

# Decorating Colors

Ceramics																
Series	Onglaze						Inglaze			Underglaze	Glass					
Application	Samba100	Carnival100	Sunshine	64 Series	Orchid	Azurico	Metallic100	SKY 100	Impression	Starlight 100	Springtime 100	VNS Series	15 Series	33 Series New	52 Series	
	Lead Free Onglaze Colors for Porcelain, Bone China, Vitreous China, Earthenware and Enamel	Lead Free Onglaze Colors for Porcelain, Bone China, Vitreous China, and Earthenware	Resistant Onglaze Colors for Porcelain, Bone China Vitreous China and Earthenware	Resistant Onglaze Colors for Porcelain, Bone China Vitreous China and Earthenware	Resistant Onglaze Purple Colors for Porcelain, Bone China, and Earthenware	Brilliant Blue Resistant Onglaze Colors for Porcelain, Bone China, and Earthenware	Lead Free and Cadmium Free Metallic Colors for Porcelain, Bone China, Vitreous China, Earthenware and Enamel	Lead Free High Temperature Fast Firing Colors for Porcelain	High Temperature Fast Firing Colors for Porcelain	Lead and Cadmium Free High-Temperature Fast Firing Metallic Colors	Intensive Lead Free Under- glaze Colors for Earthenware, Vitreous China, Bone China, Stoneware, Tiles and Porcelain	Lead Free Glass Colors	Resistant, Opaque Glass Colors	Low Fusing Glass Colors	Lead Free Metallic Glass Colors	
	Lead free Contains lead															
<b>Green</b>	11 1650 / 364C 11 1651 / 3292C 11 1653 / 362C	11 57471 / 364C 11 57472 / 569C 11 57473 / 377C	11 1232 / 3288C 11 1233 / 364C 11 1244 / 369C	11 64418 / 322C 11 64434 / 360C 11 64447 / 364C				11 857 / 337C 11 858 / 372C 11 859 / 357C 11 961 / 3308C 11 1914 / 323C	11 1453 / 372C 11 1454 / 353C 11 1455 / 3248C 11 1456 / 364C 11 1457 / 323C 11 1458 / 3305C		11 1711 / 575C 11 1715 / 547C	VNS 1600 / 349C	11 15143 / 319C 11 15417 / 322C 11 15436 / 377C 11 15446 / 339C 11 15434 / 356C 11 15449 / 349C	11 33641 / 349C 11 33642 / 364C 11 33667 / 3435C		
<b>Blue</b>	12 1650 / 632C 12 1651 / 314C 12 1652 / 308C 12 1653 / 2727C 12 1654 / 285C 12 1655 / 307C 72 1650 / 2756C	12 57171 / 314C 12 57172 / 2985C 12 57014 / 072C 12 57174 / 307C 72 57190 / 2748C 72 57193 / 289 C	12 1232 / 294C 12 1234 / 307C 12 1236 / 2728C 72 1233 / 2747C 72 1234 / 2758C	12 64015 / 2728C 12 64115 / 2945C 72 64197 / 2738C 72 64198 / 2758C		12 2500 / 661C 72 2500 / 662C		12 856 / 287C 12 861 / 542C 12 862 / 297C 12 1910 / 2748C 12 1915 / 2935C 12 1916 / 3015C 12 1917 / 2985C	12 1451 / 637C 12 1452 / 2716C 12 1453 / 659C 12 1915 / 2935C 12 1916 / 3015C 12 2201 / 2765C		12 1710 / 298C 12 1711 / 2758C 12 1712 / 2745C	VNS 2604 / 2915C VNS 2600 / 2738C	12 15110 / 299C 12 15112 / 284C 12 15114 / 285C 12 15115 / 2728C	12 33517 / 3015C 12 33530 / 285C 12 33602 / Ref Blue C		
<b>Yellow</b>	13 1604 / 116C 13 1605 / 151C 13 1650 / 101C 13 1651 / 122C 13 1652 / 137C 13 1655 / 116C	13 57301 / 116C 13 57371 / 603C 13 57372 / 1225C	13 1230 / 108C 13 1232 / 102C 13 1233 / 122C	13 64333 / 101C 13 64336 / 108C 13 64351 / 130C			13 2165 / 141C M 13 2166 / 7403C M 13 55324 / 1215C M 13 55325 / 1245C M 13 55326 / 8962C M	13 855 / 101C 13 856 / 144C 13 1916 / 107C 13 1917 / 165C	13 1451 / 100C 13 1452 / 3935C 13 1454 / 136C 13 2203 / 108C 13 2204 / 165C	13 1930 / 141C	13 1713 / 3665C 13 1715 / 108C 13 1716 / 165C	VNS 3600 / 610C VNS 3601 / 3665C VNS 7610 / 166C	13 15330 / 393C 13 15332 / 120C 13 15335 / 116C 13 15503 / 1565C 13 15535 / 1585C 13 15575 / 172C	13 33440 / 116C 13 33464 / 166C	13 52325 / 872C M 13 52326 / 873C M	
<b>Black</b>	14 1650 / Black 2C 14 1652 / Black C	14 57871 / Black7C2X	14 1231 / Black C 14 1232 / Black C	14 64885 / P. Black C			14 1910 / Black 2C 14 1450 / Black 5C			14 1710 / Black C	VNS 4600 / P. Black C	14 15886 / P. Black C	14 33886 / Black 6C			
<b>Grey</b>	15 1650 / 424C 15 1651 / 429C	15 57875 / IC Grey 7C	15 1230 / 429C	15 64885 / 431C			15 2165 / 7534C M 15 2166 / 7235C M 15 55008 / 472C M 15 55010 / 420C M 15 55881 / 8001C M 15 55885 / 877C M	15 850 / 643C 15 856 / 431C 15 1912 / 422C	15 1450 / 643C 15 1451 / 415C	15 1930 / 7534C	15 1710 / 7536C	15 15884 / 429C	15 33125 / 423C	15 52881 / 877C M 15 52885 / 8421C M		
<b>Brown</b>	16 1650 / 153C 16 1651 / 1685C	16 57871 / 157C 16 57872 / 1685C	16 1232 / 483C 16 1233 / 1595C	16 64225 / 471C 16 64226 / 478C 16 64228 / 4695C			16 2165 / 722C M 16 55222 / 876C M	16 855 / 4975C 16 856 / 477C 16 857 / 159C 16 858 / 153C 16 1914 / 728C	16 1452 / 163C 16 1453 / 722C 16 1454 / 159C 16 1455 / 1685C 16 1456 / 1545C	16 1931 / 7585C	16 1710 / 483C 16 1711 / 153C	VNS 7609 / 137C VNS 6618 / 181C	16 15226 / 1685C 16 15228 / 175C 16 15234 / 143C	16 33310 / 160C 16 33311 / 7594C 16 33444 / 4695C	16 52222 / 8762C M	
<b>Red and Orange</b>	17 1605 / 172C 17 1606 / 1795C 17 1656 / 151C 17 1657 / 172C 17 1658 / 1795C 17 1662 / 484C	17 57701 / 151C 17 57702 / 172C 17 57703 / 1795C	17 578 / 484C 17 1250 / 1505C 17 1251 / 1795C 17 1252 / 187C	17 64723 / 1815C 17 64777 / 1505C 17 64779 / 187C			17 2165 / 167C M 17 55671 / 8900C M 17 55774 / 8902C M	17 856 / 163C 17 1910 / 694C 17 1911 / 695C 17 1917 / 179C 17 1918 / 1805C	17 1451 / 182C 17 1452 / 1945C 17 1455 / 1665C 17 1456 / 171C 17 2204 / 179C 17 2205 / 1805C	17 1930 / 167C	17 1716 / 1805C 17 1714 / 1675C 17 1715 / 179C	VNS 7600 / 1805C	17 15072 / 169C 17 15773 / 485C 17 15777 / 1797C	17 33385 / 185C2X 17 33417 / 187C		
<b>Purple</b>	77 1640 / 203C 77 1641 / 207C 77 1642 / 208C 77 1643 / 197C 77 1644 / 702C 77 1645 / 201C 77 1650 / 7420C 77 1651 / 7634C	77 1640 / 203C 77 1641 / 207C 77 1642 / 208C 77 1643 / 197C 77 1644 / 702C 77 1645 / 201C 77 1650 / 7420C 77 1651 / 7634C	77 1234 / 216C 77 1235 / 208C 77 1241 / 208C 77 1242 / 194C 77 1243 / 229C	77 64671 / 223C 77 64673 / 215C 77 64675 / 7435C 77 468 / 1905C 77 467 / 219C 77 468 / 1905C 77 477 / 215C 77 478 / 220C 77 479 / 219C 77 480 / 1905C 77 481 / 211C	77 465 / 216C 77 466 / 194C 77 467 / 219C 77 468 / 1905C 77 477 / 215C 77 478 / 220C 77 479 / 219C 77 480 / 1905C 77 481 / 211C			77 1910 / 207C 77 1911 / 204C 77 1912 / 1945C	77 1910 / 207C 77 1911 / 204C 77 1912 / 1945C			77 35673 / 258C	77 1499 / 689C	77 495 / 7655C 77 33673 / 221C		
<b>Violet</b>	18 1650 / 251C						18 852 / 529C	18 1450 / 2573C 18 1451 / 2645C		18 1710 / 688C						
<b>White</b>	19 1650 19 1651	19 57071 19 57072	19 1230 19 1231 19 1232	19 64006 19 64007 19 64008			19 850 19 1912	19 1450 19 1451		19 1710	VNS 9620 VNS 601	19 15000 <sup>1</sup>	19 33130 <sup>1</sup> 19 33166	19 52009		
<b>Process colors</b>				12 64124 / 3015C 13 64324 / 107C 77 64604 / 194C 14 64804 / Black 3C 14 64889 / P. Black C								12 15104 / 285C 13 15304 / 116C 14 15804 / P. Black C 17 15704 / 1797C	12 33517 / 3015C 13 33440 / 116C 14 33886 / Black6C 17 33417 / 187C			
<b>Fluxes</b>	10 1600 10 1650 10 1652 <sup>1</sup>	10 57050	10 117 10 169	10 64050 10 64052 10 64053 10 64064	10 140	10 2500	10 55050	10 115 10 115	10 115 10 1600	10 083 10 117 10 1650 10 4001	VNS 849 BJ	10 15000 <sup>1</sup>	10 33000 <sup>1</sup>			

<sup>1</sup> Cadmium containing colors  
While every attempt has been made to reproduce colors exactly, the samples printed here may differ slightly from the finished ceramic products.  
For detailed information, please consider our technical information sheets and material safety data sheets.