

**O** R I G I N A L  
**C** O L O R  
**C** H A R T



International Mark of Quality

ORIGINAL COLOR

# GRAZE STAIN

CODE NO. / COLOR	COLOR CHART	COMPOSITION	MAX.TEMP	OF / RF	REMARK
PC-5562 Pr.Yellow 锆黄色		Zr-Si-Pr	1,250°C	OF	Suitable for all glazes
No.1349 V.Yellow 钒黄色		Zr-V	1,300°C	OF/RF	Suitable for all glazes
No.1810 C.Pink 粉红色		Zr-Si-Fe	1,250°C	OF	Deep reddish coral color
No.1813 C.Pink 粉红色		Zr-Si-Fe	1,250°C	OF	Standard coral color
No.7555 Maroon 玛瑙色		Sn-Ca-Si-Cr	1,250°C	OF	Deep reddish maroon color
No.7556 Maroon 玛瑙色		Sn-Ca-Si-Cr	1,250°C	OF	Reddish maroon color
No.7557 Maroon 玛瑙色		Sn-Ca-Si-Cr	1,250°C	OF	Deep maroon color
H-320 Sn.Pink 桃红色		Sn-Ca-Si-Cr	1,250°C	OF	Suitable for ZnO,MgO free
AF-2050 Brown 棕色		Al-Fe-Cr-Zn	1,250°C	OF	Suitable for ZnO glaze
AF-2080 Brown 棕色		Al-Fe-Cr-Zn	1,250°C	OF	Suitable for ZnO glaze
FG-1201 Brown 深棕色		Fe-Cr-Zn	1,250°C	OF	Suitable for ZnO glaze
F-23 Sepia 深褐色		Fe-Cr-Zn-Mg	1,250°C	OF	Suitable for ZnO glaze
F-5 Orange 桔红色		Al-Fe-Cr-Zn	1,250°C	OF	Suitable for ZnO glaze,Lime free
F-10 Peach 桃色		Al-Cr-Zn	1,250°C	OF	Suitable for ZnO glaze,Lime free
D-8010-2 Red 红色		Zr-Si-Cd-Se	1,320°C	OF/RF	Suitable for all glazes,OF and RF
D-8010-4 Red 红色		Zr-Si-Cd-Se	1,320°C	OF/RF	Suitable for all glazes,OF and RF
KD-8020-2 Orange 桔红色		Zr-Si-Cd-Se	1,320°C	OF/RF	Suitable for all glazes,OF and RF



## 釉用顔料

CODE NO. / COLOR	COLOR CHART	COMPOSITION	MAX.TEMP	OF / RF	REMARK
BS-9311 T.Blue 水青色		Zr-Si-V	1,230℃	OF	Suitable for frit glazes
N-1301 T.Blue 水青色		Zr-Si-V	1,250℃	OF	Suitable for high temp,glaze
No.457 Co.Blue 钴蓝色		Co-Si	1,300℃	OF	Suitable for sanitary ware,wall tile
N-107 Sky Blue 天蓝色		Co-Al-Zn	1,320℃	OF/RF	
F-105 Sky Blue 天蓝色		Co-Al-Zn	1,320℃	OF/RF	
N-3880 Co.Blue 钴蓝色		Co-Cr-Al-Zn	1,320℃	OF/RF	
FG-3 Co.Blue 钴蓝色		Co-Cr-Al-Zn	1,320℃	OF/RF	
F-251 Peacock 孔雀绿		Co-Cr-Al-Zn	1,320℃	OF/RF	
F-100 Peacock 孔雀绿		Co-Cr-Al-Zn	1,320℃	OF/RF	
N-3700 Green 蓝绿色		Co-Cr-Al-Zn	1,320℃	OF/RF	
Y-20 Green 绿色		Zr-Si-Ca-Cr-	1,320℃	OF/RF	Suitable for ZnO free
F-501 Black 钴黑色		Co-Ni-Fe-Cr-Mn	1,320℃	OF/RF	
F-5257 Black 钴黑色		Co-Ni-Fe-Cr-Mn	1,320℃	OF/RF	
ZF-104 Black 钴黑色		Co-Ni-Fe-Cr	1,320℃	OF/RF	Suitable for high temp,glaze
F-520 Black 黑色		Ni-Fe-Cr-Mn	1,280℃	OF	Suitable for frit glaze
FM-73 Gray 灰色		Co-Ni-Fe-Cr-Mn-Zr-Si	1,280℃	OF	
F-550 Gray 灰色		Co-Ni-Fe-Cr-Mn-Zr-Si	1,280℃	OF	
F-841 Gray 灰色		Co-Ni-Fe-Cr-Mn-Zr-Si	1,280℃	OF	

ORIGINAL COLOR

# BODY STAIN

坯用顔料

CODE NO. / COLOR	COLOR CHART	COMPOSITION	MAX.TEMP	OF / RF	REMARK
F-8905 Mn.Pink 锰红色		Al-Mn	1,320°C	OF / RF	
T-4105 Ti.Yellow 钛黄色		Ti-Sb-Cr	1,280°C	OF	
T-4145 Ti.Yellow 钛黄色		Ti-Sb-Cr	1,280°C	OF	
T-4106 Ti.Orange 钛桔色		Ti-Sb-W-Cr	1,280°C	OF	
T-6800 Ti.Brown 钛桔红色		Ti-W-Cr	1,280°C	OF	
BS-9305 T.Blue 水青色		Zr-Si-V	1,250°C	OF	
N-25 Sky Blue 天蓝色		Al-Co-Mg	1,350°C	OF / RF	
N-2860 Sky Blue 天蓝色		Al-Co	1,350°C	OF / RF	
N-2800 Sky Blue 天蓝色		Al-Co	1,320°C	OF / RF	
N-7004 Green 绿色		Al-Cr	1,320°C	OF / RF	
F-230 Black 黑色		Fe-Cr	1,280°C	OF	
F-8581 Black 黑色		Fe-Cr	1,280°C	OF	
F-8583 Black 黑色		Fe-Cr	1,280°C	OF	
F-850 Black 黑色		Fe-Cr	1,280°C	OF	

### QUALITY CONTROL

Chemical composition

Color control

Particle distribution, residue %

Moisture %

PH control

Bulk density

Solution viscosity



**HIGH SPEED DISPERSIBLE GLAZE STAIN (HSD)**

釉用高速混合分散顔料

1. Basically, almost all NGY original color Glaze stain can be used on HSD process but there is a few pigment which can not be processed HSD due to physicality and color tone is typical HSD pigment.
2. HSD pigment doesn't have deliquescence property, but a bit hygroscopic property, then please avoid to storage subject to high temperature and high humidity. And, once HSD pigment is opened, please use it all for a short period of time.
3. HSD pigment is dispersible pigment of water type (glaze slurry). It doesn't have dispersible effect for application of other than water type.

**CODE NO. / COLOR**

BS-9311 HSD	T.Blue 水青色	PC-5562 HSD	Pr.Yellow 镭黄色	No.1349 HSD	V.Yellow 钒黄色	No.1810 HSD	C.Pink 粉红色	No.7555 HSD	Maroon 玛瑙色
H-320 HSD	Sn.Pink 桃红色	AF-2050 HSD	Brown 棕色	FG-1201 HSD	Brown 深棕色	F-23 HSD	Sepia 深褐色	D-8010-2 HSD	Red 红色
KD-8020-2 HSD	Orange 桔红色	N-107 HSD	Sky Blue 天蓝色	N-3880 HSD	Co.Blue 钴蓝色	F-251 HSD	Peacock 孔雀绿	N-3700 HSD	Green 蓝绿色
F-501 HSD	Black 钴黑色	F-520 HSD	Black 黑色	FM-73 HSD	Gray 灰色				

**SCREEN / ROLLER PRINTING STAIN (PS)**

印刷用顔料

1. Basically, almost all NGY original color Glaze Stain can be used on PS process but there is a few pigment which can not be processed PS due to physicality and color tone is typical PS pigment.
2. Specification 325 mesh 100% through
3. Please use most suitable printing medium respectively for screen or roller printing.
4. In case of use for roller printing, measure printing medium about 60% against base glaze powder and PS pigment 40% and mixed well then recommend to sieve 325 mesh before printing.

**CODE NO. / COLOR**

BS-9311 PS	T.Blue 水青色	PC-5562 PS	Pr.Yellow 镭黄色	No.1349 PS	V.Yellow 钒黄色	No.1810 PS	C.Pink 粉红色	No.7555 PS	Maroon 玛瑙色
H-320 PS	Sn.Pink 桃红色	AF-2050 PS	Brown 棕色	FG-1201 PS	Brown 深棕色	F-23 PS	Sepia 深褐色	D-8010-2 PS	Red 红色
KD-8020-2 PS	Orange 桔红色	N-107 PS	Sky Blue 天蓝色	N-3880 PS	Co.Blue 钴蓝色	F-251 PS	Peacock 孔雀绿	N-3700 PS	Green 蓝绿色
F-501 PS	Black 钴黑色	F-520 PS	Black 黑色	FM-73 PS	Gray 灰色				

**DRY MIXING BODY STAIN (DP)**

坯用乾式混合分散顔料

1. Basically, all NGY original color Body Stain can be used on DP process but there are a few color of typical DP pigment.
2. DP pigment doesn't have deliquescence or hygroscopic property but please avoid stacking if possible while keep in storage in order to maintain effectiveness of surface activity.
3. DP pigment is the pigment of eliminating the defect created by surface tension action, etc. of moistness material other many dispersible pigment

**CODE NO. / COLOR**

F-8905 DP	Mn.Pink 锰红色	T-4105 DP	Ti.Yellow 钛黄色	T-4145 DP	Ti.Yellow 钛黄色	T-4106 DP	Ti.Orange 钛桔色	T-6800 DP	Ti.Brown 钛桔红色
BS-9305 DP	T.Blue 水青色	N-25 DP	Sky Blue 天蓝色	N-2860 DP	Sky Blue 天蓝色	N-2800 DP	Sky Blue 天蓝色	N-7004 DP	Green 绿色
F-230 DP	Black 黑色	F-8581 DP	Black 黑色	F-8583 DP	Black 黑色	F-850 DP	Black 黑色		



# SPECIAL PRE-MIX GLAZE

## 結晶窯変釉

GLAZE NAME	COLOR CHART	COMPOSITION	GLAZE NAME	COLOR CHART	COMPOSITION
ニッケル青結晶釉 Nickel blue crystalline		0.15KNaO 0.55ZnO 0.05CaO 0.30BaO :0.22Al2O3:1.5SiO2	海鼠窯変釉 Namako reactive		0.17KNaO 0.53CaO 0.15MgO 0.15BaO :0.30Al2O3:3.5SiO2
ニッケルピンク結晶釉 Nickel pink crystalline		0.10KNaO 0.40ZnO 0.10CaO 0.40BaO :0.16Al2O3:1.4SiO2	朱金地結晶釉 Shukinji crystalline		0.20KNaO 0.60CaO 0.20MgO :0.20Al2O3:2.6SiO2
黒天目窯変釉 Kurotenmoku reactive		0.40KNaO 0.50CaO 0.10MgO :0.50Al2O3:6.0SiO2	鉄赤結晶釉 Tetsuaka crystalline		0.40KNaO 0.25CaO 0.35MgO :0.55Al2O3:5.0SiO2
油滴天目窯変釉 Yutekitemoku reactive		0.49KNaO 0.25CaO 0.26MgO :0.60Al2O3:5.0SiO2	蕎麥窯変釉 Mugi reactive		0.30KNaO 0.50CaO 0.20MgO :0.45Al2O3:5.0SiO2
蛤窯変釉 Ame reactive		0.20KNaO 0.60ZnO 0.20SrO :0.25Al2O3:3.5SiO2	鉄砂・斑紋窯変釉 Tessha・Hanmon reactive		0.20KNaO 0.50CaO 0.30BaO :0.55Al2O3:4.5SiO2
黄瀬戸窯変釉 Kizeto reactive		0.08KNaO 0.85CaO 0.07MgO :0.09Al2O3:1.53SiO2	銀鼠結晶釉 Ginnezu crystalline		0.11KNaO 0.10CaO 0.08PbO 0.71MnO :0.35Al2O3:3.0SiO2
伊羅保結晶釉 Iraho crystalline		0.05KNaO 0.95CaO :0.45Al2O3:2.0SiO2	ラスター彩結晶釉 Luster crystalline		0.15KNaO 0.50PbO 0.35ZnO :0.30Al2O3:1.5SiO2

BASIC OXIDE		NEUTRAL OXIDE	ACIDIC OXIDE
R2O	RO	R2O3	RO2
Example of oxide Li2O Na2O K2O KNaO	MgO CaO SrO BaO ZnO	Al2O3	SiO2
ALKALIS (It is also said simply as ALKALIS by bonding these two)		ALUMINA	SILICA

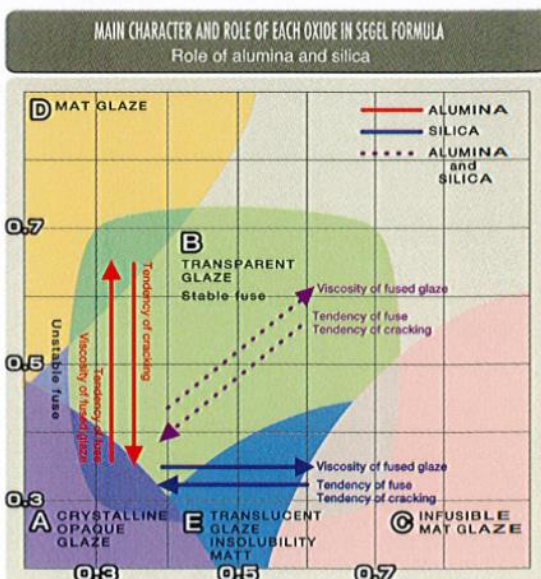
Character of KNaO...KNaO(potassium·sodium) makes glaze glass by reacting with SiO2. If KNaO is increased, glaze tend to be translucent or opaque like Shino glaze. The status of fuse tend to be voluminous because of high viscosity. It is easily gets cracking because of high coefficient of expansion.

Character of MgO...If MgO (magnesium) is increased, crystal of diopside tend to be separated out. If cool slow, it become opaque by crystallization. If A zone temperature is kept for a while during cooling process, it become big crystalline glaze. It also become prevention of cracking. Ash glaze is typical MgO glaze.

Character of CaO...CaO (calcium) is present in worldwide and become element of glaze. If add other type of alkali, it can be prevent trouble easily by replacing with CaO.It is a base for Ash glaze as contains much more ingredient.

Character of BaO...It is easily fused if BaO (barium) is increased. But it is easily gets cracking. It makes Light Celadon blue. It makes Cinnabar deep red. It is imperative for Turkish Blue glaze. It can be made matt in D zone.

Character of ZnO...It is used as low temperature glaze in oxidized firing. It is tend to become opaque glaze, translucent glaze and crystalline glaze in A zone but runny. It is starting to fuse early on in B zone, and easy to use while firing zone is wide since fused slow.





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