

RADIATION GUARD

Radiation Guard is a ceramic based, water-borne, insulating coating, designed to reflect heat and reduce energy costs. Radiation Guard is the most effective and longest lasting ceramic coating on the market.



DESCRIPTION

Radiation Guard is a water-borne combination of high-performance aliphatic urethanes, elastomeric acrylics, and resin additives which produces a tough, yet flexible coating film. Designed for performance and durability, Radiation Guard contains 4 unique ceramics to block up to 95% of Solar Heat entering a structure due to Visual Light, Ultra Violet (UV), and Infrared (IR). Radiation Guard is a flexible membrane with low permeability that can greatly reduce expansion and contraction of a roof. It also prevents corrosion and surface deterioration.

BENEFITS

- Reflects over 95% of the radiation from the sun.
- Energy savings of 20-70% for air-conditioned buildings during the warmer months. Greater savings can be seen with cooler buildings and freezers.
- Reflects 68% of sound waves that come in contact with.
- Class A fire rating. In case of fire, Radiation Guard will help prevent the spreading of, and will not contribute to, the burn.
- Prevents mold and mildew growth.
- USDA approved for use in and around food preparation areas.
- Environmentally friendly.
- Long life - 20+ years lifespan on roofing under normal conditions.
- Antibacterial
- Reduces Infrared (IR) detection

USES

- Industrial and Commercial
- Reduces energy costs and increases comfort by coating roofing or exterior walls.
- Insulates freezers or refrigeration units to protect goods and reduce costs.
- Reduces fuel consumption of refrigerated trucks.
- Protects goods by insulating long haul trailers designed to carry perishables.
- Insulates oil and gas storage tanks to prevent evaporation and heat build-up.
- Reduces temperatures differential and stop condensation in tanks and pipes.
- Reduces risk of condensation on cold water pipes.
- Insulates air conditioning unit outer casings to prevent reductions in efficiency due to heat build up inside the housing.
- Infrared (IR) camouflage for military application (Navy and Army)



APPLICATION

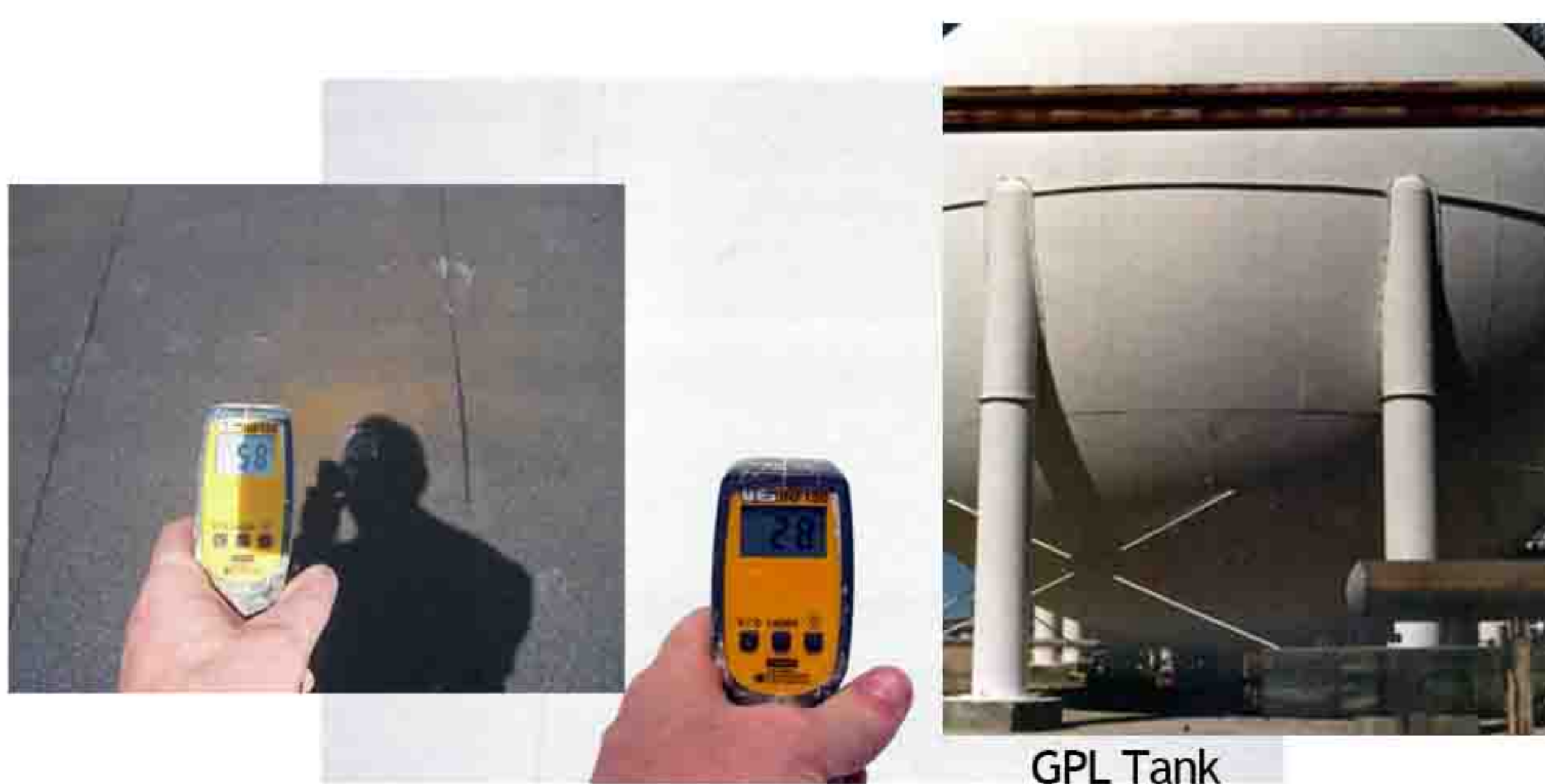
Radiation Guard can be applied to metal, concrete, masonry and wood. The application can be by spraying, brush or roller. For specific instructions on surface preparation, mixing and application, please refer to the MC application instructions for Radiation Guard. This coating should never be applied at less than 8 mils wet (200 microns), 10 mils dry (250 microns) for each coat.

PHYSICAL DATA

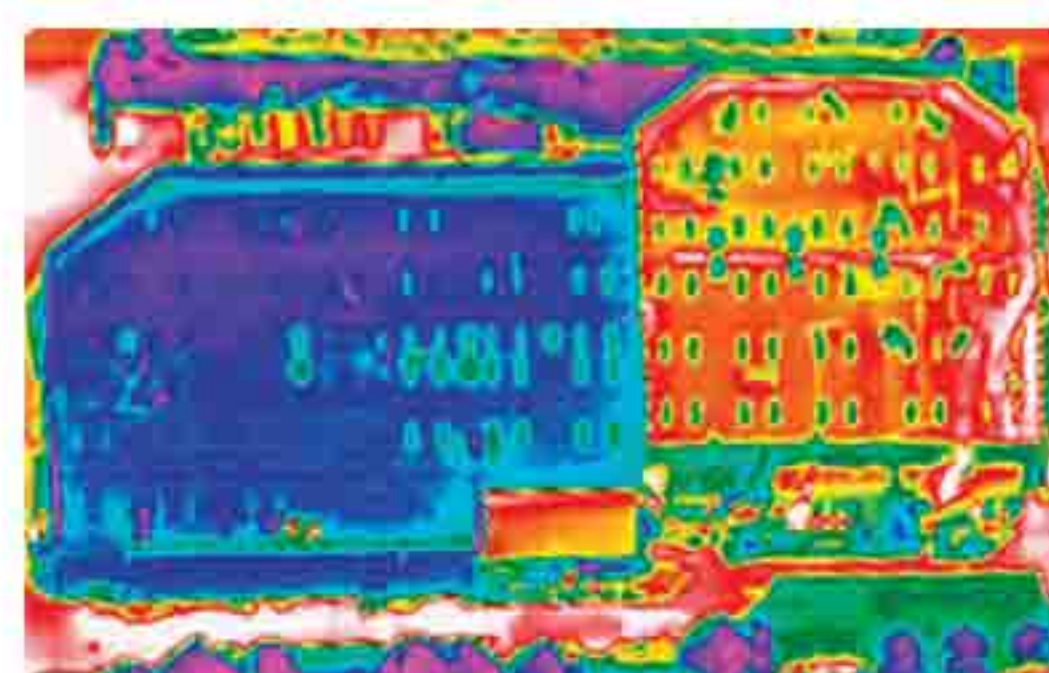
- Solids: By weight 63.6% / By Volume: 65%
- 30-60 minutes to tack free at 70°F (21°C)
- Overcoat: 2 hours when 70F (21°C) at 40% Relative Humidity
- Full Cure: 21 days
- Lead and chromate free
- Cures by evaporation
- Weight: 11.88 lbs. per gallon/ 1,42 kg/l
- Vehicle Type: Urethane/Acrylic blend
- Coverage: 2,2-2,4 m²/l (depending on substrate)
- Reflectivity: (R) 0,92
- Emissivity : (ε) 0,9
- Colors: Available in 30 different colors with special IR pigments. (Ask for more details)
- Shelf Life: Up to 3 years if unopened under appropriate storage conditions (See MSDS).
- VOO Level: 21 grams/liter
- Viscosity: 105 - 110 KU;
- pH: 8.5 - 9.0
- Maximum Surface Temperature when applying: 150 F (65°C)
- Minimum Surface Temperature when applying: 40°F (5°C)
- Maximum Surface Temperature after curing: 500°F (260°C)
- UV Resistant
- Packaging: 20 liter
- Shelf life: Up to two years in temperatura above 5°C

TESTS AND CERTIFICATIONS

1. Exterior insulation against Solar Radiation
2. Blocks 99.5% of infrared
3. Factory Mutual approval
4. IOO-ES Legacy Approval
5. UL (Underwriters Laboratory) approved
6. Flame Spread Test (ASTM E84; 0 smoke, 0 flame)
7. Class "A" Flame Spread
9. Marine Approvals: ABS; US Coast Guard; IMO; DNV;
9. USDA, NASA Approved
10. Flexibility (ASTM E1737): 180 degree bend - passed
11. Adhesion (ASTM B3359): Rated a 5B
12. Perm Rating (ASTM E96): 8.8 average
13. Abrasion Resistance (ASTM D4060): 3,000 cycles
14. Resistance to Salt Spray: 2,000 hours
15. Resistance to Wind Driven Rain (ASTM E514)



Pasta Factory - United States



IR PIGMENTS AVAILABLE