

Asphalt Sealants PRIM-18 • PRIS-74 • PRP-98

Complete system for double surface treatment

Emulsions formulated in accordance with Article 415 of the INVÍAS General Specifications for Road Construction

1. Description

The PRO-ROAD® sealant line comprises three complementary products that make up a complete double surface treatment system. All are controlled-break asphalt emulsions formulated from a resin-optimised asphalt molecule produced at the refinery under proprietary specification.

Product	Designation	Role in the system
PRIM-18	Pro-Road Modified Sealant 18	Polymer-modified liquid sealant (latex, styrene or others according to pavement requirements). Provides strength, durability, resilience and waterproofing to the surface.
PRIS-74	Pro-Road Simple Sealant 74	Conventional liquid sealant, without polymer modification, for moderately demanding surfaces. Same application technique as PRIM-18.
PRP-98	Pro-Road Primer 98	Complementary product applied before the first sealant coat to improve adhesion between the wearing course and the surface to be paved.

Modification and optimisation of the emulsions is carried out under controlled in-plant handling, adjusting the physical properties of the material: adhesion at the aggregate–asphalt cement interface is increased, resistance to permanent deformation and fatigue is improved, and the temperature susceptibility of the binder is reduced.

2. Applications

- Double and triple surface treatments (the system's principal application technique).
- Prime and seal coats over granular bases and existing pavements.
- Sand seals and chip seals.
- Slurry seals, micro surfacing and cold dense-graded mixes.
- Cold recycling, stabilised bases and soils.

3. Specifications

Property	Method	Unit	Min.	Max.
Saybolt Furoil viscosity at 50 °C	INV E-763	s	20	300
Water content, by volume	INV E-761	%	—	35
Storage stability (24 h)	INV E-764	%	—	1
Settlement at 5 days	INV E-764	%	—	5
Residual asphalt content	INV E-762	%	65	—
Solvent content	INV E-762	%	—	3
Retained on No. 20 sieve (850 µm)	INV E-765	%	—	0.1
Break with sodium dioctyl sulfosuccinate	INV E-766	%	40	—
Particle charge test	INV E-767	—	Positive	Positive
pH	INV E-768	—	—	6
Tests on the distillation residue — INV E-771				
Penetration (25 °C, 100 g, 5 s)	INV E-706	0.1 mm	60	100
Softening point, ring and ball	INV E-712	°C	55	—
Ductility (25 °C, 5 cm/min)	INV E-702	cm	10	—
Elastic recovery by torsion at 25 °C	INV E-727	%	12	—

Values correspond to PRIM-18 (modified emulsion). PRIS-74, having no polymer modification, has a residue penetration of 100–250 (0.1 mm) and a minimum softening point of 45 °C, and is not subject to the elastic recovery requirement. The INV methods are those of the INVÍAS Road Materials Testing Standards; equivalent AASHTO T 59 and ASTM D244 / D6997 methods are accepted.

4. Storage and transport

Asphalt emulsions must be stored above 5 °C, to prevent breaking by freezing of the water phase, and below 85 °C, to prevent boiling. During heating the product must be recirculated to avoid local overheating that would cause premature breaking. Bulk storage shall be in clean tanks, preferably vertical, to avoid product contamination and minimise the area in contact with air. The tank must have an agitation and/or recirculation system that guarantees complete homogeneity during storage. Where storage for extended periods is required, the product must be recirculated at least once every five days. Avoid contact with pressurised water, with emulsions of the opposite charge and with cement or lime residues in tanks and equipment.

5. Packaging and logistics

In bulk in tank trucks from 9 to 35 t · 20 t isotanks and flexitanks for export · 200 kg steel drums · 1,000 L IBCs · 1,000 kg lined big bags. HS code: 2715.00 (bituminous mixtures based on petroleum bitumen).

6. Quality control

Every batch shipped is accompanied by a laboratory-issued quality certificate reporting the tests required by the applicable standard, with traceable batch identification. Additional testing or independent third-party inspection (SGS, Bureau Veritas, Intertek, Cotecna) at origin or destination can be arranged at the customer's request.

Consult the product Safety Data Sheet (SDS) before handling.

The information in this data sheet is offered in good faith, based on PRO-ROAD®'s technical knowledge of its products and on the requirements of the standards cited. It does not constitute a sales specification or a warranty of results. The customer is responsible for verifying the suitability of the product for its intended use, for its correct handling and for its application in accordance with project specifications. Values guaranteed per batch are certified in the corresponding quality certificate.

