



PRODUCT SPECIFICATION
Euro road bitumen

SP-007
Version 9.1
Date: 06.12.2022

I INFORMATION ON MANUFACTURER

Manufacturer: NIS a.d. NOVI SAD
REFINING BLOCK - Oil Refinery Pančevo
Spoljnostarčevačka 199
Pančevo
Serbia
Phone: +381 13 324 324

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II PRODUCT NAME EURO ROAD BITUMEN 160/220
EURO ROAD BITUMEN 70/100
EURO ROAD BITUMEN 50/70

III DESCRIPTION OF TECHNOLOGICAL PROCESS

Euro road bitumen is produced from vacuum residue which is, if it is necessary, on bitumen unit by the oxidation (specific process of “blowing air”) at the specified temperature and under the specified pressure converted into road bitumen.

IV PRODUCT USE

Euro road bitumen is applied in road maintenance for road making, as base bitumen for industrial production of polymer modified bitumen and as feedstock in industry for the production of insulation materials and the like.

V PRODUCT QUALITY AND COMPOSITION

Product Specification for Euro road bitumen was made in accordance with Standard EN 12591:2009.

| Properties | Unit of Measure | Acceptance Criteria | | | Testing Method |
|----------------------|-----------------|---------------------|--------|-------|-------------------------|
| | | 160/220 | 70/100 | 50/70 | |
| Penetration at 25 °C | (1/10)mm | 160-220 | 70-100 | 50-70 | SRPS EN 1426 EN 1426 |

| | | | | | |
|--|-------|----------------|----------------|----------------|--|
| Softening point | °C | 35-43 | 43-51 | 46-54 | SRPS EN 1427 EN 1427 |
| Flash point* | °C | ≥220 | ≥230 | ≥230 | SRPS EN ISO 2592 EN ISO 2592 |
| Solubility* | % | ≥99,0 | ≥99,0 | ≥99,0 | SRPS EN 12592 EN 12592 |
| Penetration index* | | -1,5 do +0,7 | -1,5 do +0,7 | -1,5 do +0,7 | EN 12591 (Annex A) |
| Dynamic viscosity at 60°C* | Pa·s | ≥30 | ≥90 | ≥145 | SRPS EN 12596 EN 12596 |
| Fraass breaking point* | °C | ≤-15 | ≤-10 | ≤-8 | SRPS EN 12593 EN 12593 |
| Kinematic viscosity at 135°C* | mm²/s | ≥135 | ≥230 | ≥295 | SRPS EN 12595 EN 12595 |
| Density** | kg/m³ | to be reported | to be reported | to be reported | SRPS EN 15326 EN 15326 |
| Resistance to hardening at 163°C* | | | | | SRPS EN 12607-1 EN 12607-1 followed by SRPS EN 1427 EN 1427 SRPS EN 1426 EN 1426 |
| Retained penetration* | % | ≥37 | ≥46 | ≥50 | |
| Increase in softening point* | °C | ≤12 | ≤11 | ≤11 | |
| Change of mass* | % | ≤1,0 | ≤0,8 | ≤0,5 | |

Note * - testing is done on quarterly basis

Note ** - testing is done on buyers request

VI TRANSPORT

UN number: 3257

Euro road bitumen is dispatched and transported by tank trucks and rail tank cars.

Minimal temperature of road bitumen during tank trucks filling should be 180 °C for blown bitumens EURO BIT50/70 and EURO BIT70/100, and 145 °C for bitumen EURO BIT160/220.

Prevent bitumen from coming into contact with water.

Euro road bitumen dispatch is possible in cold state in containers. Bitumen temperature in containers during dispatch is bellow 100 °C. In this case bitumen is not classified as dangerous substance.

VII HANDLING AND STORAGE

Instructions on safety precautions for handling, storage and in case of an accident are stated in Safety Data Sheet (SDS).