

Technical Data Sheet

Diamond Roadrays Thermoplastic Road Marking MATERIAL as per BS 3262: Part 1 1989

Product Introduction

Diamond Roadrays

Thermoplastic road marking paint is a high performance road marking paint designed for superior day and dry night visibility.

Quality Assurance

Committed to the philosophy of continuous innovation, the focus of our Research & Development efforts has always been in developing products for typical Pakistani environment. User friendliness, ease of operation, longer service life, ease of maintenance and cost - effectiveness are some of the values that guide our R&D efforts.

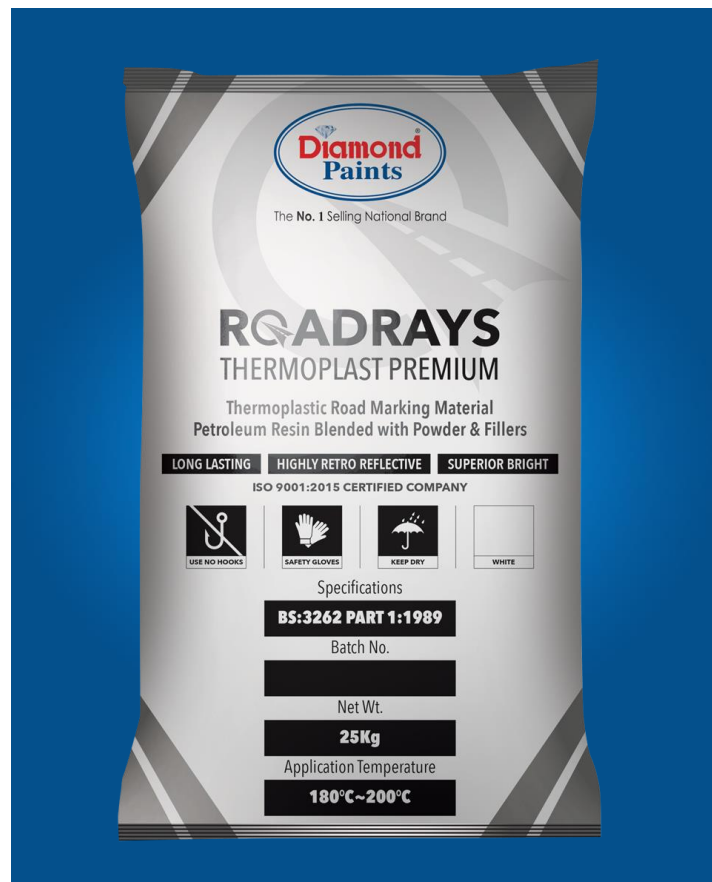
Our company policy is to do continuous research & development of new products to meet customer's specifications in all climatic conditions.

Diamond Thermoplastic Material is manufactured under strict Quality control parameters specified by BS 3262: Part 1: 1989 by our Qualified Team of Production & Laboratory Professional, by the aid of aid of modern computerized Equipments.

It is used for marking roads, runways, pavements for discipline of traffic and safety on roads.

Diamond Roadrays road marking paint has excellent durability and unique reflectivity that make it more visible at night.

The material consists of 100% solids and is environment friendly as it is solvent free. Thermoplastic road markings are generally more superior and cost effective than paint markings due to better durability, reflectivity, and visibility.



Roadrays Road Marking paint

Advantages of Diamond Roadrays Thermoplastic Road Marking Material

- High performance (Day and Night) and long lasting retro- reflectivity.
- Fast drying, thus good flow resistance.
- Excellent adhesion
- High durability and Good Color Stability
- Good skid resistance
- Good Weather Resistance
- Non Toxic & Environment friendly.
- Value for money with long lasting result.

Use of **Diamond Roadrays Thermoplastic** material may reduce over 25% of accidents by improving the performance of Road Marking.

Product Composition

Diamond Roadrays Thermoplastic Road Marking Material is a formulation of plasticized resin, aggregate, pigment and glass beads supplied in dry powder form, heated and applied to the road surface where it cools and sets very quickly.

Diamond Road Marking paint compositions complies BS:3262: Part 1: 1989 as per below detail.

Proportions of the constituents of the marking material	
Constituents	%age by Mass of total mixture
Binder (Resin + Oil)	20 \pm 2
Solid Glass Beads	20min
Aggregate together with pigment, extenders and solid glass beads	80 \pm 2

Product Specifications

Thermoplastic road marking powder paint material

Technical Parameters as per BS3262			
Test Descriptions	Specifications	White	Yellow
Product Type		Thermoplastic Powder Paint	Thermoplastic Powder Paint
Specific Gravity	1.8~2.3gms/cc	Comply	Comply
Softening Point °C Appendix C	>65°C	Comply	Comply
Drying Time	5~10mints	Comply	Comply
Film Thickness	1~1.5mm	Comply	Comply
Flash Point	>235°C	Comply	Comply
Drying Time for Traffic	1~3 hours (time may increase as per temperature)	Comply	Comply
Glass Beads Sprinkling Ratio	400~450gms/-m ² (Drop-On)	Comply	Comply
Pack Size		25Kg	25Kg
Luminance (Appendix D)	>70 (WHITE) >50 (YELLOW)	Comply	Comply
Flow Resistance (Appendix F)	≤2, 23°C±2°C for 48H	Comply	Comply
Application Parameters			
Beads Usage (BS6088 type B)		Drop on while paint is wet	Drop on while paint is wet
Heating Temperature 180°C~220°C (in pre-heater kettle)		Comply	Comply
Recommended usage (Kg/M ² with standard width of marking)		3.0~4.0Kg/m ² @1.5mmDFT	3.0~4.0Kg/m ² @1.5mmDFT

Preparation of Surface

The surface should be dry, free from dust, dirt, grease or oil & any other detritus material.

The road surface temperature should be above 10 °C. Ideally, existing markings should be removed prior to application. Thermoplastic Road Marking Material may be applied over existing thermoplastic markings if they are in a sound condition & will not be easily removed from the road surface. Thermoplastic Road Marking Material should not be applied over old paint markings.

On worn bituminous and_ concrete surfaces, a suitable tack coat DIAMOND PRIMER should be used in accordance with the manufacturer's instructions prior to application.

It should be noted that thermoplastic road markings laid on new bituminous surfaces could suffer from "bitumen carry-over" leading to discoloration & masking of the road markings.

SAFETY INSTRUCTIONS:

Thermoplastic Road Marking Paint:

1. Handling and Storage

- a. Store in original packing protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials.
- b. Keep sacks tightly closed and sealed until ready for use.
- c. Sacks that have been opened must be carefully resealed and kept upright to prevent wastage and contamination.
- d. Do not store in unlabeled packing.
- e. Store the TP sacks below 35°C.
- f. As long as Polythene sacks kept in a sealed condition, it can be useable for **1 year.**

2. Safety precautions

- a. Put on appropriate personal protective equipment. i.e. Safety Shoes, Face Mask, Nitrile Gloves, Apron and Safety goggles.
- b. Do not inhale hot melt vapors, avoid contact with skin and do not ingest any part of the product.
- c. Always use the product in well ventilated areas.
- d. Keep the product away from any source of heat, spark and fire.
- e. Do not use the product container for any food storage or handling.
- f. Remove contaminated clothing, wash hands, forearms, face thoroughly after product handling.
- g. Wash contaminated clothing before reuse.
- h. Ensure eye wash shower and station is nearby where product is being handled or applied.



3. First Aid Measures

In Case of Eye Contact

- a. Material is highly dangerous if melted, may cause severe damage to eyes avoid contact.
- b. For minor eye contact wash with plenty of water, do not use any medicine unless prescribed by a physician.
- c. Check for and remove any contact lenses.
- d. If irritation occurs immediately, consult local doctor or hospital.

In case of inhalation

- a. Remove victim to fresh air.
- b. Keep the person at rest in a position comfortable for breathing.
- c. Get medical attention if problem in breathing.

In case of Skin Contact

- a. Product is dangerous if in melted condition and may cause serious burn.
- b. For powder exposure Flush contaminated skin with plenty of water.
- c. Remove contaminated clothing and shoes.
- d. Get medical attention if severe symptoms occur.

In Case of ingestion

- a. Wash out mouth with water.
- b. Remove victim to fresh air.
- c. Keep the person at rest in a position comfortable for breathing.
- d. Do not induce vomiting unless directed to do so by medical personnel.
- e. Get medical attention if severe symptoms occur.

4. Accidental Spillage handling, Fire Fighting measures and disposal.

- a. Put on suggested personal protective equipment's. i.e. Safety Shoes, Face Mask, Nitrile Gloves, Apron and Safety goggles before handling any spillage.
- b. For Small spill absorb with an inert dry material (i.e. Sand, wood dust etc.) and place in an appropriate waste disposal container
- c. For large spills contain it to ensure runoff does not reach a waterway, sewers, rivers or well etc.
- d. For large spills evacuate the area for working personnel and remove sources of ignition.
- e. Contain and collect spillage with non-combustible, absorbent material e.g. sand.
- f. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air)
- g. Properly close container in which spill materials are stored.
- h. Do not dispose directly into sewers, drains or soil.
- i. Dispose of via a licensed EPA approved waste disposal contractor according to local environmental regulations.
- j. In case of fire use DCP or CO² fire extinguisher for small fires.



The No. 1 Selling National Brand