

# AMITEKINERA

PRIVATE LIMITED

An ISO 9001:2015 Company

Retro-reflective Thermoplastic Road Marking Material (Agglomerated/Ribbed Marking)

#### PRODUCT DESCRIPTION

This Amitek Hot Melt Retro-reflective Thermoplastic Road Marking Material is specially formulated for **Agglomerated/Ribbed Marking** with superior quality of raw materials and customized formulation focusing on excellent day and night visibility and retro-reflectivity. This thermoplastic material is designed for application of agglomerated/ribbed road markings on roads and highways. Most often in bad weather conditions, which cause poor night visibility a properly agglomerated marked road makes the difference. Agglomerated/ribbed road markings provide the highest safety road level by its structure and design.

The objective of the marking is to achieve improved visual delineation of the carriageway edge in any specific conditions at day or night. It also provides an audible/vibratory warning to vehicle drivers, should they stray from the carriageway, and run onto the marking.

The product is supplied in powder form, heated and can be applied to the road surface .It provides optimum balance between melt flow and flow resistance to achieve well defined lines as per the desired width & thickness. It has excellent wear resistance and adhesion on road surface. Our endeavor is to do continuous research and development of new products meets our customers' specifications in all climatic conditions worldwide.

#### **SALIENT FEATURES**

- Warning effect **sound and vibration** if crossed over with the wheel;
- Improves road safety by reducing the risk of aquaplaning when driving at higher speeds;
- Increases traffic safety due to excellent visibility at night and during rainy conditions due to **the 3D structure**.
- Whiteness and Retro-reflective.
- Fast drying thus good flow resistance.
- Skid resistance.
- Heat & Color stability.
- Durability and long lasting results.



## AMITEK THERMOPLASTIC ROAD MARKING MATERIAL (Agglomerated/Ribbed Marking)

COMPOSITION OF MATERIAL								
Description	BS 3262 Part-1	AASHTO M249						
Binder	18 % minimum	18 % minimum	Note as per <b>AASHTO M249</b> :  Amount of yellow  pigment, calcium					
Glass beads (Intermix)	20 % minimum	30-40 %						
Aggregates* including glass beads, pigment& extender / Calcium carbonate and inert fillers*	80 ±2 %	White - 42 % maximum						
		Yellow – See Note	carbonate and inert fillers shall be at the option of					
Titanium Dioxide	White - 8 %minimum	White - 10 % minimum	manufacturer, providing					
	Yellow – See Note	Yellow – See Note	all other requirements of this specification are met.					

\*Note: Agglomerated/Ribbed marking material includes crystalline clay minerals which are the part of Aggregates or inert fillers.

	WHITE / YELLOW		WHITE / YELLOW	
TECHNICAL DATA	As per BS3262:Part1/1989	Results	ASSHTO M249	Results
Softening Point	Not less than 65°C	Complies	$102.5 \pm 9.5$ °C	Complies
Glass Beads (Intermix)	Type A	Complies	Type - 1	Complies
Luminance Factor (as delivered)	White - Not less than 70	Complies	White – 75 minimum	Complies
	Yellow - Not less than 50		Yellow – 45 minimum	
Luminance Factor	White - Not less than 65	Complies	-	-
(as re-melted)	Yellow - Not less than 45			
Skid Resistance	Not less than 45	Complies	Not less than 45	Complies
Drying Time	15 minutes Max	Complies	Not more than 10 minutes	Complies

Flow Resistance	≤ 25%	≤ 2%	-	-
Specific Gravity	Not more than 2.15	Complies	Not more than 2.15	Complies
Flowability	-	-	White - 18 % max.	Complies
			Yellow -21 % max.	
Yellowness Index	White – 0.12	C1'	White – 0.12	Complies
	Yellow – Not Applicable	Complies	Yellow – Not Applicable	
Cracking Resistance	Show No Cracks	Complies	Show No Cracks	Complies
Impact Resistance	-	-	Minimum 1.13J	Complies
Storage Life	1 year	Complies	1 year	Complies

## SURFACE PREPARATION

Prior to application the surface should be sound and in good condition. It must be clean, dry, free from dust, dirt, grease, oil or any other foreign matter . The road surface temperature should be above 10 °C.

### **DIRECTIONS FOR USE**

- Heat the material to 180 200°C in the pre-heater till it transforms into a homogenized liquid.
- Ensure that the road surface is clean and free from dust & moisture.
- Heavy deposits of paint require removal.
- Ensure that the primer is thoroughly dry and void of solvent prior to application of the thermoplastic material.
- Do not hold thermoplastic above 180°C for more than six hours.
- Do not heat the material above 220°C at any point in time.
- Change in color indicates that the material has been scorched owing to overheating and needs to be discarded.
- Drop-on glass beads must be immediately embedded /sprayed after thermoplastic application.



## **STORAGE & PACKING**

**Storage :** A shelf life of 12 months when stored in a cool, dry and covered place away from direct sunlight and areas of potential contamination.

**Packing:** 25 Kg sealed polythene sacks. (Different packaging options available as per the packing norms of the importing country.



#### **HEALTH & SAFETY**

- Thermoplastic Road Marking Paint is non hazardous.
- Minimize dusting of the material during use
- Use of personal protective equipment like facemask, goggle, heat resistant gloves and protective clothing while handling the material is recommended
- Do not inhale product or fumes; do not ingest
- Avoid eye contact; if contacted, wash copiously with water
- Contact of molten product with skin could lead to thermal burns; flush with cold water; do not remove material as it could lead to severe tissue damage
- Please refer to our Material Safety Data Sheet prior to using the product