

Gem-ToneTM
FDA APPROVED COLORANTS

Technical Bulletins



DayGlo[®]

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IDENTIFICATION INFORMATION

Gem-Tone GC13F Ruby Red is a rich, strong blue shade red colorant intended for use in clarified polypropylene. Clean, haze free, non-warping color formulations can easily be achieved with the use of this colorant. No blooming or plateout problems will be seen with Gem-Tone colorants. These materials can be incorporated into polyolefin resins at levels as low as 0.05% and can be increased to higher levels to achieve your desired effect. Gem-Tone GC13F is FDA approved for use in PP at levels NTE 0.15%.

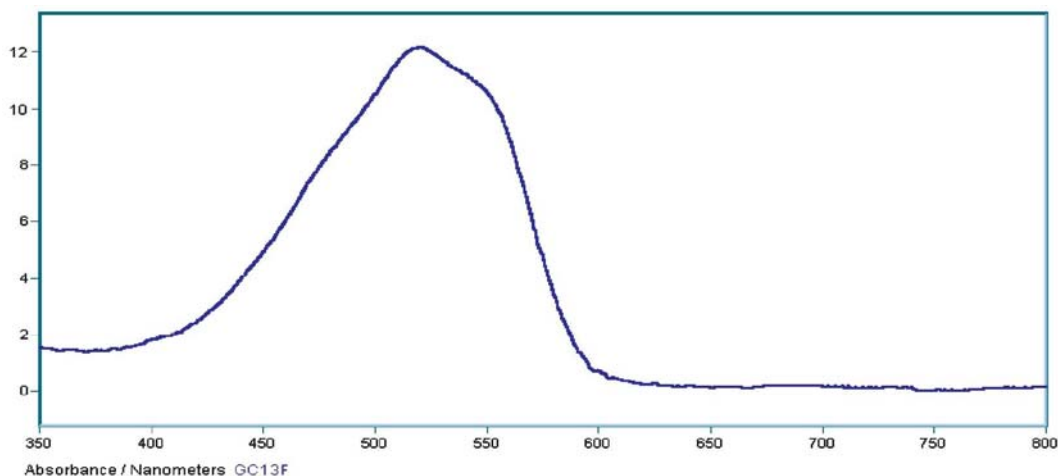
PROPERTIES

Minimum processing temperature	177°C (350 °F)
Mean particle size range	20-80 μ
Heat stability	288°C (550 °F)
Softening point	90 – 100 °C (194 – 212 °F)
Tg Typical	76°C (169 °F)
Dec.Temp.	318°C (604 °F)
Oil Absorption	53g/100g pigment
Bulk density	32 #/cu. Ft.
Specific gravity	1.25

SPECTRAL DATA

λ_{max} = 519 nm
Abs. = 11,300

GC13F UV SPECTRA



IDENTIFICATION INFORMATION

Gem-Tone GC17F Citrine Yellow is a rich, strong green shade yellow colorant intended for use in clarified polypropylene. Clean, haze free, non-warping color formulations can easily be achieved with the use of this colorant. No blooming or plateout problems will be seen with Gem-Tone colorants. These materials can be incorporated into polyolefin resins at levels as low as 0.05% and can be increased to higher levels to achieve your desired effect. Gem-Tone GC17F Citrine Yellow is FDA approved for use in PP at levels NTE 0.25%.

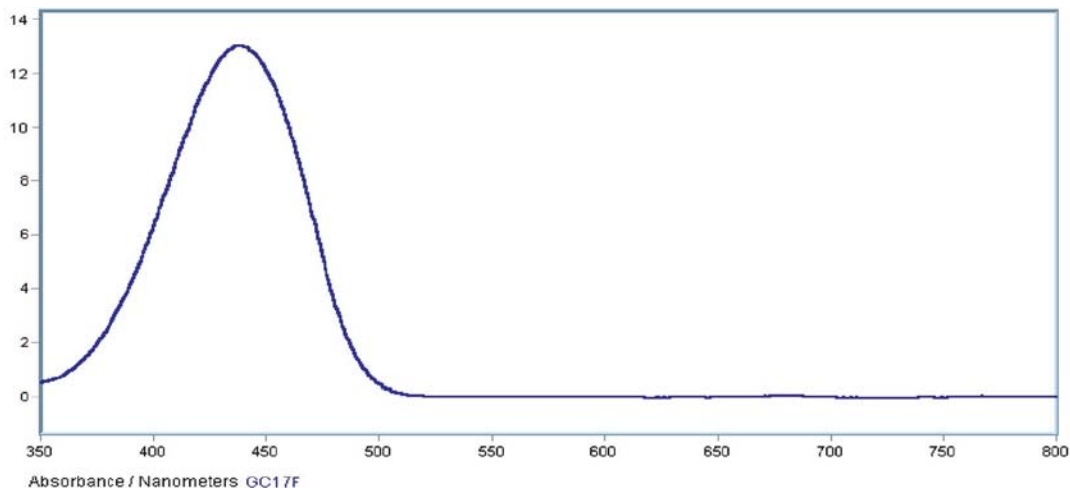
PROPERTIES

Minimum processing temperature	177°C (350 °F)
Mean particle size range	20-80 μ
Heat stability	288°C (550 °F)
Softening point	85 – 95°C (185 – 203 °F)
Tg Typical	78°C (172°F)
Dec.Temp.	275°C (527 °F)
Oil Absorption	50g/100g pigment
Bulk density	32 lbs./cu. Ft.
Specific gravity	1.2

SPECTRAL DATA

λ_{max} = 439 nm
Abs. = 13,000

GC17F UV SPECTRA



IDENTIFICATION INFORMATION

Gem-Tone GC18XPF Emerald Green is a transparent green colorant intended for use in clarified polypropylene. Clean, haze free, non-halogenated, non-warping color formulations can easily be achieved with the use of this colorant. No blooming or plateout problems will be exhibited with Gem-Tone colorants.

GC18XPF Emerald Green is FDA approved for use in PP and has recommended use @ 1% LDR (NTE 9%).

PROPERTIES

Minimum processing temperature	177°C (350 °F)
Particle size range	75-85 pellets per gram
Heat stability	288°C (550 °F)
Crystalline melt	124°C
Dec. Temp. (TGA)	439°C (822 °F)
Bulk Density	31 lbs./cu.ft
Specific gravity	0.93

SPECTRAL DATA

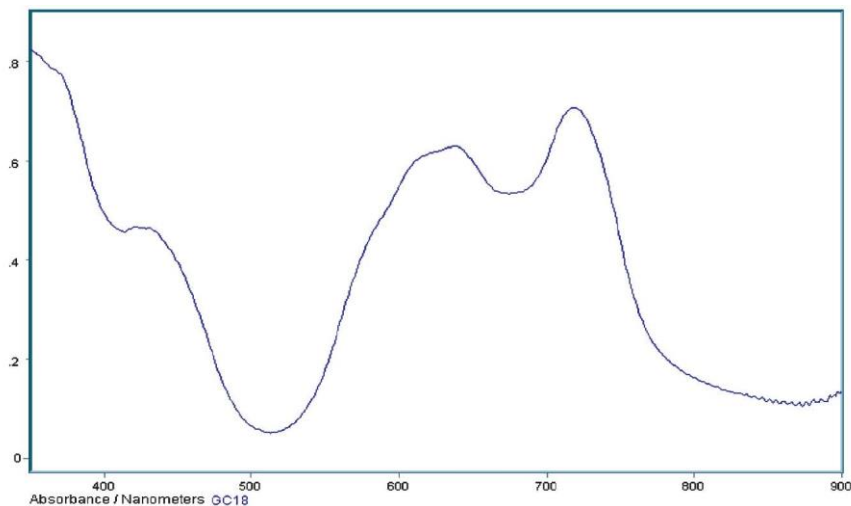
$\lambda_{\max} = 718 \text{ nm}$

Abs. = 945

$\lambda_{\max} = 637 \text{ nm}$

Abs. = 842

GC18XPF UV SPECTRA



IDENTIFICATION INFORMATION

Gem-Tone GC19F Sapphire Blue is a rich blue colorant intended for use in clarified polypropylene. Clean, haze free, non-warping color formulations can easily be achieved with the use of this colorant. No blooming, migration or plateout problems will be seen with Gem-Tone colorants. These materials can be incorporated into polyolefin resins at levels as low as 0.05% and can be increased to higher levels to achieve your desired effect. Gem-Tone GC19F Sapphire Blue is FDA approved for use in PP at levels NTE 0.1%.

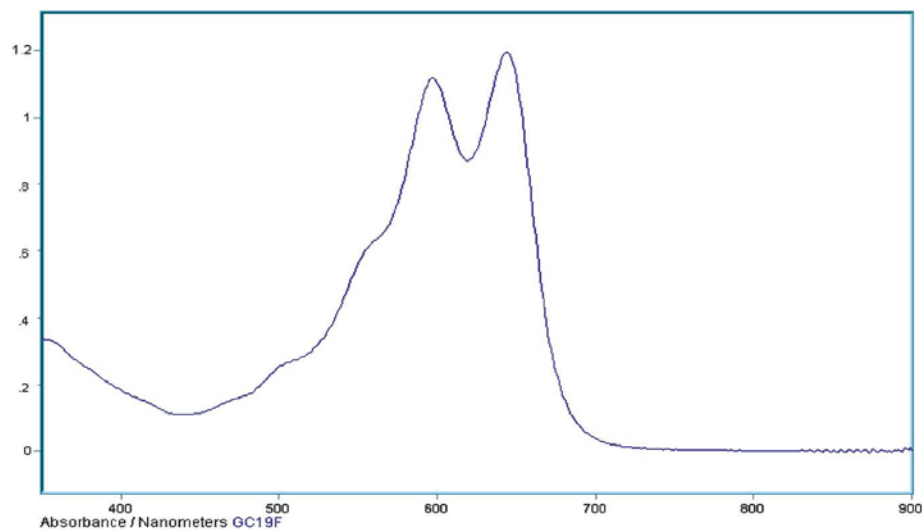
PROPERTIES

Minimum processing temperature	177°C (350 °F)
Mean particle size range	20-80 μ
Heat stability	260°C (500 °F)
Softening point	110 – 135°C (230 – 275 °F)
Tg Typical	103°C (217°F)
Dec. Temp.	315°C (599°F)
Oil Absorption	46g/100g pigment
Bulk density	28 lbs./cu. Ft.
Specific gravity	1.2

SPECTRAL DATA

λ_{\max} = 644 nm
Abs. = 23,000
 λ_{\max} = 596 nm
Abs. = 21,000

GC19F UV SPECTRA



IDENTIFICATION INFORMATION

Gem-Tone GC19XPF Sapphire Blue is a transparent colorant intended for use in clarified polypropylene. Clean, haze free, non-halogenated, non-warping color formulations can easily be achieved with the use of this colorant. No blooming or plateout problems will be exhibited with Gem-Tone colorants.

GC19XPF Sapphire Blue is FDA approved for use in PP and has recommended use @ 1% LDR (NTE 9%).

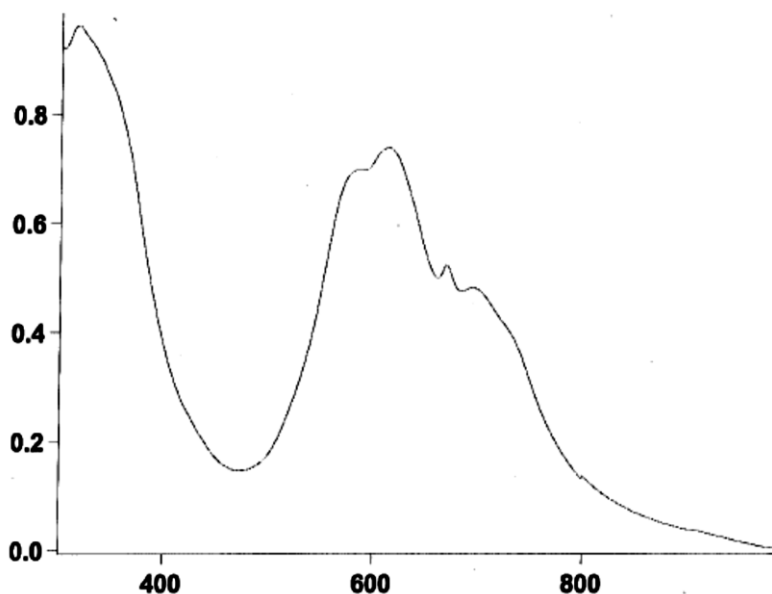
PROPERTIES

Minimum processing temperature	177°C (350 °F)
Particle size range	75-85 pellets per gram
Heat stability	288°C (550 °F)
Crystalline melt	124°C
Dec. Temp. (TGA)	439°C (822 °F)
Bulk Density	31 lbs./cu.ft
Specific gravity	0.93

SPECTRAL DATA

λ_{\max} = 612 nm

GC19XPF UV SPECTRA



IDENTIFICATION INFORMATION

Gem-Tone GC26F Crimson Red is a rich, strong blue shade red colorant intended for use in clarified polypropylene. Clean, haze free, non-warping color formulations can easily be achieved with the use of this colorant. No blooming or plateout problems will be seen with Gem-Tone colorants. These materials can be incorporated into polyolefin resins at levels as low as 0.05% and can be increased to higher levels to achieve your desired effect. Gem-Tone GC26F is FDA approved (FCN No. 1359) for use in PP at levels NTE 0.15%.

PROPERTIES

Minimum processing temperature	177°C (350 °F)
Mean particle size range	20-80 μ
Heat stability	288°C (550 °F)
Softening point	85 °C min (185 °F)
Tg Typical	51°C (124 °F)
Dec.Temp.	372°C (702 °F)
Oil Absorption	53g/100g pigment
Bulk density	32 #/cu. Ft.
Specific gravity	1.25

SPECTRAL DATA

λ_{max} = 523 nm
Abs. = 17,000 min

GC26F UV SPECTRA

