



# SYNGUARD

ELASTOMERIC WATERPROOFING COATING



SEAMLESS

VERY FLEXIBLE

WATERPROOF & SOLAR REFLECTIVE

READY TO APPLY & LONG LIFE

A product of  
BITUMAT COMPANY LIMITED



## SYNGUARD – ELASTOMERIC WATERPROOFING COATING

### Description

**Synguard** is a high performance water based acrylic elastomeric waterproofing coating, formulated with selected highly elastic & resilient acrylic polymers, properly identified & graded fillers, pigments, micro-fibers, additives & fungicide. It is used as a liquid applied seamless waterproofing or protection membrane for all types of Substrates (e.g. Metal Decks, Concrete Decks, Terraces, Walls and Polyurethane Foam).

### Product Highlights

- Single Component
- Seamless Waterproofing Membrane
- Breathable (Permits water vapor to escape)
- Excellent Solar Reflective Index
- UV Resistant for Excellent Durability
- Low VOC content - Promoting Green Building
- Crack Bridging Ability
- Protects Concrete Surfaces Against Carbonation
- Easy Maintenance



### Applications

- Protective & Waterproofing coating on polyurethane foam insulation
- Roof Waterproofing Coating
- Wall Waterproofing Coating
- Vertical & Overhead Surfaces
- Repair Works of Waterproofing Systems

### Substrates

- Concrete Surfaces
- Metal Surfaces (Corrugated Metal Decks)
- Asbestos
- Over existing Coatings
- Terrazzo Tiles
- Polyurethane Foam

### Packaging / Color

|                |                      |
|----------------|----------------------|
| 20 Kg Pails    | Standard Packaging   |
| 240 Kg Drums   | Available on Request |
| Standard Color | White                |

### How to Apply

#### Surface Preparation:

- Prepare the surface thoroughly by cleaning, washing and removing dust, dirt, oil, grease and loose particles.
- Concrete substrates should be fully cured.
- Cracks less than 2mm should be cleaned properly (free of dust), primed with 10% diluted SYNGUARD followed by pouring SYNGUARD Coating in the Crack. Thereafter let it dry before commencing the application.
- Remove any protrusions and smooth out any surface irregularities.
- In case of repair work, remove any blistered loose & delaminated materials.
- Wire brush smooth surfaces to prepare an abrasive surface for better adhesion.
- In case of metal substrates, the surface should be checked for corrosion and damages. Anti-corrosive primer should be applied wherever necessary and damages repaired

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### How to Apply

#### Coating System:

- Dilute SYNGUARD with 20% Water and mix thoroughly to prepare the primer.
- Coat the entire substrate with a prime coat and allow it to dry.
- Apply the first coat of SYNGUARD (no dilution) at the coverage rate of 1.0 Kg/m<sup>2</sup> and allow it to dry.
- The Second coat of SYNGUARD (no dilution) should be applied at right angles to the first coat at the coverage rate of 1.0 Kg/m<sup>2</sup>.
- Roofs in excess of 150 m<sup>2</sup> area are recommended to be reinforced by 60 gsm thermally bonded geotextile or glass fiber mesh sandwiched between the first and second coat. The reinforcement layer has to be placed when first coat is wet.
- For Metal deck, the overlap areas should be reinforced.

### Coverage Rate

Primer coat in addition to two coats. Each Coat at the approximate rate of 1 Kg SYNGUARD per m<sup>2</sup>.

### Curing

Drying time between coats will be 8 to 12 hrs.  
Allow the system to cure for 7 days minimum.  
A total thickness of 1.00 to 1.50 mm (DFT) must be achieved when cured.

### Precautions & Limitations

- Do not apply during rains or when rain is expected.
- All corners, gaps, joints, protrusions & outlets shall be coated with two extra coats.
- The product is designed only for light foot traffic.
- Do not clean the cured SYNGUARD coating with brooms that have hard bristles. These may cause damage.
- Application at temperature below +5°C may result in incomplete film formation, reduced elasticity and cracks can appear in the installed coating.

### Storage and Shelf Life

Store under cover at above +5°C and below + 40°C. Protect from direct sunlight and protect from Frost. Minimum shelf life of one year can be expected in original unopened containers and suitable storage.

| Technical Data                      |                  |               |
|-------------------------------------|------------------|---------------|
| Characteristic                      | Value            | Norm          |
| Color                               | White            | -             |
| Solids Content, %                   | 59               | ASTM D 1076   |
| Viscosity, cP                       | 30,000           | Brookfield    |
| Density, Kg/l                       | 1.30 ± 0.05      | ASTM D1475 16 |
| Hardness, Shore A                   | 70               | ASTM D 2240   |
| Tensile Strength, N/cm <sup>2</sup> | 200              | ASTM D 412    |
| Elongation, at Break%               | 250              | ASTM D 412    |
| UV Resistance                       | 200 hours        | ASTM G 154    |
| Crack Bridging ability              | > 0.6            | ASTM C 836    |
| Application Temp, °C                | +5 (minimum)     | In-House Test |
| Service Temperature °C              | Approx. -5 to 90 | In-House Test |

above values are subjected to a ± 10% Tolerance



# MATERIAL SAFETY DATA SHEET (SYNGUARD)

## 1. Product and Company Identification

Product Brand Name: Synguard  
 Product Description: White liquid acrylic coating  
 Use: Waterproofing  
 CAS Name/Number: N/A

### Manufacturer Details

Company Name :BITUMAT CO. LTD.  
 Telephone : +966 13 8121210 / 8121213  
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## 2. Product Composition

| Component                | Cas.No.             |
|--------------------------|---------------------|
| Styrene Acrylic Emulsion | NIA - Non-Hazardous |
| Water                    | 7732-18-5           |
| Calcium Carbonate        | 1317-65-3           |
| Titanium Dioxide         | 13463-67-7          |
| Ammonium Hydroxide       | 1336-21-6           |
| Rheological Additives    | NIA (Mixture)       |

## 3. Hazard Identification

Inhalation: None currently known  
 Eye Contact: None currently known  
 Skin Contact: None currently known  
 Ingestion: None currently known  
 Exposure: None currently known  
 Long Term Exposure: None currently known  
 Other Health Hazards: None currently known

## 4. First Aid Measures

Skin Contact: Wash with water when wet and use proprietary hand cleaner when dry. Remove any contaminated clothing.  
 Eye Contact: Rinse immediately with plenty of clean fresh water. Seek medical advice if irritation persists.  
 Ingestion: Seek medical advice immediately.

## 5. Fire Fighting Measures

Flash Point: Not applicable-water based system.  
 Explosive Limits: Not established  
 Extinguishing Media: The material will not burn until the water evaporated. For residual solids, use water jet, carbon dioxide, dry chemical powder or universal type foam fire extinguishers.  
 Special Fire Fighting Procedures: None  
 Explosion Hazards: None - (NFPA) National Fire Protection Assn. 203M UL : 790

## 6. Accidental Release Measures

Spillage or accidental releases: Major spills should be collected for disposal. Minor spills may be flushed to sewer (if the local regulations permit).  
 Waste Disposal Method: The material is not classified as a hazardous waste. Bury in suitable landfill as permitted by local regulations

## 7. Handling and Storing

Handling: Avoid breathing vapors.  
 Storing: Storage and handling area should have sufficient ventilation. Keep the container closed when not in use.  
 Store under cover at above +5°C and below + 40°C. Protect from direct sunlight, heat sources and keep away from Frost

## 8. Exposure Controls / Personal Protection

Respiratory : Use masks when spraying  
 Protection : Use safety glasses and protective gloves  
 Recommended Ventilation: Working area should have sufficient ventilation

## 9. Physical & Chemical Properties

Appearance : White or coloured flowable liquid  
 Odour: Slight ammoniacal odour  
 Boiling Point : 100°C  
 Freezing Point : 0°C  
 Specific Gravity: 1.3  
 Solubility In Water: Fully miscible with water  
 Percent of Volatiles : 36%  
 Vapour Pressure : Same as water

## 10. Stability & Reactivity

Stability : Stable under normal temperatures and pressures.  
 Hazardous Polymerization : Hazardous polymerization not indicated.  
 Conditions to Avoid : Excessive heat and freezing  
 Incompatible Materials : Strong oxidizers and acids  
 Hazardous Decomposition Products : No known issues under normal usage conditions

## 11. Toxicological Information

Acute toxicity : No record of acute effects found . Toxicity levels not established.  
 Skin and eye contact : If the product adheres to skin, irritation may occur when it dries.  
 Chronic toxicity : No record of chronic effects found . Toxicity levels not established.  
 Carcinogenicity : No record of carcinogenicity effects found. Toxicity levels not established.  
 Mutagenicity : No record of mutagenicity effects found. Toxicity levels not established.  
 Reproductive hazard : No record of reproductive hazard found. Toxicity levels not established

## 12. Ecological Information

Aquatic toxicity - fish: May have short-term environmental effects. Contain, monitor & remove.  
 Aquatic toxicity - daphnia : May have short-term environmental effects. Contain, monitor & remove.  
 Aquatic toxicity - algae : May have short-term environmental effects. Contain, monitor & remove.  
 Biodegradability : May have short-term environmental effects. Contain, monitor & remove.  
 Bio-accumulation : Based on its structural properties, the product is not biologically available. Accumulation in organisms is not to be expected

## 13. Disposal Considerations

For large quantities : Refer to Waste Management Authority. Dispose of material through a licensed waste contractor. Normally suitable for incineration by an approved agent.  
 For small quantities : Do not pour leftover paint down the drain. Unwanted paint should be brushed out on newspaper, allowed to dry and then disposed of via domestic waste collection. Empty paint containers should be left open in a well-ventilated area to dry out. When dry, recycle the container via domestic recycling programs with local authorities. Check with your local council first.  
 Disposal of packaging: Incinerate or landfill

## 14. Transportation Information

Transportation : Synguard is not classified as hazardous for transportation

## 15. Regulatory Information

Labelling according to KSA directive: not required  
 Symbol and indication of hazards contains: not required  
 Risk phrases : not required  
 Safety phrases : not required  
 Special labelling : not required  
 National regulation : KSA  
 Further information : Keep container closed

## 16. Other Information

The information contained in this safety data sheet is intended to assist in the use of above product without risk to safety or health and is based on current knowledge and experience. The data does not signify any warranty with regard to the products properties.



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