



255 FOUNTAIN STREET AKRON, OHIO 44304-1991  
330-535-2100 ♦ 800-321-2260 ♦ FAX 330-535-8947

## COLORS -FDA PIGMENTS-

### FOOD & DRUG ADMINISTRATION COLORANTS ACCEPTABLE UNDER 177.2600

The following C. I. Pigments are acceptable under CFR 21, Regulation 177.2600 “Rubber articles intended for repeated use” per section 178.3297 “Colorants for polymers” and/or section 73.2725 (Ultramarines). Use of these pigments, while permitted, does not automatically qualify a rubber compound under these regulations. Certain extraction tests and other use limitations may exist depending upon the pigment and the type of food(s) the rubber may contact. The Technical Staff at Akrochem can also provide assistance with FDA compounding in general.

#### INORGANIC POWDER PIGMENTS:

C.I. Pigment #	CAS #	Description	FDA Pigment Limits (%)
Black 11	1309-38-2 1317-61-9 12227-89-3	Syn. Black Oxide (Magnetite) Iron Oxide C.I. Pigment Black 11	No Limit
Black 28	68186-91-4	Mixed Metal Oxide	5 % by weight
Blue 28	1345-16-0	Mixed Metal Oxide	5 % by weight
Blue 29	57455-37-5	Ultramarine	No limit
Brown 6	52357-70-7	Synthetic iron oxide	No Limit
Green 17	1308-38-9	Chromium III oxide	10 % by weight
Red 101	1309-37-1	Synthetic RIO	No Limit
White 4	1314-13-2	Zinc Oxide	No Limit
White 6	13463-67-7	TiO <sub>2</sub> (Anatase)	No Limit
White 6	13463-67-7	TiO <sub>2</sub> (Rutile)	No Limit
White 18	1317-65-3	Calcium Carbonate	No Limit
White 19	1332-58-7 8047-76-5	China Clay (Kaolin) C.I. Pigment White 19	No Limit
White 22	7727-43-7	Baryte (Natural BaSO <sub>4</sub> )	No Limit
White 24	1332-73-6	Aluminum Hydrate	No Limit
Yellow 42	122259-21-1 51274-00-1	Synthetic iron oxide C.I. Pigment Yellow 42	No Limit

## ORGANIC POWDER PIGMENTS:

C.I. Pigment #	CAS #	Description	FDA Pigment Limits (%)
Blue 15	147-14-8	Phthalocyanine (Red Shade)	No Limit
Blue 15:1	147-14-8	Phthalo Blue (Red Shade, less than Blue 15)	No Limit
Blue 15:3	147-14-8	Phthalo Blue (Strong Green Shade)	No Limit
Green 7	1328-53-6	Phthalo Green (Blue Shade)	No Limit
Orange 64	72102-84-2	Orange GP (Bright)	1 % by weight
Red 38	6358-87-8	Pyrazolone Red (Strong Medium Shade)	10 % by weight
Red 53.1	5160-02-1	Red Lake C (Yellow Shade)	Permitted as D & C Red 9
Red 57:1	5281-04-9	Lithol Rubine (Blue Shade)	1 % by weight
Red 254	84632-65-5	HP Red (Medium Shade)	1 % by weight
Violet 19	1047-16-1	Quinacridone Violet (Blue Shade)	No Limit
Yellow 110	106276-80-6	Tetrachloroisindolinone (Orange Shade)	1 % by weight
Yellow 180	77804-81-0	Monazo (Lemon Yellow)	10 % by weight

These two charts of pigments represent the higher volume FDA pigments. There are a number of lesser-used pigments available. There are also specialty versions of some pigments that are certified to meet certain FDA standards (for example, carbon black can be certified to contain less than 0.5ppm PAH, poly-aromatic hydrocarbons). Carbon blacks are standard furnace grades.

Most of these C.I. pigments are available in dispersion form. Dispersions include polymeric, aqueous, plasticizer and silicone gum or fluid bound forms. Note: Not all pigment dispersions are FDA compliant.

Check with your Akrochem Technical Service Rep if you can't find the right color or need assistance picking the proper one for your application. Use per regulation as outlined in CRF 21, sections 177.2600, 178.3297 and/or 73.2725.

Akrochem has extensive laboratory color matching skills. We can custom design a color formulation to color match your requirements. Put us to the test! Call: 1-800-321-2260.