

Technical Data Sheet Elephant Shield[®] -Liquid Rubber[®]

PRODUCT DESCRIPTION

Elephant Shield - Liquid Rubber is a universal, environmentally friendly elastomeric coatings offer high performance yet surprisingly easy in application

Elephant Shield - Liquid Rubber specially developed for waterproofing, Corrosion Control, Chemical Protection and Weather resistance for all type of substrate including Concrete, Metal , Wood, FRP/ Steel/ Cement Sheet, Tiles, China mozek, APP Membrane Etc. it is applicable on both horizontal and vertical surface

Upon curing Elephant Shield - Liquid Rubber form flexible, fully Adhere Joint less, durable & anti-aging membrane offers Waterproofing & Chemical resistant, does not stale and crack, expands and contracts with structure as weather conditions change and is steady to biological deterioration and the effects of a number of acids, alkalis, salts and Ultra Violet Radiation

Unique feature of flexibility and elasticity of the membrane able to withstand stresses and vibrations without cracking or peeling from the surface

Elephant Shield - Liquid Rubber is applied using a brush, roller, squeegee and for large site with piston type airless spray pump

A UNIQUE ENVIRONMENTALLY SAFE ALTERNATIVE

Elephant Shield - Liquid Rubber is a water based, VOC Free, environmentally safe alternative to conventional hot applied or solvent based waterproofing systems. Its cold-applied direct from bucket to any surface without primer – enhance safety and Save considerable man Hrs at the field

UNMATCHED MULTI- APPLICATION ABILITY

This highly versatile product can be used for a variety of applications in hot & cold climate including indoors and outdoors, industrial and domestic, below and above grade, ponding application, roofing, Foundation, water/chemical processing utility, structure, beam etc.

Elephant Shield - Liquid Rubber A unique product serves most complicated needs of architectural and industrial designer in waterproofing, Corrosion control and Chemical resistance

FEATURES & BENEFITS

- \checkmark Free of flammable solvents , Toxins and VOCs
- ✓ Water Based, Environmentally friendly
- ✓ Long lasting UV Stabilized
- ✓ Direct application to almost any material including concrete, wood, metal, foam, FRP, Tile etc.
- ✓ Elongates up to 950%, with 95% recovery
- \checkmark Can withstand temperature changes and surface shifts without cracking
- ✓ The product self-heals if it is punctured
- ✓ Multi Purpose & high-performance solution for all Waterproofing, Corrosion Control and Chemical Protection needs
- ✓ Applicable in Industrial, Commercial and household

STORAGE & USE

• The Elephant Shield - Liquid Rubber application, while extremely safe, is mildly alkaline. We recommend the use of standard protective equipment, such as gloves and eye protection.

The product should not be stored or used in temperatures below 4.5 degrees Celsius, as the uncured membrane may become damaged if frozen.
The product is an high performance Waterproofing and Corrosion protection coating that cures to shades of black. It does not serve any decorative or aesthetic purpose.

• Follow standard application method describe on the bucket or visit elephantshield.com to see demo video

APPLICATIONS

It's a **one-stop solution** for the most key areas Waterproofing, Corrosion Control, Air barrier & Chemical Protection including but not limited to

• Multi-Surface Full Area Waterproofing of RCC/Metal Roof & Landscaping area Industrial Water storage / Chemical Storage/process Tanks • Cracks, Gap, Bolt Holes & Joints - of concrete Roof, PEB Infrastructure, Wall, China Mozek, all Type Roof Foundation, Solar panel, HVAC Terminal and all types Sheet, Skylight, Ventilator, Gutter of Roofing Air etc. • Utility Cutouts - in Wall and Roof for HVAC Duct, Cabals, Pipelines • Air barrier entire building envelop for corrosive environment

COLOR

Black*

TOP COAT COMPATIBILITY

* Elephant Shield - Liquid Rubber is compatible to any water-based paint or any type of cementing or tiling work on top of it after min 10 days ESLR application

LIMITATION

Elephant Shield - Liquid Rubber should not be applied when the ambient temperature is below 5°C (41°F). The uncured membrane may be damaged if frozen should not be applied to wet or frozen surfaces. Do not apply if rain is imminent within 24 hrs. Some surface base coat materials such as coal tar are unsuitable for use with Liquid Rubber. Please consult technical service with any questions

PACKAGING & SELF LIFE

Bucket: 1 Ltr, 5 Ltr, 10 Ltr, 20 Ltr, Totes: 1000 Ltr

Bucket: 5 Gal (18-L) (On special Request)

The shelf life is 12 months from the date of manufacturing specified on the packaging $% \left({{{\rm{T}}_{\rm{s}}}} \right)$



COVERAGE

9 to 12 Sq Ft / Ltr (With two coats depending on the surface for RCC Roof and plaster wall)

12 to 15 Sq Ft / Ltr (With two coats depending on the surface for Roof Sheet and Metal surface)

17 to 20 Running Ft / Ltr (With Fabric For Roof Sheet joints, bolt holes and RCC Cracks)

Elephant Shield - Liquid Rubber dries to the touch in twenty minute $@20^\circ$ C and is completely cured in 48 hrs. This curing time may vary depending on temperature and relative humidity.

Note: The following coverage rates are approximate and for estimating purposes only, It varies with the type of surface, application procedure & applicator skills

WARRANTY

Elephant Shield Global Distribution Inc. (ESGD) warranties its Products to be free of defects in materials but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, ESGD makes no other warranty, expressed or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE with respect to ESGD Products. ESGD's sole obligation shall be, at its option, to replace or to refund the full or part of purchase price of the quantity of ESGD Products proven to be defective, and ESGD shall not be liable for any loss or damage. Direct all warranty claims in writing, along with copy of original proof of purchase, to Elephant Shield Global Distribution Inc. at support@elephantshield.com, The exclusive venue for any legal action arising out of the purchase of this product or this warranty shall be had in a court of competent jurisdiction within the state and district of our Authorised Chennal partner and its Ahmedabad District, Gujarat for all Indian customers. All claim will be settle as per warranties policy of ESGD

NOTES

*Manufacturer Guarantee 100% Product Authenticity

*Beware of DUPLICATE Elephant Shield - Liquid Rubber products

*Please refer to our website at www.elphantshield.com for the most up-to-date Product Data Sheets.

*All ESGD Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) requirements.

CAUTION

Keep out of reach of children. Avoid storage below 5°C and under direct sunlight. Please consult the MSDS before using Elephant Shield - Liquid Rubber

Elephant Shield - Liquid Rubber is mildly alkaline. When applying this product observe normal safety precautions, wear gloves, eye protection and other suitable protective equipment. For further information please consult the product MSDS.

PHYSICAL PROPERTIES (LIQUID)

Property	Typical Result
Colour	Brown to Black
Specific gravity (liquid) g/cm3	Approx. 1.0
Odour	None
Volatile Organic Compound	Contains no solvents
solids Contain (wt.)	62% to 63%
Viscosity, Brookfield (cps)	12,000-15,000
рН	10-12

PERFORMANCE (CURED MEMBRANE)

PROPERTY	TYPICAL RESULTS
Colour	Black
Specific gravity, g/cm'	Approx. 1.0
Chemical Resistance ASTM G 20	Resists salt water and most inorganic solutions. Refer Chemical resistance Chart for further information
Accelerated Weathering Xenon arc)	No deterioration of the film, >90% retention of original tensile
ASTM G 155s, 250 hrs	strength
Biological Resistance ASTM E154, ASTM D412	Passed
Impact Resistance CGSB 37 - GP - 56 @ 23°C	Passed (168)
Water Tightness After Impact	Passed (No Leakage)
Tensile Strength ASTM D 412, Kpa (psi)	>830 (>120)
Elongation, %	>950%
Recovery ASTM D 412, %	>95%
Adhesion to concrete DeFelsco, kPa (psi)	>900 (>130), cohesive failure
Puncture Resistance CGSB 37-GP-56	Passed (No Puncture)
Blistering ASTM D714, 1000Hrs exposure	None
Abrasion resistance ASTM F 1677	Good - Very Good
Low temperature mandrel -10°C	Passed
Hardness, Durometer 00	83 - 85
Hardness, Shore A	18 - 20
Hardness, Shore D	3 - 4
Thermal Resistance ASTM C518-04 (2.66/ply)	0.028
UL Fire rating (Ballasted)	Class A

TRADE MARK NOTICE

ELEPHANT SHIELD GLOBAL DISTRIBUTION INC. is the owner of the Trade Mark LIQUID RUBBER, ELEPHANT SHIELD and has been authorized to use. Any unauthorized use of the above trade mark, will invite trade mark infringement which would also imply imprisonment.