SIVICO Joint Stock Company

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Isfahan

PAKISTAN
Karachi
Lahore

MALAYSIA
Butterworth, Penang Klang, Selangor Kuantan, Pahang Kuching, Sarawak Ipoh, Perak Johor Bahru, Johor Muar, Johor Nipong Tebal, Penang Subang Jaya, Selangor

VIETNAM
Haiphong

QUALITY MAKE THE DIFFERENCE!

DPI®

ROADLINER THERMOPLASTIC PAVEMENT MARKING MATERIAL

ISO 9001 BUREAU VERITAS Certification

FAST500
VƯƠN TẦM CAO MỚI

SIVICO Joint Stock Company
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ISO 9001 BUREAU VERITAS Certification

ORIGINAL VALUE AND ENGAGEMENT

ORIGINAL VALUE

People creativity
Administration focus
Advanced technology
Prestige trade mark
Outstanding quality

ENGAGEMENT

DEVELOPMENT COOPERATION

For customers:	**Sincerely, prestige, indestructibility.**
For shareholders:	**Maximise shareholder value.**
For workers:	**Ensure continuous improvement of material life, cultural and spiritual.**
With Society:	**Responsibility, respect community values.**
With environment:	**Friendly, preserve and cherish.**

INTRODUCTION

Sivico Joint Stock Company has established on March 28th 2002, major and leading manufacturer of thermoplastic road marking materials and related products based on transferring technology from DPI Corp, Malaysia. Sivico is the first company in Viet Nam produce thermoplastic road marking materials with output 15.000 tones per year. License agreement No 005.DPI, recognized by Vietnamese ministry of science and technology "License Certificate" No 1171/GCN-BKHCNMT on May 07th 2002.

Sivico road marking material was developed with the assistance of DPI traffic paint, Malaysia. With the combined technologies from USA, Europe and Japan, consistent efforts were made to improve the quality of product through research and development in order to obtain improved formulations to suit varying conditions.

Sivico road marking material is manufactured under very stringent quality by Sivico and DPI engineer group technicians. The product qualifies specifications set by Bristish Standard Institution BS3262, Japan Industrial Standards JIS K5665, American Standard AASHTO M249 and Vietnamese Standard TCVN 8791:2011. Furthermore, DPI Roadliner can be fine-tuned to satisfy standards set by countries, such as, Australia, China, Indonesia, Malaysia.

Our factory in Lot D1 Trang Due industrial zone, Hong Phong commune, An Duong District, Hai Phong city, Vietnam has been awarded the ISO 9001:2000 on 28th June, 2004 and ISO 9001:2008 on 2nd June, 2010 and ISO 9001:2015 in December 2016 by BV Certificate. Total Quality Management (TQM) Certificate by Bristish Standard Institution on 28th November, 2009.

GENERAL CHARACTERISTIC

- Excellent long term durability
- Good day and night visibility
- Environmentally safe
- Non toxic, solvent-free for safe handling
- Exceptional heat stability
- High skid resistance
- Rapid drying time
- Conforms to BS3262, AASHTO M249, JIS K 5665 and Vietnamese Standards TCVN 8791:2011 specs.

EXCELLENT ADHESION:

The selective combination of high grade resins coupled with the hot applied method of the material provides an extremely strong bond between the material and the road surface. The bond between the material and the asphalt film is so strong that a special erasing machine is required to remove any unwanted lines. For concreting surface application, a special concrete primer, DPI Concrete Primer #120, is recommended for improved adhesion.

HIGH DURABILITY:

By nature of the product composition, thermoplastic is hard wearing and is highly durable under all weather and traffic conditions. Different chemical combinations are used to cater for varying weather conditions, whether in the countries with four seasons or in the humid tropics. It can outlast any conventional rubber based paint by more than 4 times its durability.

GOOD VISIBILITY DAY & NIGHT:

A combination of high quality reflective glass beads into the product mixture retains high retroreflectivity values set by world testing authorities. The inter-mix glass beads provide continuous retroreflectivity as the lines are being worn by passing traffic. For immediate reflectorization, drop-on beads are recommended when the lines are being applied.

HIGH SKID RESISTANCE:

Suitably sized aggregate materials are selectively tested and combined into the product to provide the required skid resistance. This is highly imperative for the safety of road users. A slippery surface could cause a major accident.

FAST DRYING TIME:

The product dries within three (3) minutes after application, and traffic can be released in 5 minutes. This is most vital in busy traffic areas, thus avoiding serious traffic congestions.

COLOUR BRILLIANCE AND OUTSTANDING WHITENESS:

Due to selective use of high quality hydrocarbon resin, titanium dioxide (rutile grade) and high temperature resistant chrome pigment, the end results are most outstanding both in unique whiteness and colour brilliance synonymous with DPI Roadliner.

PRODUCT STABILITY:

By careful selection of high quality raw material combined with the improved chemical formulation obtained through years of research and development, the product is able to maintain its stability against effects of ultra violet rays of the sun, thus retaining its original colours or whiteness and physical conditions for a long period of time.

DPI ROADLINER THERMOPLASTIC TECHNICAL INFORMATION

HIGH SOFTENING POINT:
This is most essential of high temperature weather conditions both in summer and tropical climate. The special formulation makes it possible to withstand extreme climate conditions both hot and cold.

GOOD FLOW PROPERTY:
DPI Roadliner is relatively easy to preheat to melt thus shortening the start-up time. When maintained at 180°C to 200°C preheating temperature, it gives a good flow property against viscosity which is important to give well defined lines and at the same time retaining the required thickness of the lines.

ENVIRONMENT FRIENDLY:
DPI Thermoplastic Roadliner is non-solvent paint. Application by heating to melt, screed on the road, without environment pollution. According to the conditions and safety environmental protection.

1. BINDERS:

a. Hydrocarbon - A specially developed aliphatic hydrocarbon resin plasticised with synthetic resin to suit extreme tropical climatic conditions and reinforced for high compression strength. It has excellent affinity for pigments, superior processibility, lightness of colour, thermal stability and excellent weatherability in terms of adhesion and colour retention.

b. Alkyd - A maleic-modified glycerol ester resin, a homogeneous blend of high quality natural agriculture derived resins, is impervious to the effects of oil and grease. This special formulation is highly recommended for use in areas contaminated with oil spills, grease, dirt, etc.

2. AGGREGATE:

Specially selected white calcite (calcium carbonate), pulverised to the required fineness, is used to give a pure white base material. Special attention is given to the separation and rejection of the coloured stones to ensure only pure white calcite is selected for the purpose. The selected stones are then pulverised to specifications so that the desired quality is obtained before production.

3. EXTENDER:

Pure white calcium carbonate powder is added to the product mixture to assist the even dispersion of pigment in the mixture thereby maintaining colour uniformity throughout.

4. PIGMENT:

To ensure long lasting and brilliant white markings, a white pigment consisting of titanium dioxide type R (rutile) is used in the product mixture. For yellow markings that can withstand heating temperature up to 220°C without colour change, a mixture of titanium dioxide and selected chrome yellow pigment having a heating range of up to 220°C is added to the mixture. DPI is capable of colour matching to any colour specification, but the final result is subject to the availability of suitable pigments at the time.

5. REFLECTORIZATION:

High retro-reflection is obtained through the mixing of high quality spherical glass beads (20% of mixture by weight) into the formulation thus giving excellent visibility to drivers day and night. For immediate reflectorization, it is recommended that glass beads be sprinkled onto the surface of the lines or markings as they are drawn at the rate of not less than 400 g/m^2.

6. SPECIAL FORMULATION:

For countries with four seasons or extreme cold temperature, a special chemical formulation is used to cater for varying conditions of changing temperatures.

7. PACKING:

DPI Roadliner is packed in 25 kgs thermoplastic polyethylene bag; 40 bags/ton/pallet.

ISO 9001 BUREAU VERITAS Certification

ROADLINER THERMOPLASTIC PAVEMENT MARKING MATERIAL

APPLICATION

MACHINE SPRAY METHOD

See Machine manual or consult machine supplier.

APPLICATION EQUIPMENT, TOOLS AND MATERIALS

1. Safety & Cleaning Tools:
   a. Cleaning tools (brooms, besom and special equipment).
   b. Safety beacons, flashlights, sign boards.
2. Pretreatment and Application Equipment:
   a. Preheaters/Kneaders mounted on truck. Normally twin preheaters are used, one for white and the other for yellow.
   b. Applicator machines complete with heating gas.
   - Push type with interchangeable laying/marking shoes.
   - Reverse action type with fixed shoe (this is recommended for marking directional arrows pedestrian crossings and chevron markings).
   - Automatic spray truck.
3. Materials:
   a. Thermoplastic - White and Yellow.
   b. Glass beads for drop-on application.
   c. Primer.

HAND SCREED METHOD

APPLICATION METHOD

1. CLEANING:

Remove sand, dust, oil and grease to ensure that the road surface is absolutely clean; dry and free of pot holes, protrusions, etc.

2. POSITIONS OF LINES TO BE MARKED:

Decide the positions, take measurement and premark the lines with a string marker. (A string coated with white chalk or powder) or a wheel marker.

3. PRETREATMENT:

a. Apply DPI ROAD LINER PRIMER uniformly with a roller or applicator, especially for concrete road surface.

b. Apply primer slightly wider than the width of the line to be marked with thermoplastic.

c. Allow primer to dry completely. Avoid any deposit of sand and dust on primer surface.

d. Primer coverage shall be 20 g/m for 15 cm width line.

4. MELTING OF THERMOPLASTIC MATERIAL:

a. Feed DPI ROAD LINER, White or Yellow, into preheater/kneader (using separate preheater for different colour) then heat and stir well until uniform viscosity is obtained.

b. Melting temperature shall be controlled between 180°C to 200°C.

c. Do not overheat because change of colour may occur.

5. APPLICATION:

a. Drain the molten thermoplastic into storage tank of the applicator machine.

b. Keep the storage tank hot by means of the gas fire at a consistent temperature (180°C - 200°C).

c. During application, ensure that the glass beads are dropped from the beads dispenser (400 g/m^2).

6. DRYING:

a. Drying time is about 1,5 minute for 2 mm thick line. Thicker lines or markings take a bit longer to dry.

b. Release suspension of traffic after drying of the line is confirmed. (Preferably after 5 to 10 minutes).

7. STANDARD COVERAGE:

Average coverage of one metric ton of thermoplastic is about 230 m^2 - 250 m^2 of 2 mm thickness.

DPI THERMOLINE

DPI THERMOLINE HYDROCARBON THERMOPLASTIC formulation is the result of the technical collaboration between Shinto Paint Japan and DPI since 1985. For more than a decade, its high quality performance has been reknown throughout Asia and Australasia. The excellent qualities are characterised by the following.

- High Durability, Excellent Adhesion.
- Good Visibility Day & Night.
- High Skid Resistance, Fast Drying Time.
- High Softening Point: A good chemical formulation combined with years of R&D have yielded a product of exceptional stability against the effects of the U/V ray and the harsh tropical climatic conditions.

DPI ROADLINER THERMOPLASTIC

PRODUCT PACKING:
Packed in 25 kgs thermo degradable plastic bags. 40 bags per pallet of one metric ton (1000 kgs).

PRODUCT COMPOSITION

The product is made up of filler mater materials, extender, plastisizer, pigment, reflective glass beads and a specially formulated hydrocarbon resin binder. The special formulation is the result of many years of R & D and field tests and the resultant product has been the choice of leading professionals and specifiers throughout the Asia Pacific region.

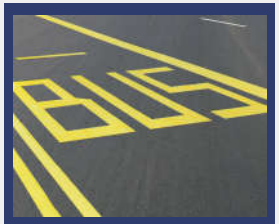
APPLICATION METHOD

DPI THERMOLINE Hydrocarbon thermoplastic may be applied with a manual handliner or an automated vehicle system. It may be screeded, extruded or sprayed on to asphalt or concrete surfaces after being heated to 180°C or 200°C. Based on a line thickness of 2 mm, the theoretical coverage is approximately 230 - 250 sq. Meters per metric ton of material or 4.0 kg per square meter of line marking.

OUTSTANDING PRODUCT CHARACTERISTICS

- Environmentally safe contains 100% solids, non toxic.
- High retroreflective performance providing excellent day and night visibility.
- High Softening point thus preventing line deformity and dirt pick up rate.
- High skid resistance thus enhancing road safety.
- Good bonding to asphalt and concrete surfaces with primer.
- Conforms to BS3262, JIS K 5665 and Vietnamese Standard specifications. Formulation may be adjusted to AASHTO specifications.

The product dries within three minutes and traffic may be released in 5 minutes after line marking operation.



LETTERING & NUMERALS

GUIDE LINE MARKING

CHEVRON MARKING

DPI DURALINE

"DPI DURALINE ALKYD THERMOPLASTIC formulation is the result of years of research and development by the DPI laboratory. It is a highly reflective, durable, oil resistant pavement marking material that far surpasses the quality of hydrocarbon resin thermoplastic. Undoubtedly, it is fast becoming the professional's choice for long lasting, outstanding road line markings of exceptional quality.

DPI ROADLINER THERMOPLASTIC

PRODUCT COMPOSITION

The product is made up of filler materials, extender, plastisizer, pigment, reflective glass beads and a specially formulated alkyd resin binder. The alkyd binder is a maleic-modified glycerol ester resin, a derivative of specially treated rosin which has good resistance to oil and grease. This special formulation has been subjected to stringent laboratory and field tests since 1993 and has been found to have exceptionally high performance quality under the tropical conditions.

ADDED PRODUCT ADVANTAGES

Owing to its oil resistant quality, DPI Duraline Alkyd Thermoplastic is highly recommended for pavement marking in more likely oil contaminated areas such as container port areas, garages, vehicle service centres, truck and bus terminals, heavy vehicle parking areas, bus stops and traffic intersections. The material can be applied on fresh asphalt paving in high traffic urban environments without the worry of bitumen oil attacking the newly laid road markings. With the aid of primer it can be used to cap worn thermoplastic markings, including old hydrocarbon thermoplastic but not disintegrated lines. It also provides good bonding to concrete surface with the help of DPI Primer #120.

PRODUCT PACKING:

Packed in 25 kgs thermo degradable plastic bags.
40 bags per pallet of one metric ton (1000kgs).

APPLICATION METHOD

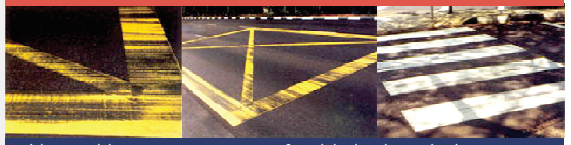
DPI Duraline Alkyd Thermoplastic may be applied with a manual handliner or an automated vehicle system. It may be screeded or sprayed-on to asphalt or concrete surfaces after being heated to 180°C to 200°C. Based on a line thickness of 2.0 mm, the theoretical coverage is approximately 230 - 250 sq. Meters per metric ton of material or 4.0 kg per square meter of road marking.

OUTSTANDING PRODUCT CHARACTERISTICS

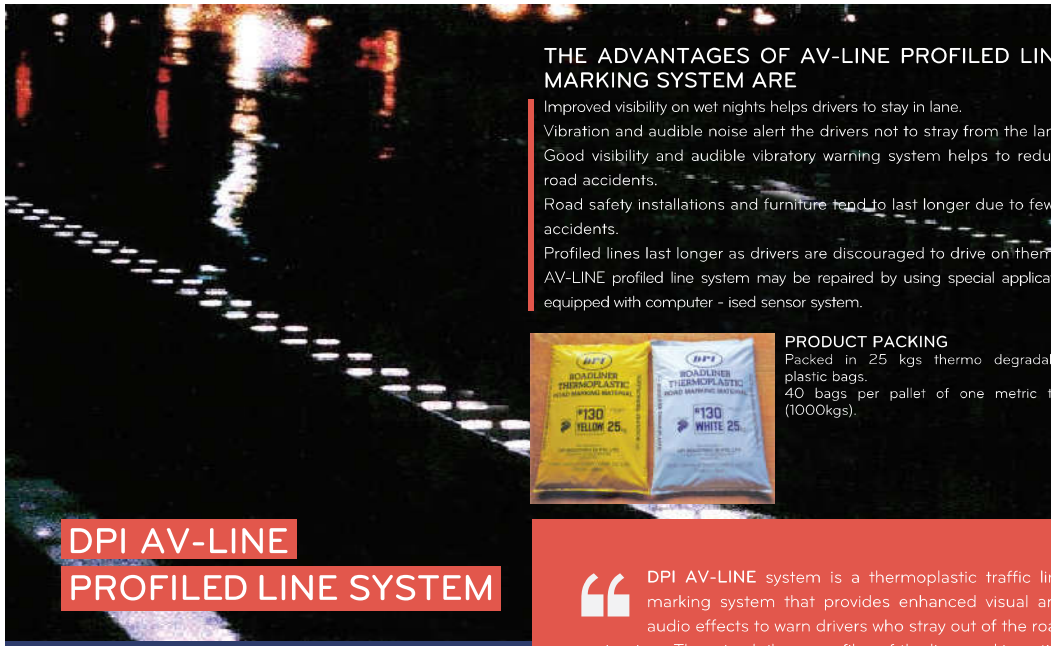
- Environmentally safe - contains 100% solids, non toxic.
- High retroreflective performance providing excellent day and night visibility.
- Good abrasive resistance .
- Impervious to effects of oil and grease, allowing line marking to be done immediately after laying of fresh asphalt premix.
- High softening point thus preventing line deformity under extremely hot weather and lessen dirt pick-up rate.
- High skid resistance thus enhancing road safety.
- Good bonding to asphalt and concrete surfaces with primer.
- Conforms to BS3262, JIS K 5665 and Vietnamese Standard specifications. Formulation may be adjusted to AASHTO M249.

CAUTION

It is recommended that compatibility test be carried out before mixing alkyd with hydrocarbon resin. Avoid mixing them in the same melting vessel.



Normal line painting over freshly laid asphalt premix is more suseptible to permanent oil stains. Alkyd thermoplastic helps to lessen this problem.



DPI AV-LINE PROFILED LINE SYSTEM

PROFILED LINE SYSTEM

The profiled line is normally made up of a base line of 2 mm thick with ribs or profiles from 6mm to 8mm above the base line. The width of the line varies from 100 mm to 300 mm and the size and spacing of the ribs vary with different widths. The spacing of the ribs may be adjusted through the microprocessor which controls the mechanical shutter of the applicator shoe. Generally, 220 mm or 250 mm centres are recommended for optimum visual and audible vibration effects.

APPLICATION

The profiled line is applied with a special equipment, which is able to have the base line and ribs formed in one continuous process. This special equipment has a microprocessor, which controls the whole line marking process. It is capable of mending damaged ribs through its electronic censor system. The equipment is mounted on a self propelled walk-behind applicator machine. AV-LINE profiled line material may also be applied with the help of other application systems such as truck mounted profiled line marking system and handliner marking system. For more details, please contact any SIVICO Joint Stock Company.

THE ADVANTAGES OF AV-LINE PROFILED LIN MARKING SYSTEM ARE

Improved visibility on wet nights helps drivers to stay in lane.
Vibration and audible noise alert the drivers not to stray from the lar
Good visibility and audible vibratory warning system helps to redu road accidents.
Road safety installations and furniture tend to last longer due to few accidents.
Profiled lines last longer as drivers are discouraged to drive on them
AV-LINE profiled line system may be repaired by using special applica equipped with computer - ised sensor system.

PRODUCT PACKING

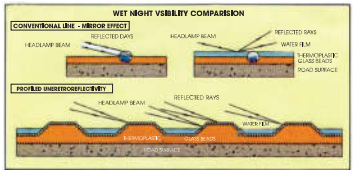
Packed in 25 kgs thermo degrada plastic bags.
40 bags per pallet of one metric t (1000kgs).

DPI AV-LINE system is a thermoplastic traffic li marking system that provides enhanced visual ar audio effects to warn drivers who stray out of the roa perimeters. The raised ribs or profiles of the line marking sti out of the water film on a rainy night thus providing enhance visibility from a distance. This is an improvement over norm line marking which becomes almost invisible when submerge under a layer of water. When the wheels hit the raised profil of the line marking, an audible noise is heard and a vibration felt on the steering wheel. This adds further warning to th errant driver to stay clear of the line thus avoiding the event an accident.

Profiled line marking was introduced in UK and Europe in th early nineties. Owing to its hard setting quality and fast dryin time, hot melt thermoplastic of special formulation has bee used for profiled line marking. DPI AV-LINE thermoplastic w developed through years of R&D and is now a popular choi of professional engineers and specifiers in Asia and Austral It has been proven in Europe, UK, USA and Japan th profiled line markings helped to reduce vehicle accident ra by as high as 60 %. The profiled lines not only provide goo visibility on wet nights but also cause strong vibrations ar sound effects when driven over, thus alerting the errant driv not to stray over the edge of the road thereby preventin accidents. Profiled line marking is specially recommended f edge or shoulder lines along highways, centre lines for ma roads and delineation around road islands and chevron mar ings to keep out vehicles.

SPECIFICATION DPI THERMOPLASTIC PROFILED ROADLINER

No.	ITEM	BS 3262: PART1: 1989 TEST STAN	TEST RESULT
1	Binder content, % (Appendix C - BS 3262)	18 - 22	20.7
2	Glass Bead Content, % (Appendix D - BS 3262)	≥ 20	20
3	Softening point, °C (Appendix E - BS 3262)	≥ 65	140
4	Luminance Factor, % (Appendix F - BS 3262)	White: ≥ 70 Yellow: ≥ 50	80 51
5	Heat Stability on Luminance Factor, % (Appendix G - BS 3262)	White: ≥ 65 Yellow: ≥ 45	76 47
6	Skid Resistance (Appendix J - BS 3262)	≥45	50
7	Flow Resistance, % (Appendix H - BS 3262)	< 25	0
8	Drying time (mins) 20°C Drying time (mins) 30°C	-	3 - 5 5 - 7
9	S.G.	-	2.1
10	Yellowness Index	-	0.097
11	Indentation (100g:1h:60°C, mm)	-	1
12	Durability (years)	-	2 - 3



SPECIFICATION GLASS BEAD

TEST STANDARD BS 6088: 1981

NO.	SIEVE DESIGNATION (µm)	BS 6088: 1981 TEST STANDARD		TEST RESULT	
		TYPE A (% RETAINED)	TYPE B (% RETAINED)	TYPE A (% RETAINED)	TYPE B (% RETAINED)
1	1180	0 - 3	-	0	-
2	850	5 - 20	0 - 5	10	0
3	600	-	5 - 20	-	11
4	425	65 - 95	-	80	-
5	< 425	0 - 10	-	10	-
6	300	-	30 - 75	-	60
7	180	-	10 - 30	-	14
8	<180	-	0 - 15	-	15

TEST STANDARD AASHTO: M 247-11 AND M 247-13

NO.	SIEVE DESIGNATION (µm)	AASHTO: M 247-11 AND M 247-13 TEST STANDARD		TEST RESULT	
		TYPE I (INTERMIX, MASS PERCENT PASSING)	TYPE II (DROP-ON, MASS PERCENT PASSING)	TYPE I (INTERMIX, MASS PERCENT PASSING)	TYPE II (DROP-ON, MASS PERCENT PASSING)
1	1180	100	100	100	100
2	850	95-100	90-100	98	95
3	600	75-95	50-75	85	65
4	425	-	15-45	-	35
5	300	15-35	0-15	24	8
6	180	-	0-5	-	2
7	150	0-5	-	2	-

SPECIFICATION DPI THERMOPLASTIC ROADLINER (NON PROFILED) STANDARD TCVN 8791:2011

NO.	ITEM	TCVN 8791:2011 TEST STANDARD	TEST RESULT
1	Colour	White: ≥ Y35 Yellow: Y12 - Y14	Y35 Y12
2	Luminance Factor, %	White: ≥ 75 Yellow: ≥ 50	81.5 51
3	Heat Stability on Luminance Factor, % (200°C/6h)	White: ≥ 70 Yellow: ≥ 45	76 47
4	Softening point,, °C	≥ 85	111
5	Abrasion Resistance, g (500r/1Kg)	≤0.4	0.109
6	Flow Resistance, % (40°C)	≤10	3
7	S.G, g/ml	change ± 0.05 g/ml	2.0
8	Drying time, mins (32± 2°C, 2.0 mm thickness)	≤ 2	1.5
9	Glass Bead Content, %	≥ 20	20
10	Binder content, %	≥ 18	19.2
11	Skid Resistance	-	72
12	Alkali Resistance	-	Excellent
13	Compressive Strength, kgf/cm^2	-	150
14	Residue on Heating, %	-	99
15	Yellowness Index	-	0.077
16	Durability (years)	-	2-3
17	Adhesion(Mpa)	>1.24	1.35

SPECIFICATION DPI THERMOPLASTIC ROADLINER (NON PROFILED) STANDARD BS 3262: PART1: 1989

NO.	ITEM	BS 3262: PART1: 1989 TEST STANDARD	TEST RESULT
1	Binder content, % (Appendix C - BS 3262)	18 - 22	19.2
2	Glass Bead Content, % (Appendix D - BS 3262)	≥ 20	20
3	Softening point, °C (Appendix E - BS 3262)	≥ 65	113
4	Luminance Factor, % (Appendix F - BS 3262)	White: ≥ 70 Yellow: ≥ 50	81.5 52
5	Heat Stability on Luminance Factor, % (Appendix G - BS 3262)	White: ≥ 65 Yellow: ≥ 45	76 47
6	Flow Resistance, % (Appendix H - BS 3262)	≤ 25	3
7	Skid Resistance (Appendix J - BS 3262)	≥ 45	72
8	Drying time (mins) (32°C, 2.0 mm thickness)	-	1.5
9	S.G, g/ml	-	2.0
10	Abrasion Resistance	-	Excellent
11	Alkali Resistance	-	Excellent
12	Compressive Strength, kgf/cm^2	-	150
13	Residue on Heating, %	-	99
14	Yellowness Index	-	0.077
15	Durability (years)	-	2 - 3

SPECIFICATION DPI THERMOPLASTIC ROADLINER (NON PROFILED) STANDARD AASHTO M 249:2012

NO.	ITEM	AASHTO M 249 TEST STANDARD	TEST RESULT
1	Binder content, %	≥18	20
2	Glass Bead Content, %	30 - 40	32
3	Softening point, °C	102 ±9.5	110
4	Luminance Factor, %	White: ≥ 75 Yellow: ≥ 45	86 52
5	Adhesion strength (psi)	≥ 180	190
6	Cracking at low Temp (-9,4 ± 1.7°C)	No crack	No crack
7	Impact resistance (inch.pound)	≥10	11
8	Drying time ((mins, 3.2 - 4.8 mm thickness))	≤ 2 mins (10 ± 2°C) ≤10 mins (32 ± 2°C)	1.5 3
9	S.G.	≤ 2.15	2.1
10	Flowability (initial), % (218 ± 2°C x6hrs)	White: ≤ 18 Yellow: ≤ 21	4 5
11	Flowability (after age), % (218 + 2°Cx8hrs)	≤28	5
12	Yellowness Index	≤ 0.12	0.067
13	Durability (years)	-	3 - 4

SPECIFICATION DPI CONCRETE PRIMER #120

DPI CONCRETE PRIMER #120, is a combination of synthetic resin which can make thermoplastic road marking material adhere to surface and hot resistant anti-skid materials. It has quick dry, good adhesion, easily penetrate into underneath surface and is adherent very good to thermoplastic road marking materials. DPI concrete primer #120 is suitable on concrete surfaces and asphalt surfaces.

NO.	TECHNICAL DATA			
1	Type	Synthetic resin		
2	Recommended Use	As a primer for hotmelt materials on concrete and old surfaces		
3	Color	Colourless clear liquid		
4	Flash Point	10°C		
5	Solids by Volume	30 ± 2 %		
6	Coverage (Theoretical)	0.125 L/m^2	112.5	g/m^2
7	Wet Film Thickness	3.04 mils	76	microns
8	Dry Film Thickness	0.92 mils	23	microns
9	Drying Time	Temperature	20°C	30°C
10	(Tại D.F.T 23µ m)	Surface Dry	10 mins	7 mins
11	Drying Time (At D.F.T 23 µm)	15 mins	10 mins	
12	Method of Application	Brush, roller or conventional spray.		
13	Condition for Application	* Before application: - Remove all wax, oil and grease. - Remove all dust by hand or power tools. Taking care to avoid polishing the surface. - Spray or brush DPI concrete primer #120 on concrete surface or old asphalt surface. - Leave applicated surface complety dry or at least 10 minutes for high efficiency.		
14	Preferable Preceding Coats	-		
15	Preferable Subsequent Coats	Thermoplastic Roadmarking Material		
16	Packing	One pack product (18 litr/pail)		

ISO 9001
BUREAU VERITAS
Certification

ROADLINER THERMOPLASTIC PAVEMENT MARKING MATERIAL

HA NOI - HAI PHONG EXPRESSWAY

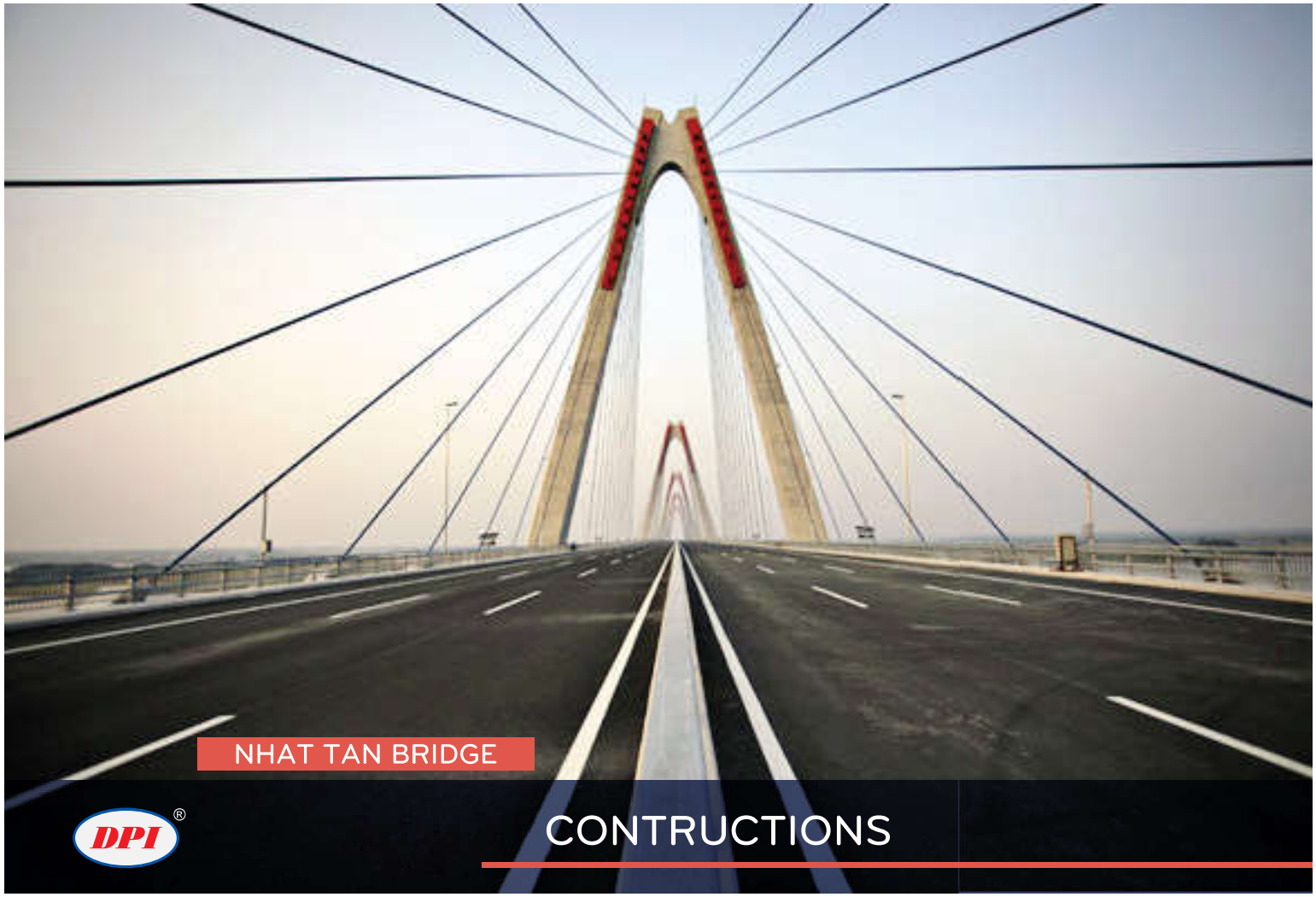
DPI®

CONTRUCTIONS

LONG THANH - DAU GIAY EXPRESSWAY

HA NOI - LAO CAI EXPRESSWAY

ISO 9001
BUREAU VERITAS
Certification

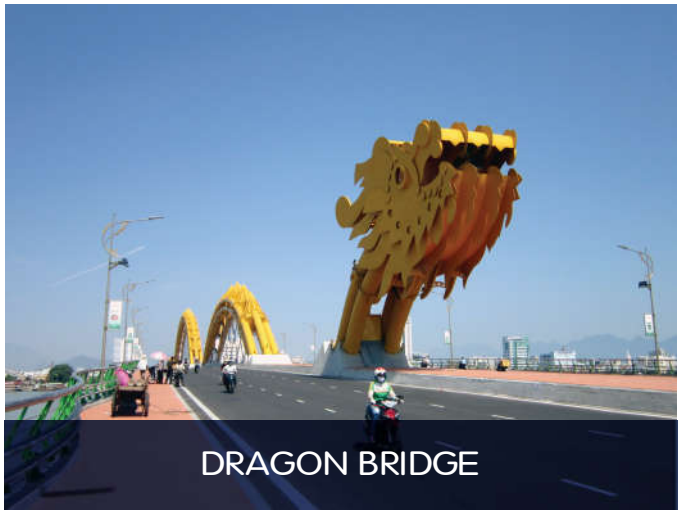


NHAT TAN BRIDGE

DPI®

CONTRUCTIONS

PHU MY BRIDGE



DRAGON BRIDGE