

TECHNICAL DATA SHEET

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SECTION I - GENERAL DESCRIPTION

Product Name : ThermoCool
 Product Code : P1000
 Chemical Name/Synonyms : Water based Fluid-Applied Ceramic Insulation Paint/Coating.
 (Specific chemical identity of proprietary components are withheld as a trade secret)
 Product Description : Thermal Insulation Paint/Coating
 Product Features : A) Excellent thermal insulation
 B) Excellent solar reflectance
 C) Very Low VOC
 D) Adhere to most practical surface without primer
 E) Anti fungi & algae
 F) Quick drying time
 G) Sound dampening
 H) Seal Minor holes/cutting on surface
 I) Water resistant
 General Usage : Rooftops, factory/warehouses, livestock farm/barns, storage areas, office, portable buildings, containers, coolers, walls, sheds & pipings
 Application Method : Brush, Roller, Airless spray.

SECTION II – PERFORMANCE

Finishing : Semi-Gloss/Matt (depends on application method)
 Mixing Ratio : Nil (use as supplied)
 Primer System : Nil (self-prime)
 Recommended Dry Film Thickness : ~150 microns per coat
 Drying time -surface/partial dry : 30 – 60 minutes (22- 32 ° C)
 -fully cured : 24 hours (22- 32 ° C)
 Re-coating interval : 30minutes- 3 hours (depends on weather)
 Shelf Life : 12 months (22-32 ° C)
 Coverage : 70 (roof tiles) - 90 (metal roof) ft²/liter at 1 coats (subjects to substrate porosity & condition).
 Solar Reflectance (ambient 21.2 ° C) : 82.8%
 Thermal Emittance (ambient 23.4 ° C) : 0.87
 Thermal Conductivity : 0.14 W/mK

SECTION III - INGREDIENTS

No	Ingredient	CAS#	Amount In Product	OSHA PEL TWA/STEL
1	Polymer/solids	Proprietary	50-55%	None
2	Water	7732-18-5	40-44%	None
3	Ammonia	7664-41-7	<1.05%	STEL 35ppm

*STEL: Short Term Exposure Limit, 15-minute TWA (Time Weighted Average)

*This product does not contain substance which holds hazardous ingredients such as:

- A) Formaldehyde, HCHO : Nil
 B) Heavy metal (Hg, Pb, Cd, Cr) : Nil
 C) Flash Point. : Nil (Water based not Solvent based)
 D) Presence of Halogenated solvent and aromatic solvents (HS-GC-MS).
 : Nil (Water based not Solvent based)
 E) VOC content : ~50g/L (Very Low)
 F) Presence of Epichlorohydrin. : Nil (Used for epoxy resin)
 G) Presence of NMP. : Nil (Water based not Solvent based)
 H) Presence of APEOs : Nil (Used in Textile Industry)

SECTION IV - PHYSICAL/CHEMICAL CHARACTERISTICS

*Typical data, not specification

<u>Boiling Point</u>	<u>Freezing Point</u>	<u>% Volatile</u>
< 212° F	~ 32° F	~ 45
<u>Vapour Pressure</u>	<u>pH</u>	<u>Appearance & Odour</u>
Water 17	9.2 - 9.5	White, Alkaline – acrylic odours

SECTION V - HEALTH HAZARD DATA

Harmful and dangerous of serious damage to health by prolonged exposure if swallowed. Slight irritating or rash when prolonged contact with skin. Contact with eyes may cause slight irritation or redness.

SECTION VI - EMERGENCY AND FIRST AID PROCEDURE

- A) After skin contact : instantly wash with water and soap and rinse thoroughly.
 B) After eye contact : Flush opened eye with plenty of running water.
 C) After ingestion : Rinse out mouth and then drink plenty of water. Do not induce vomiting. Seek medical aid.

*INDIVIDUALS WITH SENSITIVE AIRWAYS (e.g. asthmatics) MAY REACT TO AIRBORNE VAPORS.

SECTION VII - FIRE AND EXPLOSION HAZARD DATA SHEET

Being an aqueous system (water based), this product is **not a fire hazard** as supplied. In case of fire, personnel not having suitable respiratory protection must leave the area to prevent significant exposure to smoke and vapors from combustion, burning, or decomposition. Extinguishing media recommended are Water, Carbon dioxide (CO₂), Dry Chemical, or Sand.

SECTION VIII - PRECAUTIONS FOR SAFE HANDLING AND STORAGE

Precautions to be taken in handling and storage

- A) Open, handle, and use under well-ventilated conditions. No significant amount of exposure to vaporization is anticipated if material is stored in condition well ventilated.
 B) Do not allow product to freeze to prevent coagulate.
 C) Avoid Prolonged or repeated inhalation of spray mists and heated Vapors.
 D) Do not store in open, unlabeled or mislabeled containers.

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