section has made adjustments with technical differences to adapt to my country's technical conditions and adjustments:

The situation is collectively reflected in Chapter 2 "Normative Reference Documents", and the specific adjustments are as follows:

* Replace ISO 472 with GB/T 2035 which is equivalent to the international standard (see Chapter 3);

* Replace ISO 13000-2 with GB/T 39714:2 modified to adopt international standards (see

Chapter 4);

* Deleted ISO 1043-1 (see Chapter 2 of the ISO 13000-1:2005 edition);

---Modified the grade classification of tensile properties of PTFE semi-finished products (see 4:3);

---Modified the classification of the electrical strength of PTFE semi-finished products (see 4:8:2 ~ 4:8:7);

--- Modify the thickness requirements of PTFE semi-finished products for electrical strength test samples (see 4:8:2 ~ 4:8:7);

---Modified some letter codes of semi-finished products (see 5:2:1);

---Added the expression of the code containing recycled resin [see 5:2:4b)];

---Added the reference standard content in Appendix A (see Appendix A [1]~[4]):

This part was proposed by the China Petroleum and Chemical Industry Federation:

This part is under the jurisdiction of the National Plastics Standardization Technical Committee (SAC/TC15):

Drafting organizations of this standard: Shanghai Institute of Materials, Shanghai Shanguhua Fluorine Materials Co., Ltd., Zhejiang Jiari Fluoroplastic Co., Ltd., Shanghai

City Plastics Research Institute Co., Ltd., Zhonglan Chenguang Chengdu Testing Technology Co., Ltd., Luxi Chemical Group Co., Ltd., Liaocheng University:

1 Scope

This part of GB/T 39714 specifies the requirements and naming of polytetrafluoroethylene (PTFE) semi-finished products:

This section applies to the production of semi-finished PTFE containing up to 1% of comonomers: Teflon used to make semi-finished products

The olefin can be new material, it can be reprocessed or recycled resin: The maximum addition amount of pigments or colorants according to mass parts is 1:5%, which is also applicable

The processing conditions for different forms of unfilled PTFE products:

This section divides semi-finished products into four grades based on the difference in tensile strength and tensile breaking strain: Semi-finished products can be divided into processing type

(P type), dimensionally stable type (S type), can also be designated as electrical type (E type) or other types in different applications:

Note: Refer to Appendix A for other standard specifications on semi-finished PTFE products mentioned in this section for reference:

2 Normative references

The following documents are indispensable for the application of this document: For dated reference documents, only the dated version applies to this article

Pieces: For undated references, the latest version (including all amendments) applies to this document:

GB/T 2035 Plastic Terms and Definitions (GB/T 2035-2008, ISO 472:1999, IDT)

GB/T 39714:2 Plastic polytetrafluoroethylene (PTFE) semi-finished products Part 2: Sample preparation and performance determination

(GB/T 39714:2-2020, ISO 13000-2:2005, MOD)

ISO 20568-1 Plastics Fluoropolymer Dispersion Molding and Extrusion Materials Part 1: Nomenclature System and Basic Specification

(Plastics-Fluoropolymerdispersionsandmouldingandextrusionmaterials-Part 1:Designationsys-

temandbasisforspecifications)

3 Terms and definitions

The following terms and definitions defined in GB/T 2035 and ISO 20568-1 apply to this document:

3:1

Moulded basicshape

Direct sintering and compression molding, semi-finished PTFE without other processing:

3:2

Semi-finished product

Turned belts, plates, bars, tubes, pipes, molded profiles or other special-shaped products produced directly, instead of further

The final product processed and/or produced:

3:3

Turning tape skivedtape

Film or sheet processed by cutting, cutting or trimming:

Note: The term "sticky tape" is not recommended:

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