

# PRODUCT DATA SHEET LuminX<sup>®</sup> SOLAR REFLECTIVE Cool Roof Coating

SINGLE COMPONENT, PU + ACRYLIC BASED ELASTOMERIC, SOLAR HEAT REFLECTIVE COATING, HIGH SRI PAINT FOR COOL ROOF COATING WITH ADVANCED NANOTECHNOLOGY REFLECTIVE PROPERTY COATING

# Description

LuminX® is a water-based acrylic cross-linked elastomeric Cool roof coating. Its innovative advanced nanotechnology-based formulation offers high solar reflectivity and thermal emittance which significantly reduces the roof temperature even in the extreme weather conditions. LuminX works on the cool roof coating technology principle. Its high SRI value ensures that it reflects the maximum amount of heat. Its unique formulation forms a strong chemical bond with the surface and offers complete protection with a promise to keep the building cool.

A high SRI value of a coating indicates a high degree of cooling effect by acting as a shield for the roof allowing minimal solar penetration into the roof hence helps in saving energy.

# **PRODUCT INFORMATION**

Chemical type	Acrylic elastomeric polymer dispersion	
Packaging	Bucket - 1Kg, 5Kg, 10Kg, 18Kg, 20Kg,	
Color Appearance	Bright White Thick Liquid	
Shelf Life	24 months if stored properly in unopened original sealed or undamaged pack.	
Storage	Store in cool and dry conditions.	
Solid content by weight	~55%	
No of Coats	2 coats (each coat of 150 micron) recommended	





Solids by Weight	~55%	
Density	~1.31 kg/l @ 27°C	
Elongation at break	>200 %	ASTM D412
Tensile Strength	2 MPa	ASTM D412
Accelerated Weathering - 1000 hours	Pass - No cracking, checking	ASTM-D4364
Elongation (After 1,000 hours aging)	>200%	
Wet Film Thickness	150 micron per coat	-
Dry Film Thickness	160 micron after 2 coat	-
Adhesion to Peel Dry adhesion Wet adhesion	>2 MPa 1 MPa	ASTM C794, D-903
VOC Volatile Organic Content	<10 g/L	ASTM D2369
Crack Bridging Ability	passes upto 3mm width	ASTM C1305
Low Temp Flexibility (Initial)	Passes	ASTM D522
Low Temp Flexibility (After 1,000 hours aging)	Passes - 1½ inch mandrel bend at 10°C	ASTM D522
Flash Point	Non - Flammable	
Water Absorption	< 10%	ASTM D1653
Water Vapor Permeance	<20 g/m <sup>2</sup> /24hr	ASTM D471
Fungal resistance	Pass - no fungal growth	ASTM G21
Application Temperature	-10 - 40 Deg C	
Coverage	Kg/ Sq. m/ Thick/ No .of Coats	46 Sqm/20Kg / 200 micron / 2coat
Solar Reflectance	0.8765	EN 673-2011 EN 410-2011
Thermal Emittance	0.861	EN 12898 -2019
SRI Solar Reflectance Index*	110	ASTM E1980 -19

## Coverage

Smooth Surfaces: Approximately 500 square feet per 20 Kg size. Apply two coats.

Solar Heat Reflective Cool Roof Coating | Roof coating Summer Cool Roof | Cool Roof Coating Technology | All Weather Protection | Eco Friendly | Reduced Energy Cost | Improves Home Comforts | Reduces CO2 emission |Smart Coating | IR reflective coatings for roof | Superior solar reflectance | High SRI Cool Roof Solar Reflective Cool Roof Coating | Significant Savings on roof maintenance costs | Exterior Durability Cool Roof Paint | Suitable for a wide range of roofs | Nontoxic and Washable roofs | Low VOC content | Broad temperature range flexibility | Reduces urban heat island effect |

# Features / Advantages

- Lower Indoor Temperature
- Reduced roof temperature.
- High solar reflectance index (SRI) indicates high degree of cooling effect
- Ultra violet rays and weather resistant
- Save on electricity bills by decreasing air conditioning needs.
- Improve indoor work comforts and worker productivity.
- Extends the life of a roof
- Save on roof maintenance cost
- Increase cooling efficiency of buildings
- Crack-bridging property
- Algae and fungi resistant
- Simple and fast application
- Help in Reduction of Roofing Wastes in Landfills
- Decrease CO2 emission
- Reduce "Urban Heat Island" effects
- Eco friendly

# Uses

**For application on various roofs** - RCC, concrete, stone, Marble, Brick, wood, tiles, glass, GI roof, Tin roof, metal roofs, Asbestos roofs, Bituminous roof types.

**Buildings** - Residential Buildings | Terrace/roof | Sheds |Industrial Building | Airports | Hospitals | Schools |Dormitories | Hotels| Club house | Warehouses and Cold Storages | Factories | Offices | Sports Stadium| Educational Buildings |Theaters | Rail Cars | Cold Transport Vehicles | Buses | Museums | Galleries |

For Roofs, Exterior side wall, Balconies & Patios, Footpaths, Ramps and Pathways Water Tanks Ramp Areas | Bridges & Tunnels | Concrete Foundations | Footings

### Application

#### Application Process Surface Preparation

Clean and wash the surface thoroughly to get rid of any foreign material from the roof surface like cement, old paint, sand, dust particles etc.

#### **Coating preparation**

Open the LuminX<sup>®</sup> coating bucket, stir thoroughly. Add 20% water by weight of coating and stir again.

#### How to apply

Choose a bright sunny day.

Apply the 1st coat using Roller/Brush/Spray.

Leave it to dry for 5-6 hours.

Now apply the second coat in a perpendicular way to the 1st coat and leave it to dry. Your cool coated roof is ready after 24 hours of complete drying.

### Clean-Up

Before the coating gets dry, clean hand tools, spillage, etc., with warm soapy water. If the coating has dried, clean your hands with a waterless hand cleaner. Soften the dried film on tools with mineral spirits, then scrape clean. When using mineral spirits, exercise safe practices concerning flammability and toxicity.

Please consult our support team for any specific questions regarding the application of this product.

### **Limited Product Warranty**

We, the manufacturer, warrant only that this product is free of defects, since many factors which affect the results obtained from this product - such as weather, workmanship, equipment utilized and prior condition of the substrate - are all beyond our control. We will replace at no charge any product proved to have a material defect within 1-year of purchase, provided it has been applied in accordance with our written directions for uses we recommend as suitable for this product. Proof of purchase must be provided. DISCLAIMER OF WARRANTIES AND LIMITATION OF LIABILITY: THIS LIMITED WARRANTY IS IN LIEU OF ANY OTHER WARRANTIES EXPRESS OR IMPLIED INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. MANUFACTURER SHALL HAVE NO LIABILITY OF ANY KIND BEYOND PRODUCT REPLACEMENT, INCLUDING FOR CONSEQUENTIAL, EXEMPLARY OR INCIDENTAL DAMAGES RESULTING FROM ANY DEFECTS OR ANY DELAYS CAUSED BY REPLACEMENT OR OTHERWISE. IF PURCHASER DOES NOT ACCEPT THESE TERMS OF LUMIN COATINGS LIMITED WARRANTY, PURCHASER MAY RETURN WITHIN 30-DAYS OF PURCHASE ALL CONTAINERS OR PACKAGES OF PRODUCT PURCHASED FOR A FULL REFUND (PROVIDED THE CONTAINERS OR PACKAGING IS UNOPENED AND LESS SHIPPING CHARGES IF ANY). RETENTION OF PRODUCT BEYOND 30-DAYS FROM PURCHASE, OR USE OF PRODUCT SHALL CONSTITUTE ACCEPTANCE OF LUMIN COATING LIMITED WARRANTY TERMS, CONDITIONS AND DISCLAIMERS. THIS LIMITED WARRANTY PROVIDES THE PURCHASER'S EXCLUSIVE REMEDY FOR ANY DEFECT IN THE PRODUCT. To the extent that any part of this LIMITED PRODUCT WARRANTY AND LIABILITY DISCLAIMER is determined unenforceable under the law of the place of purchase of the product, that part is severed and the remainder of these terms remain in full force and effect. To the extent permitted by law, the duration of any implied warranties is limited to the duration of express warranty.

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