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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 33383-2024

Corrosion control technology of modified polyvinyl chloride structural adhesive and cement

改性聚氯乙烯结构胶及胶泥腐蚀控制技术

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1.Structure and drafting rules for standardization documents" Drafting. This document replaces GB/T 33383-2016 "Technical Specification for Corrosion Resistance of Modified Polyvinyl Chloride (HFVC) Structural Adhesives and Mortars" and Compared with GB/T 33383-2016, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

a) Added the terms "modified polyvinyl chloride (HFVC) anti-corrosion structural adhesive", "angstrom microcrystalline (AWHFVC) anti-corrosion structural adhesive", "waterproof "Anti-seepage anti-corrosion sol", "anti-corrosion composite coating" and definitions (see 3.1, 3.2,

3.9 and 3.11); the terms "primer coating" and "main layer" have been changed Definitions of "reinforcement layer", "surface coating", "coating repair material" and "anti-corrosion structural adhesive" (see 3.4, 3.5, 3.6, 3.7,

3.8 and 3.10, 3.2, 3.3, 3.4, 3.5,

3.8 of the.2016 edition); the term "waterproof anticorrosive sol" and its definition were deleted (see.2016 edition 3.7);

b) Added the following design rules for the main coating, top coating and primer coating of HFVC (or AWHFVC) anti-corrosion composite coating. Performance requirements" (see 4.1.2), changed the requirements for painting at construction joints [see 4.1.6d)1), 4.1.4d)1) of the.2016 edition];

c) The test methods for "bond strength, volume resistivity, hardness (Shore A), and water impermeability" have been changed (see Table 1, Table.2016 Edition). 1); Added the requirement and test method of "HF resistance (immersion in 5% HF solution for 72h)" (see Table 1); Changed the "Penetration depth" requirements (see Table 2, Table 2 of the.2016 edition);

d) Deleted the requirement of "concrete surface dryness and moisture content" [see 4.3.2.1.3c) of the.2016 edition]; added the requirement of "concrete base before coating" Surface treatment requirements [see 4.3.2.1.3c)~d)]; added the "moisture content" requirements for the base before anti-corrosion construction (see 4.3.2.1.4);

e) Added the quality requirements for HFVC (or AWHFVC) anti-corrosion composite coatings [see 4.4.2c)], and deleted the HFVC anti-corrosion structure Coating quality requirements [see 4.4.2c) of the.2016 edition];

f) Added the requirements for base coating construction [see 4.4.3c)];

g) The test method for "Alkali resistance and acid resistance" has been changed (see A.7, A.7 of the.2016 edition). Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document is proposed by China Petroleum and Chemical Industry Federation. This document is under the jurisdiction of the National Technical Committee on Corrosion Control (SAC/TC381). This document was drafted by: Urumqi Tianlu Kaideli Chemical Co., Ltd., Zhejiang Aimi Microcrystalline New Material Technology Co., Ltd., Guangdong Jian Kexin Technology Research Institute Co., Ltd., China Communications Construction Funeng Construction Engineering Co., Ltd., Guangzhou Synthetic Materials Research Institute Co., Ltd., Jiangsu Bangjie Anti-corrosion and Insulation Technology Co., Ltd., Guangzhou Liangheng Testing Technology Service Co., Ltd., Guanghan Huaqi Anti-corrosion Engineering Co., Ltd., Jiangsu Jinling Special Coatings Co., Ltd., Huzhou Lvtian New Materials Co., Ltd., China Municipal Engineering North China Design and Research Institute Co., Ltd., Zhejiang Digital Intelligence and Transportation Institute Technology Co., Ltd., Hangzhou Benchuang Technology Co., Ltd., Hunan Anguang Inspection and Testing Co., Ltd., Henan Sihai Anticorrosion Group Co., Ltd., China International Corrosion Control Engineering Technology Research Institute (Beijing) Co., Ltd., Xuzhou Shengdu Construction Engineering Co., Ltd., China Energy Engineering Group Hu Henan Electric Power Design Institute Co., Ltd., Henan Puxin Anticorrosion Construction Engineering Co., Ltd., Shandong Electric Power Engineering Consulting Institute Co., Ltd., China Electric Power Engineering Consulting Group Northwest Electric Power Design Institute Co., Ltd., Xiangyang Zhongzhong Chemical Co., Ltd., and Zhongshan Vocational and Technical College. The main drafters of this document are. Xu Yunli, Xu Jizhuan, Chen Jun, Zhang Kai, Liu Qin, Liu Yan, Xie Yufang, Wang Xingxiu, Mo Yeqiang, Yuan Shuang, Wen Guosong, Bian Zhibing, Liao Xiaolong, Li Jing, Gao Yingliang, Liu Hongyi, Xu Xiaomei, Zhang Peng, Guo Minlong, Yu Chunhui, Huang Lu, Li

Xianxiu, Chen Lihua, Liu Yanhua, Guo Qingying, Zhang Tao, Zheng Jun, Zhang Zhigang, Dai Tiehua, Liu Xuan, Luo Jianjun, Chen Shaoxiong, Zhao Xiangyue, Zhang Jibing, Zhao Bing, Ma Qinglei, Sun Xiaojing, Mengkai Ge, Jianji Chen, Wenqiang Niu, Xing Fan, Yi Huang, Bingyuan Hao, Shuguang Yao, Fuyang Yao, Xiao Yao, Wu Ma. This document was first published in.2016 and this is the first revision. Corrosion control technology of modified polyvinyl chloride structural adhesive and mortar

1 Scope

GB/T 33383-2024 covers corrosion control using modified polyvinyl chloride structural adhesive and cement, a Chinese system for protecting concrete against aggressive chemical exposure. The application is the industrial floor, sump, trench, tank base and structure surface in a plant where acid, alkali or salt solution is spilled or stored, and where the concrete would otherwise be consumed. The document sets the requirements on the adhesive and the cement, hardness, non-volatile content, drying time, impact resistance, bond strength and chemical resistance among them, on the design of the protective system and on the construction, surface preparation, mixing, application, curing and the inspection of the finished work, together with the data management the technology requires. It applies to the waterproof, impermeable and anti-corrosion design and construction of reinforced concrete surfaces in new, rebuilt and extended buildings and structures, and may be referenced for equipment and steel structure surfaces. It takes effect on 1 October 2024.

This document specifies the technical requirements and data management for corrosion control of modified polyvinyl chloride structural adhesives and mortars. This document applies to the waterproofing, anti-seepage and anti-corrosion of reinforced concrete (or concrete) surfaces in newly built, rebuilt and expanded buildings and structures. Design and construction work, and reference for anti-corrosion design and corrosion-resistant work on the surfaces of other equipment and steel structures.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 531.1 Test method for indentation hardness of vulcanized rubber or thermoplastic rubber Part

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 adhesive A material made by mixing modified polyvinyl chloride resin, corrosion-resistant pigment, filler components, polyvinyl chloride compounds and auxiliary components.