

Life line of road...





## **Certificate of Registration**

issued to

## **ROADMARK INDIA**

having been assessed by International Benchmarking and Certifications for compliance is certified to be registered in the List of Registered Organizations with regard to the standard and scope of supply as detailed below from their site: PLOT NO. 18/1, STREET NO. 8, KADIPUR INDUSTRIAL AREA, GURGAON-122001, HARYANA (INDIA)

#### ISO 9001:2015 (QMS)

For the following scope: MANUFACTURING & TRADING OF THERMOPLASTIC ROAD MARKING MATERIAL.

Certificate Number: QM/1607RN/2214 Date of Certificate: 12.07.2016 Date of Expiry: 11.07.2019

1<sup>st</sup> Surveillance Due on : 11.06.2017 2<sup>nd</sup> Surveillance Due on : 11.06.2018

Director: St

1 Date: 12.07.2016

This Certificate is issued in accordance with the procedures for certificate registration and is valid only until the date of expiry or earlier if so advised, in writing to the certificated organization by IB&C. It is issued subject to the continued availability of access at any time and without notice to the above named organization's premises for the purpose of assessment and surveillance regarding the standard named above and IB&C Terms and Conditions. This is an accredited Certificate authorized for issue by the American International Accreditation Organization-Bureau of Accredited Registrars in accordance with 150 17021 "Conformity Assessment Requirements for bodies providing certification of management systems." Certificate holders are listed in the Register of IB&C clients.



#### International Benchmarking & Certifications

U 60, 3rd Floor, Shakarpur, Delhi 110092, India www.international-benchmarking.com e mail:admin@international-benchmarking.com This certificate remains the property of IB&C



#### Welcome to RoadMark India

We RoadMark India are one of the trusted Manufacturer and supplier of quality assured range of Thermoplastic Road Marking Material (TRMM) & Road Safety Equipments. Best quality raw materials are used for manufacturing these products to provide safety and full compliance with the increasingly exacting international standards. The goal was thus to create product that would be in keeping with both the roads themselves and their surroundings, thus blending the needs of the environment with road engineering techniques. Under able guidance of big professionals we have set good standards in industry.

#### About Us

We have started our journey as scaffolding & shuttering manufacturer in Haryana and manufacturing all scaffolding & shuttering items at large scale & supplying shuttering products to the prestigious construction companies & contractors all over India. After serving the construction companies for more than two decades we have introduced "**RoadMark India**" (**RMI**) an ISO 9001:2015 (**QMS**) **Company** for catering the growing needs of safety on roads. RMI started manufacturing of <u>Hot Melt</u> <u>Thermoplastic Road Marking Material</u> conforming to the specification laid down by Ministry of Road Transport and Highways (MORT&H) clause 803.4, BS (British Standard) 3262 under the brand name "<u>TUFF" & "WINNTUS</u>"<sup>TM</sup> Road Marking Materials.

#### About The Product

#### Thermoplastic Road Marking Material/Paint/Compound "TUFF"& "WINNTUS"<sup>™</sup>

Hot applied TRMM is specially formulated with Premium quality raw materials available in the World. This is based on aliphatic chemistry offers superior weathering resistance and colour stability for tropical Indian condition. It's a synthetic resin based thermosetting material which is having better features comparing to conventional cold applied paints. The material consists of 100% solids and is environment friendly as it does not emit any solvent. TRMM are generally regarded as superior as and more cost effective than other paint markings as it has better durability, reflectivity, and visibility and provide less traffic disruption during application.





#### Advantages Of Thermoplastic Road Marking Material Over Conventional Paints

#### **Thermoplastic Road Marking Material**

- Cost Effective Initial cost per square meter is higher than conventional cold paint but Thermoplastic Road Marking is much more durable. It has 6 times longer life than cold paint and is therefore much more cost effective.
- Fast Drying Thermoplastic road markings cool down within minutes, reducing traffic disruption and confusion. Wet tracks by vehicles are totally avoided since it dries quickly.
- Improved Night Time Visibility The inclusion of intermix and drop on glass beads gives the line an immediate and enhanced night time reflectivity.
- Better Control on Thickness of Coating Thickness and line definition is strictly controlled mechanically, resulting in high quality line markings.
- Skid Resistant Thermoplastic Road Marking contain aggregates that make lines less slippery and safer for vehicles.
- Environment friendly Thermoplastic Road Markings are dry 100% solids and after application harden by cooling resulting in no solvents being released into the atmosphere & it is non polluting material.

#### **Conventional Cold Applied Paint**

- Less Cost Effective Cold applied Road paint disappears from the road surface when exposed to medium/high density traffic within six months. Colour retention and visibility is impaired within 3 months. Repeated application of cold paint in the long term becomes much more expensive when compared to thermoplastic.
- Slow Drying Cold applied paints require long time for drying after application and therefore cones/barriers are required for long periods to protect the paint while it dries. Usually, where cones or barriers are not available, wet tracks by vehicles ruin the paint job.
- Poor Visibility\_– Cold applied road paints offers low visibility at all times. This poor visibility at all times. This poor visibility gets worse during wet conditions.
- Less Control on Thickness\_– Thickness is not controlled by any reliable method and is at the discretion of the operator.
- Slippery Surfaces Cold applied paints are smooth and during wet conditions provide highly reduced traction with vehicles tyres making them slippery and hazardous.
- Environment Hazard Cold traffic paints contain solvent, which are environmentally hazardous. These solvents are released into the atmosphere as the cold paint dries.





#### Method of Application

The thermoplastic road marking materials must be pre heated in a pre heater and transferred into a TRMM application machine. To get the best result before application of TRMM, surface of the road should be free from dust, oil spillage, grease, loose particles, moisture, cracks/unfilled space, excessive bleeding of bitumen previous applied cold paint. TRMM can be applied on bituminous or concrete surface. The temperature of the surface should not be less than 10degree centigrade. Recommended primer must be used before application on concrete surface.

#### Application Precaution

- Before application of TRMM surface should be inspected thoroughly for best results. 1.
- 2. Before Application, The surface should be dry & free from dust, Loose particles, oil spillage, grease, moisture, cracks, excessive bleeding of bitumen & crevice.
- If TRMM have to be applied over previous cold marking paint it must be removed by wire brush to 3. get longer bonding properties.
- The use of per-heater (Melter / Boiler) gives better results & covering area, comparing to the 4. application done by directly heating in manual hot melt marking trolley.
- Repairing of cracks & crevices should be carried out before application. 5.
- 6. TRMM can be applied with all type of road marking application machine like hand prams & automatic machine.
- This should be ensured that Glass beads dispenser sprinkles required quantity uniformly for 7. better initial reflectivity.

#### General Problem / Solution

Patchy reflection at night	: Improper spray of Glass Beads. Delay in spraying of Glass Beads.
Blackening of Strips :	Applied over new-carpeted Road. Excessive drop on Glass Beads.
Bubble formation:	Applied at high temp. (Over 200° C).
Cracking :	Due to expansion and contraction of road surface by changing of
	weather. Uneven screed of TRM mixture.
Peel off :	Applied over dirty or wet surface. Material applied at low temperature.

#### ESTIMATED PER K.M. CONSUMPTION OF TRMM AT 2.5 MM THICKNESS

Single solid line 100 mm (Edge Line)	500 kg
Single solid line 150 mm (Edge Line)	750 kg
Broken line 3m/3m gap. 100mm (center line)	250 kg
Broken line 3m/6m gap. 100mm (center line)	170 kg
Broken line 3m/4.5m gap. 100mm (center line)	200 kg
One edge line 150mm+1 center line 3/3 gap	1000 kg
Two edge line 150mm+1 center line 3/3 gap	1750 kg
One edge line 150mm+1 center line 3/6 gap	925 kg
Pedestrian crossing (zebra) 0.5 mt x 3.0 mt per strip	7.0 kg



#### "TUFF" Product Description

Retro-reflective Thermoplastic Road Marking Material Confirming to MORT&H, 803.4

#### **Technical Data**

Colour	White & Yellow
Composition	
Binder	Minimum 18%
Glass Beads (Intermix)	Minimum 30%
Tio2 (for White)	Minimum 10%
Fillers (for White)	Maximum 42%
Softening Point	102.5 ± 9.5°
Yellowness Index (for White)	Not More than 0.12
Drying Time	Maximum 15 minutes
Daylight Luminance @ 45°	
White	Minimum 65 %
Yellow	Minimum 50%
Flow Resistance	Not more than 25 %

#### Features and Recommended Use

- Conforms to clause 803.4 of "Specification for Road & Bridge Works" issued by the Ministry Of Road Transport & highways (MORT&H)
- Retro-reflective thermoplastic road marking material with excellent whiteness.
- Inter mix glass beads offer long lasting retro-reflectivity.
- Optimal balance between melt flow and flow resistance to achieve well defined lines as per the desired width and thickness.
- Excellent wear resistance and adhesion on asphalt roads.
- Suitable for application with manual, screed/extrusion automatic machines.

#### **Directions For Use**

- Heat the material in a pre-heater with adequate agitation till the material becomes a homogeneous liquid.
- Ensure that the road surface should be free from dust, oil spillage, grease, loose particles, moisture, cracks/unfilled space, excessive bleeding of bitumen previous applied marking.
- For concrete & aged asphalt roads a primer coat recommended for proper bonding of the material with the road surface.
- Ensure that the primer is thoroughly dry and void of solvent prior to application of the thermoplastic material. Ensure temperature of 180-200° C and adequate agitation during application. Do not hold thermoplastic
- above 180° C for more than 6 hours. Do not heat the material above 220° C at any point.
- Change in colour indicates that the material has been scorched owing to overheating and needs to be discarded.
- Drop-on glass beads must be immediately deposited after thermoplastic application.

#### Safety Information

- Minimise dusting of the material during use.
- Use personal protective equipments like face mask, goggle, heat resistant gloves, safety shoes and protective clothing while handling the material is recommended.
- Do not inhale the product or fumes, do not ingest.
- Avoid eye contact, if contacted, wash copiously with water.
- Contact of molten product with skin would lead to thermal burns, flushed with cold water, do not remove material as it would lead to severe tissue damage.

#### Storage & Packing

- Storage:-A minimum shelf life of 12 months when stored in cool and dry and covered place.
- Packing:-25kg. HDPE/PP Bag.





#### "WINNTUS<sup>™</sup>" Product Description

#### Retro-reflective Thermoplastic Road Marking Material Confirming to BS 3262: Part 1/1989

#### Technical Data

Colour	White & Yellow
Composition	
Binder	Minimum 18%
Glass Beads (Intermix)	Minimum 20%
Aggregates including glass beads, pigment & extender	80 ± 2 %
Softening Point	Greater than 65° C
Yellowness Index (for White)	Not More than 0.12
Drying Time	Maximum 15 minutes
Daylight Luminance @ 45°	
White	Minimum 65 %
Yellow	Minimum 50%
Flow Resistance	Not more than 25 %

#### Features and Recommended Use

- Conforms to the British Standards (BS) Specification 3262: Part 1/1989.
- Retro-reflective thermoplastic road marking material with excellent whiteness.
- Inter mix glass beads offer long lasting retro-reflectivity.
- Optimal balance between melt flow and flow resistance to achieve well defined lines as per the desired width and thickness.
- Excellent wear resistance and adhesion on asphalt roads.
- Suitable for application with manual, screed/extrusion automatic machines.

#### Directions for use

- Heat the material in a pre-heater with adequate agitation till the material becomes a homogeneous liquid.
- Ensure that the road surface should be free from dust, oil spillage, grease, loose particles, moisture, cracks/unfilled space, excessive bleeding of bitumen previous applied marking.
- For concrete & aged asphalt roads a primer coat recommended for proper bonding of the material with the road surface.
- Ensure that the primer is thoroughly dry and void of solvent prior to application of the thermoplastic material.
- Ensure temperature of 180-200° C and adequate agitation during application. Do not hold thermoplastic above 180° C for more than 6 hours. Do not heat the material above 220° C at any point.
- Change in colour indicates that the material has been scorched owing to overheating and needs to be discarded.
- Drop-on glass beads must be immediately deposited after thermoplastic application.

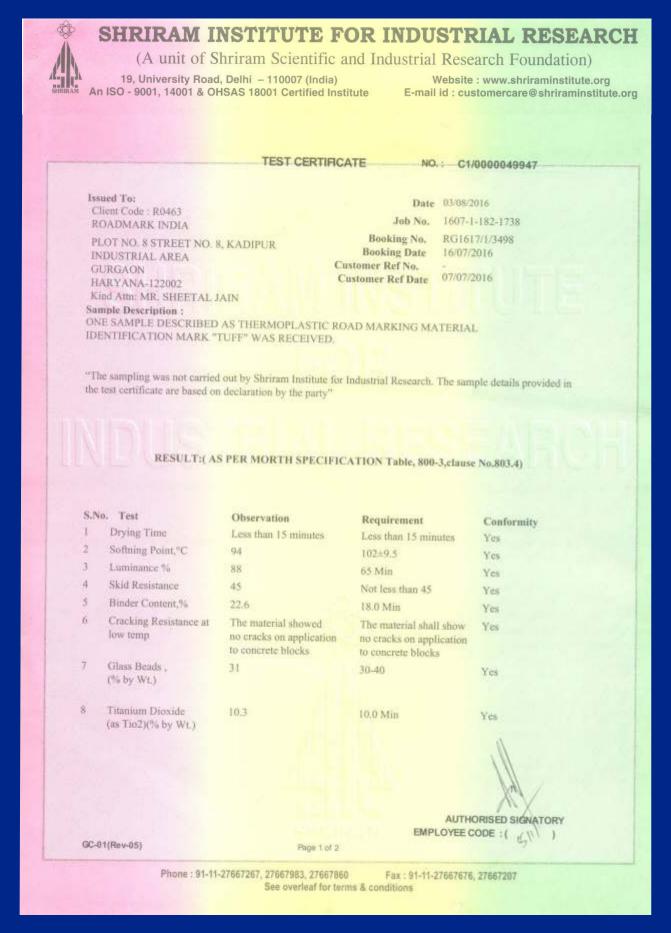
#### Safety Information

- Minimise dusting of the material during use.
- Use personal protective equipments like face mask, goggle, heat resistant gloves, safety shoes and protective clothing while handling the material is recommended.
- Do not inhale the product or fumes, do not ingest.
- Avoid eye contact, if contacted, wash copiously with water.
- Contact of molten product with skin would lead to thermal burns, flushed with cold water, do not remove material as it would lead to severe tissue damage.

#### Storage & Packing

- Storage:-A minimum shelf life of 12 months when stored in cool and dry and covered place.
- Packing:-25kg. HDPE/PP Bag.



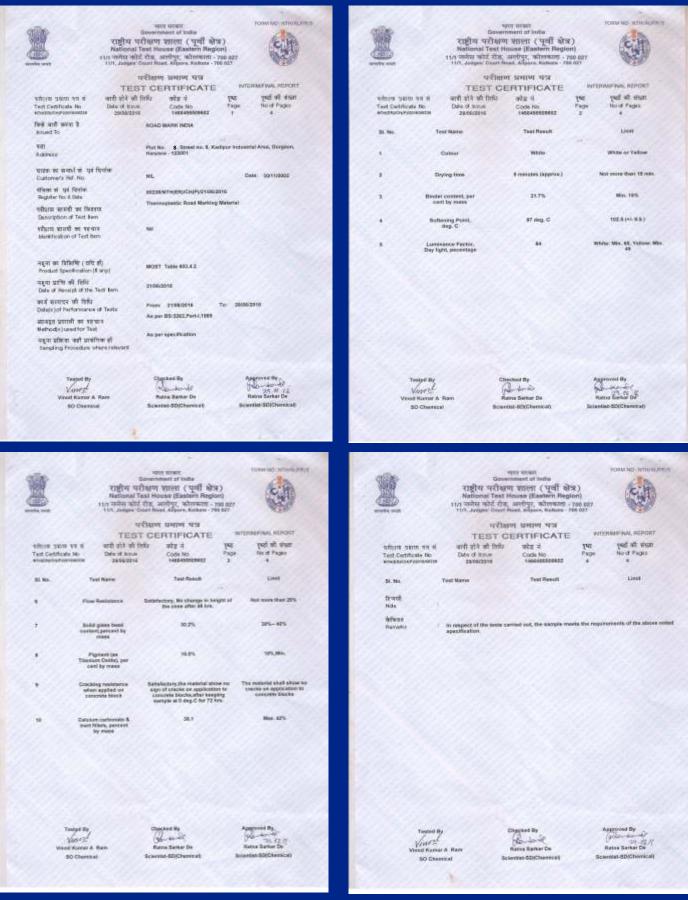




19, University Road, Delhi – 11 SHRRAM An ISO - 9001, 14001 & OHSAS 18001		Vebsite : www.shriraminstitute.org id : customercare@shriraminstitute.c
TE	ST CERTIFICATE NO.	: C1/0000049947
9 Calcium Carbonate 36.1 and Inert Filler, %	42.0 Max.	Yes
Method of Test: As per Guidelines of: MORTH, BS: 3262 Part-1-1989,AASTH M-249 & Standard Method of Chemical Analysis by N.H.Furman X-Rite Spectro		
D.O.R.:16.07.2016 D.O.C.:03.08.2016		
		AUTHORISED SIGNATORY
GC-01(Rev-05)	EMP Page 2 of 2	PLOYEE CODE : ( 5/1/ )

Phone : 91-11-27667267, 27667983, 27667860 Fax : 91-11-27667676, 27667207 See overleaf for terms & conditions







### Our Road Safety Products



**Road Studs** 



**Solar Road Studs** 



Removable Signs



**LED Batton Torch** 



**Speed Breakers** 



Safety Cones



**Convex Safety Mirrior** 



**Road Sigages** 



Delineators



Safety Cones with Caution Sign & Chain



**Delineator Post** 



**Road Baricades** 



# ROADMARK INDIA Life line of road...







Head Office Plot No. 8, Gali No. 8, Kadipur Industrial Area, Pataudi Road, Gurgaon 122001 (Haryana) Ph. : 9899932211, 8447755607 Website : www.roadmarkindia.com E-mail : roadmarkindia@gmail.com, info@roadmarkindia.com Branch Office Plot No. 37-A, Laxman Puri, Lucknow (226016) Uttar Pradesh Ph. : 9415080353, 9621204696 E-mail : roadmarkup@gmail.com