+ Plasticolors® MS Colorants

Colorants for Polyurethane Applications

Plasticolors® MS colorants have been designed to provide an effective way to tint a broad range of polyurethane systems, particularly in RIM, flexible foam, spray elastomers, shoe soles, and cast urethane applications. These products are dispersed in a highly reactive polyether polyol to maximize compatibility and yield excellent color performance.

Key Benefits

These colorants have broad compatibility across polyurethane systems. The MS colorants are low in viscosity and ideal for third-stream operations. When used in a batch process, the low viscosity makes them pumpable, flowable and pourable in a manner that makes them exceptionally easy to handle. The ability to achieve low viscosity allows for less waste left over in the container. Pigment solids concentration is optimized to balance viscosity with the color strength. Consistent color quality is made available in a large palette of colors and pigment chemistries.

Properties

MS colorants contain no solvents, are heavy metal free*, and produce high tint strength. Our technology produces the optimal particle size for color strength and pigment efficiency. Typical product viscosities for MS colorants range from 1,000 cP (mPa*s) to 5,000 cP (mPa*s) depending on pigment chemistry and concentration. All colorants contain pigments dispersed in an 1,800 Mw diol with a hydroxyl number of 61, making them suitable for processes with fast cycle times or low processing temperatures. Colorants are controlled to a low moisture specification to reduce impact on isocyanate reactivity. Resins used are fully reactive in polyurethane systems and crosslink into the matrix solids when cured.

Compatibility

- Polyether Polyols
- Polyureas

Applications

MS colorants are made to serve in a wide variety of polyurethane applications. As such, they are best suited for the following processes:

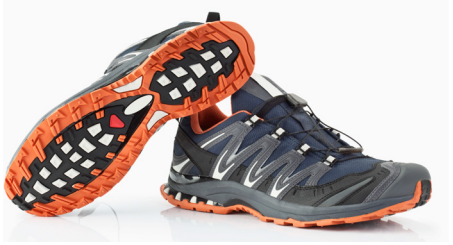
- Reaction Injection Molding (RIM)
- Flexible and Slabstock Foam
- Spray Elastomert
- Shoe Soles
- Cast Urethane

Products can also be used in coatings, adhesives, sealants, and elastomer applications.

Handling and Storage

Proper handling is essential to maintain good quality. Containers should be tightly sealed when not in use. This will prevent the absorption of atmospheric moisture and minimize the chance of airborne contamination. Containers should be stored in a manner as to protect them from temperature extremes (0-45°C, 32-120°F). It is recommended that the containers be mixed prior to use. Shelf life of the MS colorants is 24 months from the date of manufacture in unopened containers. Reference the MSDS for more product care information.

* Chromaflo Technologies does not intentionally add any heavy metals, reactive monomers or solvents to these dispersions. However, some raw materials may contain impurities in trace amounts.



Product Code	Description	CI Name	Pigment Wt. %	Specific Gravity	Pigment Lightfastness[1]		Pigment Weatherfastness[2]	
					Full	Tint	Full	Tint
MS-10804	White	PW 6	64	1.99	8	8	5	5
MS-02884	Black	PBk 7	22	1.13	8	8	5	5
MS-30693	Phthalo Blue GS	PB 15:4	25	1.13	8	8	5	5
MS-30696	Phthalo Blue RS	PB 15:2	15	1.09	8	8	5	5
MS-30700	Phthalo Blue RS	PB15:1	11	1.09	8	8	5	5
MS-30699	Violet BS	PV 19	24	1.10	7-8	7	4	3-4
MS-50311	Phthalo Green	PG 7	20	1.15	8	8	5	5
MS-60284	Organic Orange	PO 34	19	1.08	5-6	5	-	-
MS-070002	Red Oxide	PR 101	59	1.94	8	8	5	5
MS-070010	Organic Red	PR 170	28	1.11	-	-	3-4	2-3
MS-070022	Organic Red	PR 144	15	0.99	-	-	-	-
MS-80870	Yellow Oxide	PY 42	40	1.51	8	8	5	5

Products listed represent standard single pigment colors. Custom color matched blends are available with special consideration for a variety of requirements, including color, outdoor durability, abrasion, and cost considerations. If a specific pigment chemistry or custom blend is needed, please contact Chromaflo Technologies.

NOTE: All fastness data is based on pigment supplier information and is given for guidance only. It is not an indicator of fastness in all applications, as many factors and components have a high level of influence over performance. It is the responsibility of the user to test and verify performance in their individual application.

(1) Light fastness is measured on an eight step blue wool scale, where 1=very poor light fastness and, 8=excellent light fastness.

(2) Weather resistance is measured on a five step gray scale, where 1= very poor weather resistance, 5= excellent weather resistance

Chromaflo Technologies

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