



# INFRATECH POLYMERS INC.

## *Environmental Highway Products*

UNIT #4 19747 TELEGRAPH TRAIL LANGLEY BC CANADA V1M 3E6  
[www.infratech.com](http://www.infratech.com)  
(604) 888-8808 Fax (604) 888-8191

### PRODUCT DATA SHEET

# THE INFINITY SYSTEM

## WATERPROOF ASPHALT PAVEMENT

Jan. 2010

### READ BEFORE USING THIS PRODUCT

#### GENERAL

The Infinity System is a durable, waterproof, extremely long lasting polymer asphalt concrete pavement mix designed to combine waterproofing and paving into a single step. The system is composed of 4 main items: 1) **Infraprimer XS** - the primer, 2) **Inframastic** - the detail / verticle edge mastic, 3) **Infrapave DMA** - the dry mix polymer additive, and 4) the proposed asphalt pavement mix. The **Infrapave DMA is the core of the system** and is added before the asphalt cement coating of the heated aggregate in either a batch or drum mix plant.

The Infinity System makes quick waterproofing and paving work for bridges, parkades, and other suspended slab use.

#### SPECIFICATION CONFORMANCE

The Infinity system is designed to meet and exceed waterproofing specification 37-GP-50M from the Canadian General Standards Board. Asphalt pavement mix design is developed by our labs using local gravel sources to achieve maximum performance and load handling.

#### Property:

#### Specification

**CUSTOM DESIGNED TO MEET YOUR PERFORMANCE REQUIREMENTS.**

**Meets or Exceeds SHRP PG 94-34**

#### PROPERTIES

1. 2% air voids on compacted asphalt concrete pavement mix for waterproof pavement.
2. integrated waterproofing and wear course paving in a single step.
3. standard equipment installations, no special tools.
4. superior binder properties that extend life of pavement approximately 3.5 times that of standard PG 64-22 mix designs.
5. reduced lifecycle costs.
6. quick turnaround times and open to traffic +/- 1 hour after paving operation is complete.
7. easily transported to plant site
8. tensile strength.
9. extremely high rut and shove resistance.
10. insensitive to rough concrete deck finishes.

Binder properties can be optimized depending on the end use required.

#### INSTALLATION

Installation uses standard paving equipment and tools with a slightly modified rolling pattern. Once internal temperature has cooled to 60°C the area can be opened to vehicle traffic.

The minimum substrate installation temperature is 4°C without the use of radiant heaters.

#### WARRANTY

Infratech Polymers Inc. warrants the product to meet the chemical description provided and is fit for the intended purpose as described in this technical data sheet when manufactured and installed as directed. The manufacturer makes no other warranty either expressed or implied. Buyer assumes all risk in handling.

No Other Warranty Of Any Kind Is Made By The Seller, Express Or Implied, Statutory, By Operation Or Law, Or Otherwise, Including Merchantability And Fitness For A Particular Purpose.



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#### ESTIMATING QUANTITY:

Asphalt containing Infrapave DMA typically weighs 2400 kg per cubic meter but varies per job mix formulation. This equates to approximately 120 kg per sq.m. when compacted to a 50mm depth resulting in a yield of 7.4 sq.m. per unit of Infrapave DMA.

#### AVAILABILITY:

Kit Size:

- 20kg (2 x 10kg polyethylene bags)
- Bulk Tanker

#### STORAGE:

DO NOT ALLOW PRODUCT TO FREEZE. Store in a dry area at temperatures between 10°C and 35°C in the original unopened containers.

For additional information please see the "Product Installation Guidelines" or call 604-888-8808

INDEPENDENT TEST DATA OF PG64-22 WITH INFRAPAVE DMA		
Properties	Test Method	Result
Color		Black
Shelf Life		1 Year
Softening Point		132°C
Low Temperature Embrittlement		-32°C
Performance Grade	AASHTO MP1	PG 94-34
Dynamic Shear Ratio	AASHTO TP5	1.034k @ 118°C
Creep Stiffness	AASHTO TP3	90MPa @ -24°C
Elastic Recovery	ASTM D6084	92% @ 10°C
Force Ratio	AASHTO T300	.099
Toughness	ASTM D5801	37.5 cm kg
Tenacity	ASTM D5801	25.2 cm kg
Permeability 3"	ASTM D5084	Impermeable 10e <sup>7</sup> or higher
Permeability (In-Situ)	ASTM C1202	454.5 to 517.5 coulombs
Chloride Penetration	AASHTO T260	.02%
Beam Fatigue	AASHTO TP8	264,770 cycles
Resilient Modulus	ASTM D4123	217369 @ 25°C

Deck/Ramp Type	Deck Considerations	Maximum Grade	Minimum Thickness
Concrete (New): Supported Suspended Post Tension	1) Pre-stressed concrete must be shot blasted 2) Surface must be properly cured 3) No latent defects, all moisture removed	8%	50mm
Concrete (Old): Supported Suspended Post Tension	1) Surface should be milled 2) No latent defects, all moisture removed 3) Failed areas must be completely cleaned & repaired	8%	38mm
Steel	1) Sand blast areas to remove latent materials 2) Ensure deck is structural sound after cleaning	2%	38mm (Above Fasteners)
Steel Grid with Concrete Fill	1) Remove all unsound material 2) Replace below grid line	4%	38mm (Above Grid)
Wooden	1) Structurally sound with minimum deflection	1%	75mm