Polyethylene & Polypropylene:
IR Rays Problem & Their Solution

PaintFlex® is the liquid paint that can be applied directly to the surface of polyethylene & other hard to paint products. 29.Sep.2026

~PaintFlex® IR-Block~ PaintFlex® Infrared Heat-Reflective Coating (Infrared-Blocking)

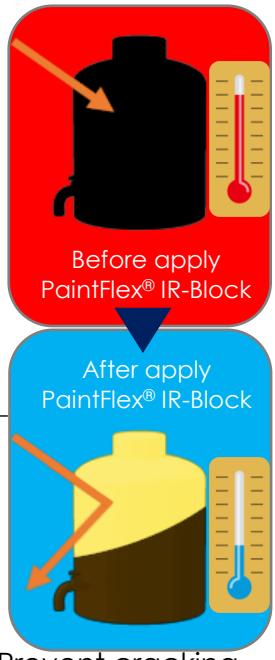
Applied PaintFlex® Infrared Heat-Reflective Coating (Infrared-Blocking) to the surfaces of common storage tanks made of polyethylene and polypropylene containing carbon black.

When applying a "**PaintFlex® IR-Block**" permanent infrared-blocking coating to the surfaces of tanks made of carbon black PE (polyethylene) or PP (polypropylene),

- requires **no** heat treatments such as flame or corona treatment

furthermore,

- the coating can be easily applied in any location using standard painting tools such as spray guns, brushes, or rollers.



The most significant advantage of applying "**PaintFlex® IR-Block**" to the surfaces of PE (polyethylene) or PP (polypropylene) tanks is as follows:

A. It dramatically reduces thermal deformation (expansion and contraction) in PE and PP tanks caused by exposure to direct sunlight.
   - Minimize warping, twisting, and dimensional changes

B. When PE or PP tanks are used in combination with dissimilar materials—such as metals—that have significantly different rates of thermal expansion and contraction, this coating dramatically reduces issues such as leakage caused by the high stress exerted on joints.

C. Minimize temperature fluctuations (rises and drops) in liquids or stored chemicals within PE (polyethylene) and PP (polypropylene) tanks.

D. Prevent embrittlement
   - Prevent polymer hardening caused by repeated thermal cycling Prevent cracking

E. Maintain mechanical strength
   - Prevent a decline in tensile strength due to prolonged exposure to high temperatures

Additional Benefits

- **PaintFlex® IR-Block** is Custom RAL colors available upon request, including dark shades like black
- Solid color finishes (gloss/matte) using **PaintFlex® IR-Block**;
- **PaintFlex® IR-Block** allows for simple application even on assemblies combining multiple materials (e.g., PE/PP tanks with metal components)
- Multi-color finishes (gloss/matte) using **PaintFlex® IR-Block**;
- **PaintFlex® IR-Block** allows for simple application even on assemblies combining multiple materials (e.g., PE/PP tanks with metal components)
- Text and graphics can be easily applied to **PaintFlex® IR-Block** surfaces using stencil, screen printing, or pad printing inks
- **PaintFlex® IR-Block** is resistant to expansion/contraction and vibration
- **PaintFlex® IR-Block** is resistant to peeling and cracking
- **PaintFlex® IR-Block** is resistant to UV radiation and fading
- **PaintFlex® IR-Block** is scratch-resistant
- (abrasion resistance can be adjusted based on customer requirements)
- **PaintFlex® IR-Block** withstands high-pressure car washing
- **PaintFlex® IR-Block** can be applied using standard tools such as sprayers, brushes, and rollers
- **PaintFlex® IR-Block** gloss levels can be adjusted according to customer requirements

Smart Paint Solution for Surface of PE & PP Tanks

Compliances
- ✓ Food/Water contact friendly
- ✓ RoHS (Restriction of use of Hazardous Substances

more information please contact us at
mitsukotr@ymail.com
please visit our web page at:www.paintflex.com