

**ROMANIA**

**MINISTRY OF TRANSPORTS**

**ROMANIAN RAILWAY AUTHORITY – AFER**

**CERTIFICATE OF RAILWAY TECHNICAL APPROVAL**

**Series OT, no. 98/2017**

In compliance with the provisions of the Resolution of the Romanian Government no. 626/1998, with the subsequent amendments and completions, and based on the Report no. 144 of 07.06.2017 of the Technical Approval Committee, it is hereby certified that the critical railway product

**CRUSHED STONE FOR THE RAILWAY BALLAST OF THE NICULIȚEL QUARRY**

Manufactured by the legal person:

**DUNAPREF CARIERE S.R.L**.

With registered office in comuna NICULIȚEL, sat Niculițel, str. Dealului, nr. 1, camera 1, județul TULCEA, registered at the National Trade Register Office under no. J36/67/2012 is in compliance with the referral technical document, Tender dossier ”Crushed stone for the railway ballast” no. 184/2005, endorsed by CNCF ”CFR” SA and AFER and

**WAS TECHNICALLY APPROVED IN THE FINAL PHASE OF MANUFACTURING**

In order to be used in the railway transport domain.

The critical railway product is classified in the risk class **2B.**

The main technical properties, which define the critical railway product are specified in the document annex of this certificate.

This certificate is valid until **June 8th, 2022**, in the following conditions:

Compliance with the provisions of the referral technical document and the O.M.T. no. 290/2000.

Date of issue: **June 9th, 2017**

**GENERAL MANAGER,**

**Victor BADEA**

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|  | Annex of the  Certificate of Technical Approval  **Series OT, no. 98/2017** |

**B.4. Physical and mechanical properties**

|  |  |  |  |
| --- | --- | --- | --- |
| **Property** | **Imposed values** | | **Determination method** |
| **A Category** | **B Category** |
| Los Angeles LARB (%) Coefficient, max | 14 | 20 | SR EN 1097-2, annex A |
| Resistance at impact SZRB (%), max | 14 | 22 | SR EN 1097-2, annex A |
| Micro-Deval MDE, RB (%) Coefficient, max | 11 | 15 | SR EN 1097-1, annex A |
| Real mass (Mg/m3), min | 2400 | | SR EN 1097-6, annex B |
| Water absorption (%), max | 1,5 | 2,5 | SR EN 1097-6, annex B |
| Mass loss (%), max\*) as a result of the freeze-defreeze attempt | 1,5 | 2,5 | SR EN 1367-1 |
| Bulk volume mass (MG/m3) | **Imposed value**-to be declared  **Measured value**- 1,45 | | SR EN 1097-3 |
| Foreign bodies: wood, charcoal, leaves, river stones, crude oil, oil etc. | Not admitted | | STAS 4606 |

\*) Is determined in case the water absorption is ≥ 0,5%.

**C. VALIDITY CONDITIONS**

This certificate of railway technical approval is valid in the following conditions:

* Maintenance of the source, the Niculițel quarry and the type of rock (magmatic-diabase);
* Maintenance of the technological requirements which constitute the foundation of the approval;
* Performance of the periodical attempts and evaluations, at intervals of 2-2,5 years, in order to assess the conformity with the type, as it is established in the referral technical document of the product, Tender dossier no. 148/2005.

**GENERAL MANAGER,**

**Victor BADEA**

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