

ICS 93.080.20

CCS Q20



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

GB/T 43882-2024

Odour-less asphalt concrete

净味沥青混凝土

Issued on: April 25, 2024

Implemented on: November 1, 2024

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 Technical Requirements	2
5 Test methods	2
6 Inspection Rules	2
4 Appendix B (Normative) Sampling and testing methods for smoke from odorless asphalt concrete	6

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: 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 was proposed by the Ministry of Housing and Urban-Rural Development of the People's Republic of China: This document is under the jurisdiction of the National Concrete Standardization Technical Committee (SAC/TC458): This document was drafted by: Shenzhen Haichuan New Materials Technology Co., Ltd., Shenzhen New Urban Planning and Architectural Design Co., Ltd., Shandong Jingbo Petrochemical Co., Ltd., Shell (China) Co., Ltd., Chang'an University, Shenzhen Luqiao Construction Group Co., Ltd., Starlight Energy (China) Co., Ltd., Tianjin Chuhui Clean Odor Technology Development Co., Ltd., Anhui Baoxiang Construction Group Co., Ltd., Guangdong Guanyue Road and Bridge Co., Ltd. Co., Ltd., Dahao Municipal Construction Co., Ltd., Wuhan Municipal Road and Bridge Co., Ltd., China Communications Construction Road and Bridge North Engineering Co., Ltd., Guangdong Construction Engineering Cheng Machinery Construction Co., Ltd., Shanghai Highway and Bridge (Group) Co., Ltd., Taiyuan University of Science and Technology, Heyuan Haichuan New Materials Technology Co., Ltd., Guangdong Hongmao Construction Management Co., Ltd., Shandong Transportation Planning and Design Institute Group Co., Ltd., Shandong Haiyun Asphalt Co., Ltd., Shenzhen Long Sheng Engineering Construction Co., Ltd., Shaanxi Transportation Engineering Consulting Co., Ltd., Shaanxi Transportation Planning and Design Institute Co., Ltd., Shanxi Transportation Tong Technology Research and Development Co., Ltd., Shenzhen Haichuan Industrial Co., Ltd., Henan Jiaoyuan Engineering Technology Group Co., Ltd., China Construction Third Engineering Bureau Group Co., Ltd., Henan Hexin Expressway Co., Ltd: The main drafters of this document are: Zhao Pu, Xu Liting, Hao

Peiwen, Wang Yaowei, Wan Zhong, Ye Zhiwei, He Weiping, Xiao Xin, Wang Xinpeng, Gao Yunlong, Xue Yongbing, Qi Cong, Wang Chun, Yu Qiang, Yan Jinhai, Cheng Lebing, Zhang Yonghan, Lü Xiaowu, Lin Chen, Zhang Daoli, Zhu Yongqiang, Chen Huowen, Wang Hongwei, Chen Haibo, Zhang Qiongzi, Shao Jinggan, Feng Bodi, Wang Feng, Cai Ming, Zheng Weisheng, Bi Yufeng, Li Ming, Li Xinqiong, Zheng Zhihua, Jiang Xueming, Zhong Wuming, Lü Qiong, Kong Fansheng, Li Wenkai, Wu Meng: Odor-free asphalt concrete

1 Scope

GB/T 43882-2024 covers low-odour asphalt concrete. Hot mix asphalt is laid at around 160 °C, and at that temperature the bitumen releases fumes containing volatile organics and polycyclic aromatic hydrocarbons - an occupational exposure for the paving crew and a nuisance, sometimes a serious one, for everyone nearby. That matters most exactly where paving is least avoidable: night works in residential streets, tunnels and underground car parks where there is no dispersion, and hospital or school surroundings. Odour-suppressed mixes address it with additives and with modified binders, and the difficulty for a purchaser is that the claim is about something subjective and transient, made by the supplier, and impossible to verify after the road is laid. This document specifies the technical requirements, test methods, inspection rules and transport requirements for odour-less asphalt concrete, and applies to its production, testing and use. Under ICS 93.080.20 and CCS Q20, it is written for asphalt producers and paving contractors, for the road authorities and developers who specify it, and for the occupational health authorities concerned with paving crews.

This document specifies the technical requirements, test methods, inspection rules and transportation of odorless asphalt concrete: This document applies to the production, testing and use of odorless asphalt concrete:

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: CJJ/T 273 Technical Standard for Rubber Asphalt Pavement HJ/T

55 Technical Guidelines for Monitoring Fugitive Emissions of Air Pollutants

HJ905 Technical Specifications for Odor Pollution Environmental Monitoring

HJ1262 Determination of odor in ambient air and exhaust gas - Three-point comparison odor bag method JT/T 798 Rubber asphalt made from waste tire rubber powder for road use JTGE

3 Terms and definitions

The following terms and definitions apply to this document: 3:

1 Odour-less additive An additive that adsorbs or reacts with odor molecules in asphalt smoke to effectively inhibit the volatilization of harmful substances: 3:

2 Odour-less asphalt By adding odor purifier, the asphalt fume emission level can meet the requirements of Grade II and above asphalt:

Note: The preparation of odor-free asphalt adopts a wet process, in which the odor-free agent is mixed with asphalt: 3:

3 The product made of odorless asphalt meets the technical requirements of road performance, and the smoke emissions during the production, transportation and construction of the mixture meet the odor requirements: Asphalt concrete that meets air concentration emission requirements: 3:

4 Cluster analysis method is used to classify asphalt fume emission data and determine the emission level: 3:

5 Odor concentration The dilution factor when the asphalt concrete smoke sample is continuously diluted with odorless clean air to the odorist threshold:

20 Test procedures for asphalt and asphalt mixtures in highway engineering JTGF

40 Technical Specifications for Highway Asphalt Pavement Construction