

Zinc Pinc- Δ 10

Lab 2-Flux Capacity



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Zinc Pinc

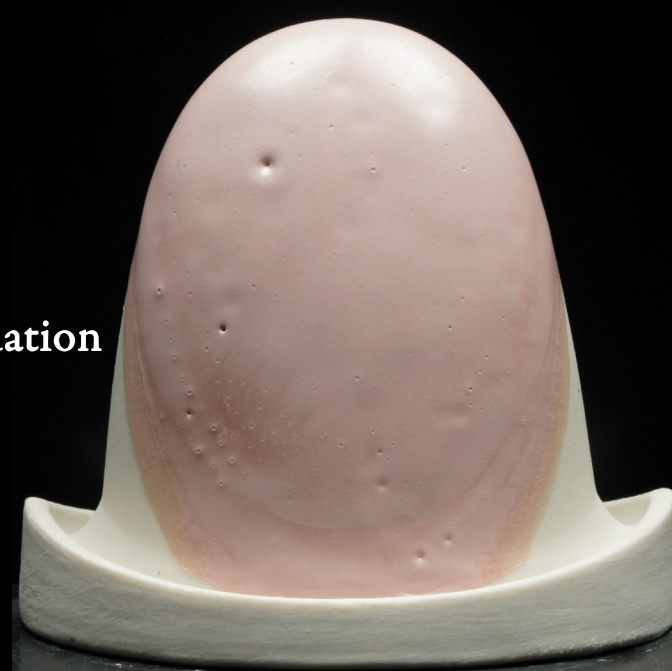
Original

030823-1

Neph Sy	40.00
Zinc Oxide	20.00
EPK	10.00
Flint	30.00
Chrome Oxide	1.00
Water	80



1-3 Second Dip



2-3 Second Dips



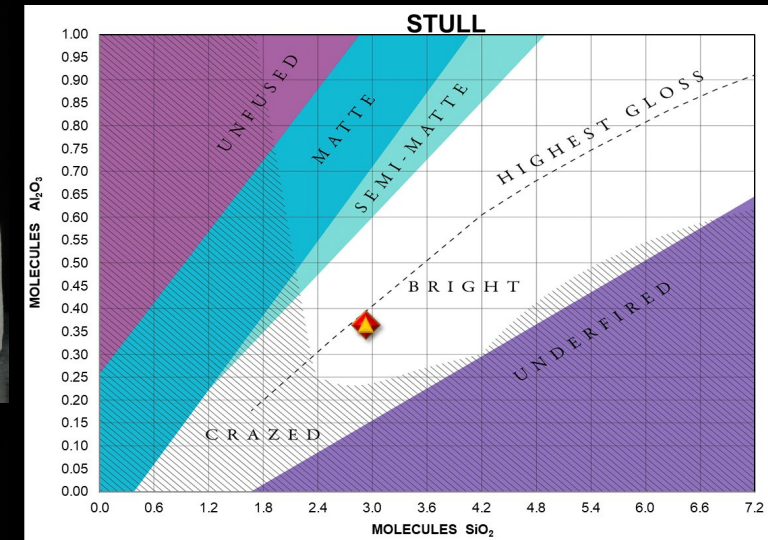
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.00 : 1		Alkali Metals 0.25		Alkaline Earths 0.75	
SiO ₂ 2.93	Collective "Al ₂ O ₃ " 0.37	Na ₂ O 0.20	K ₂ O 0.06	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.36	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.73	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 8.00 : 1		Alkali Metals 0.25		Alkaline Earths 0.75	
SiO ₂ 2.93	Collective "Al ₂ O ₃ " 0.37	Na ₂ O 0.20	K ₂ O 0.06	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.36	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.73	FeO 0.01
Cr ₂ O ₃ 0.02	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



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Lab 2-Alkali Metals-Oxidation



030823-1



030823-7



030823-8



030823-9



030823-10



030823-11



Original (NS)



w/Mahavir



w/Custer



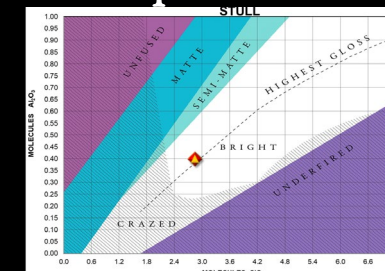
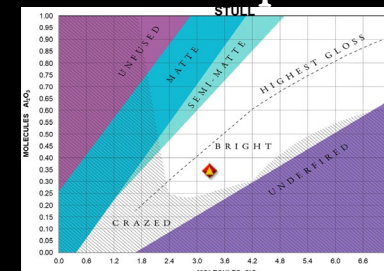
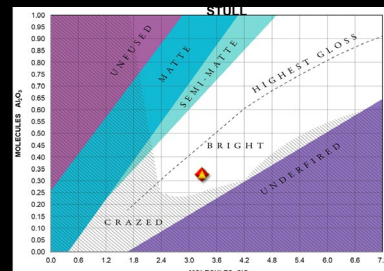
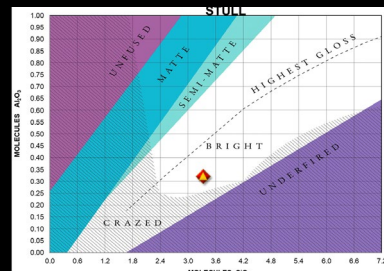
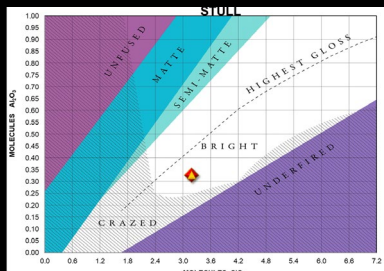
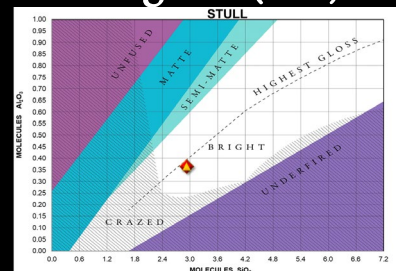
w/G200EU



w/Minspar



w/Spodumene



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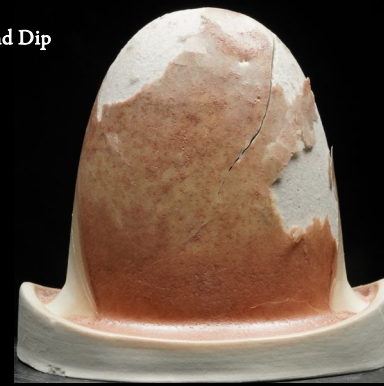
Lab 2-Alkali Metals-Oxidation



030823-1



030823-13



030823-15

1-3 Second Dip



Original (NS)

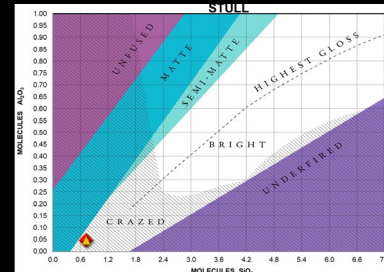
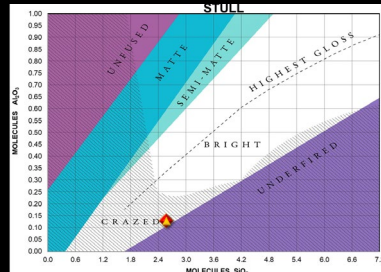
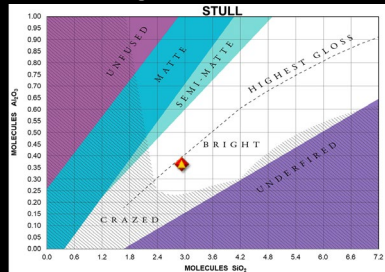


w/Frit 3110



w/Lithium Carbonate

2-3 Second Dips



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Lab 2-Alkali Metals-Reduction



030823-1



030823-7



030823-8



030823-9



030823-10



030823-11

1-3 Second Dip



Original (NS)



w/Mahavir



w/Custer



w/G200EU

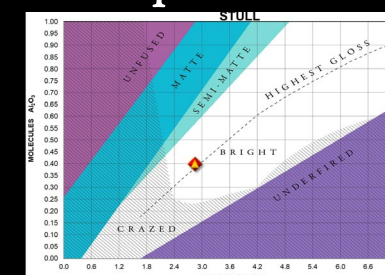
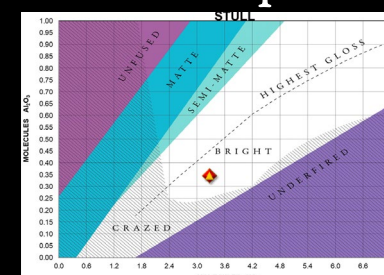
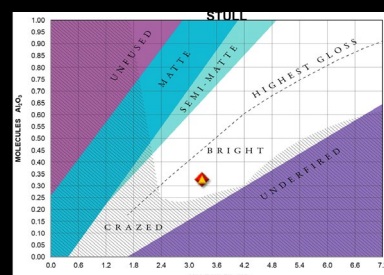
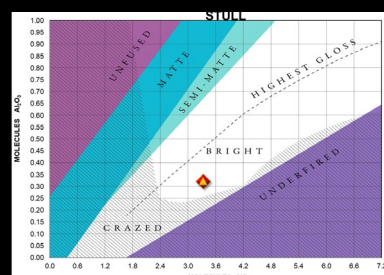
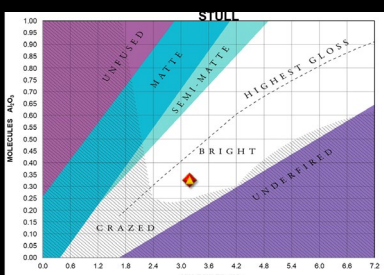


w/Minspar



w/Spodumene

2-3 Second Dips



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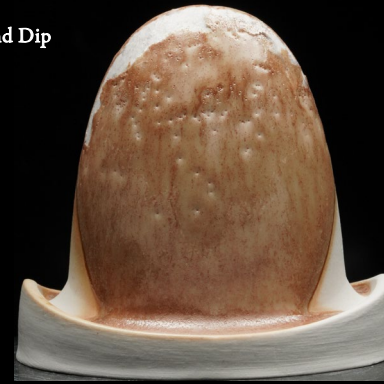
Lab 2-Alkali Metals-Reduction



030823-1



030823-13



030823-15

1-3 Second Dip



Original (NS)

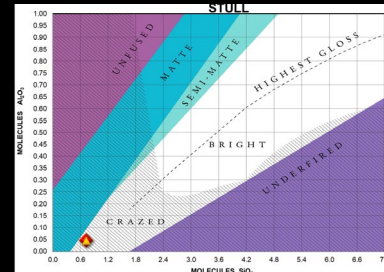
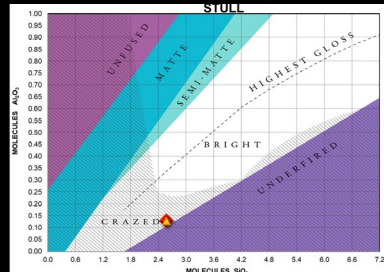
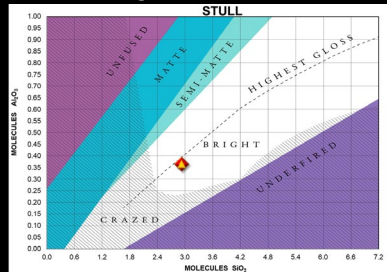


w/Frit 3110



w/Lithium Carbonate

2-3 Second Dips



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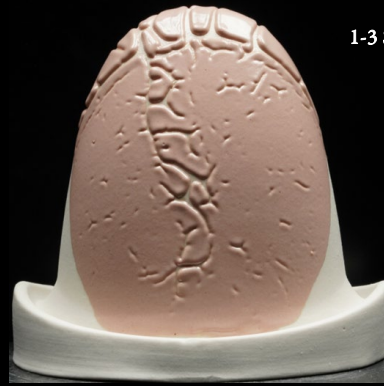
Lab 2-Alkaline Earths-Oxidation



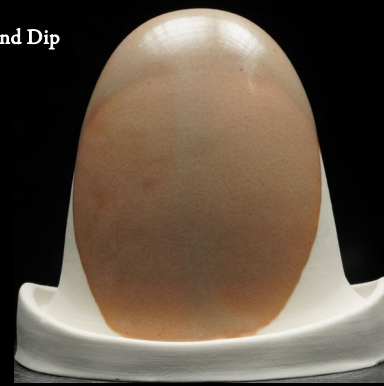
030822-1



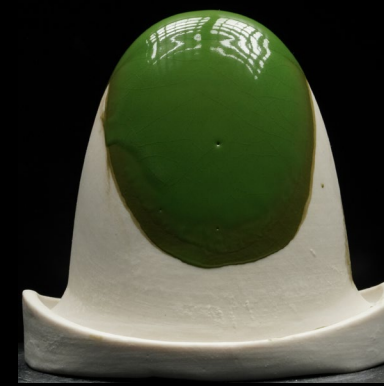
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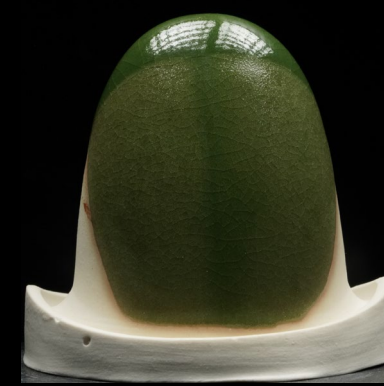
030822-17



030822-18



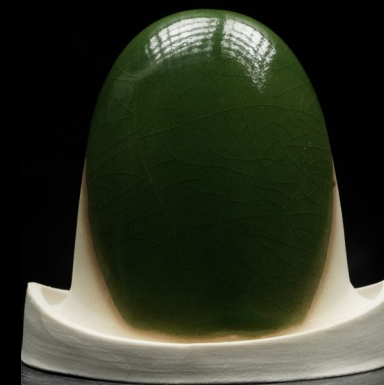
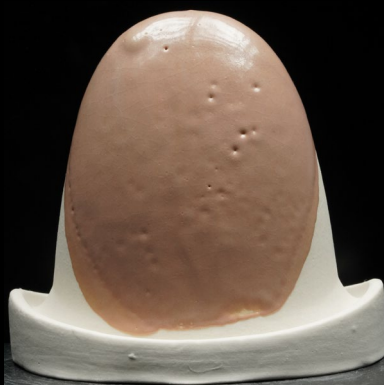
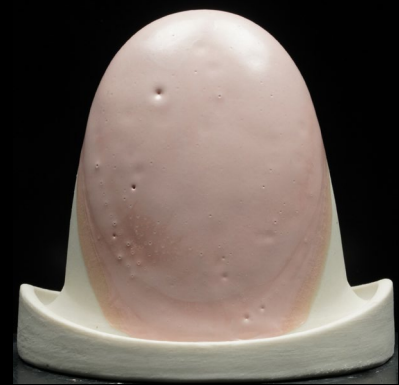
030822-19



030822-20

1-3 Second Dip

2-3 Second Dips



Original (ZO)

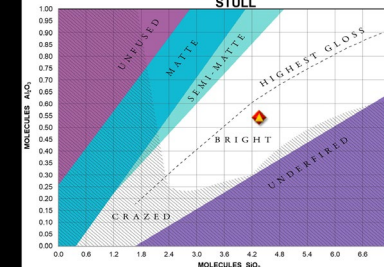
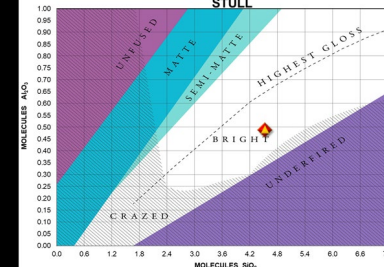
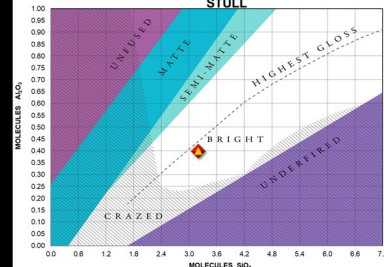
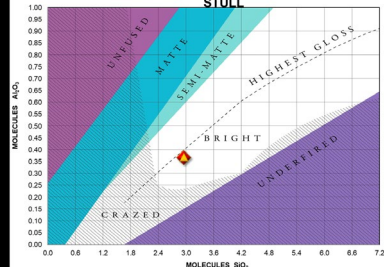
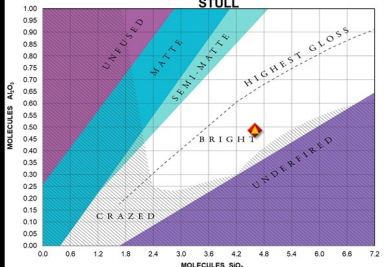
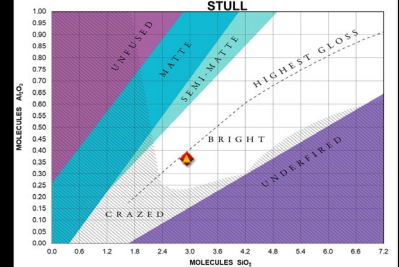
w/Talc

w/Mag Carb

w/Dolomite

w/Wollastonite

w/Strontium Carb



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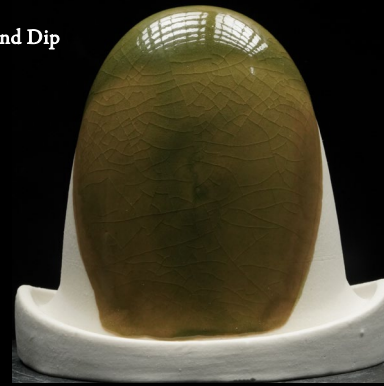
Lab 2-Alkaline Earths-Oxidation



030823-1



030823-21



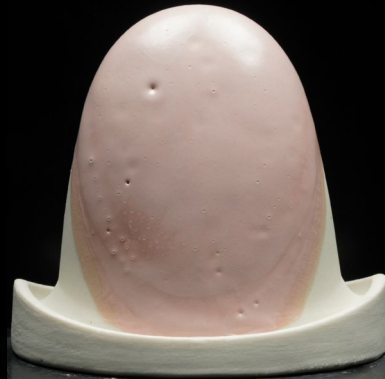
030823-22



030823-23

1-3 Second Dip

2-3 Second Dips



Original (ZO)



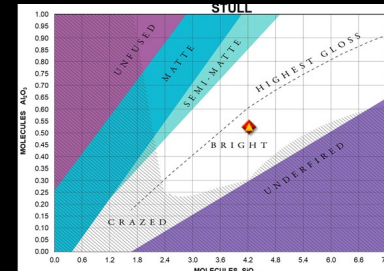
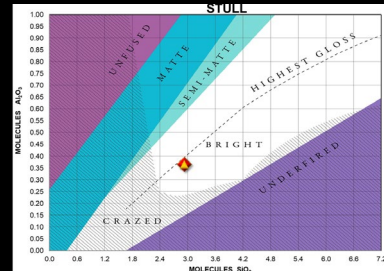
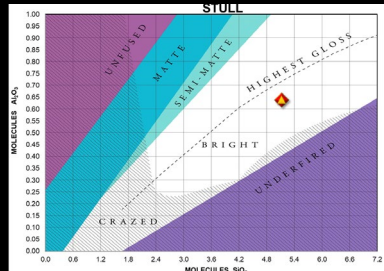
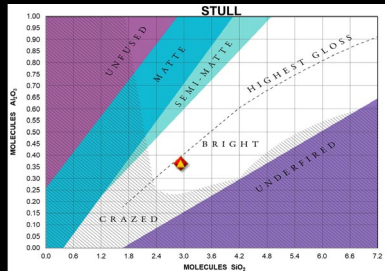
w/Barium Carb



w/Whiting



w/Bone Ash



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Lab 2-Alkaline Earths-Reduction



030823-1



030823-16



030823-17

1-3 Second Dip



030823-18



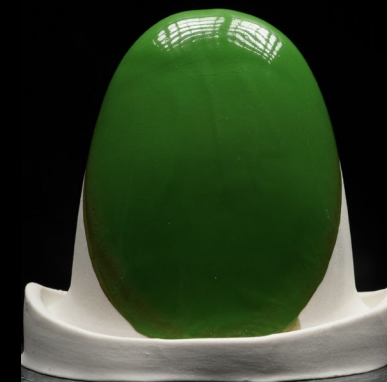
030823-19



030823-20



2-3 Second Dips



Original (ZO)

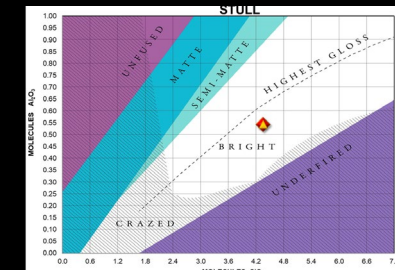
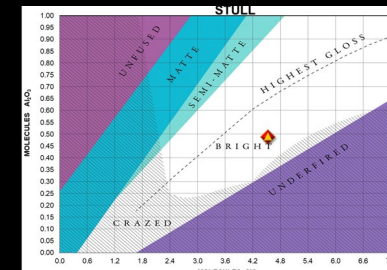
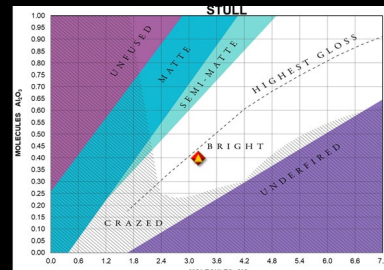
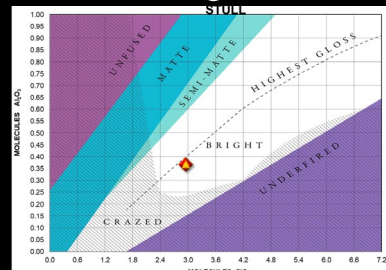
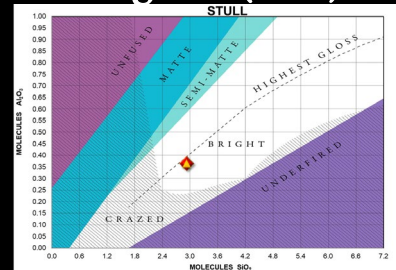
w/Talc

w/Mag Carb

w/Dolomite

w/Wollastonite

w/Strontium Carb



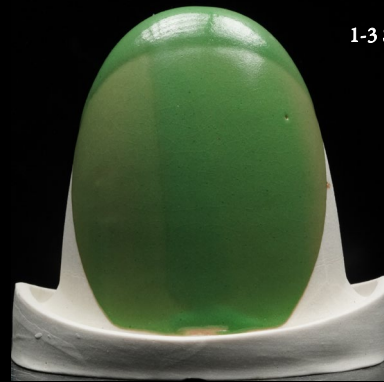
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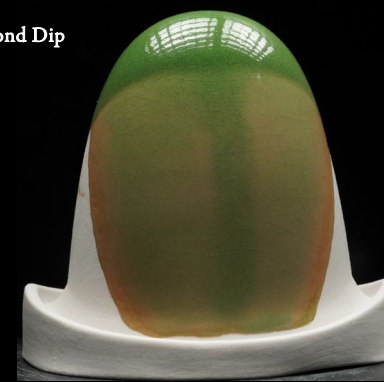
Lab 2-Alkaline Earths-Reduction



030823-1



030823-21



030823-22



030823-23

1-3 Second Dip

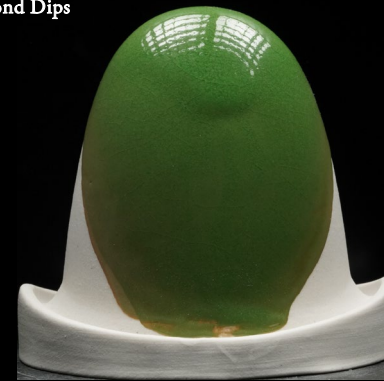
2-3 Second Dips



Original (ZO)



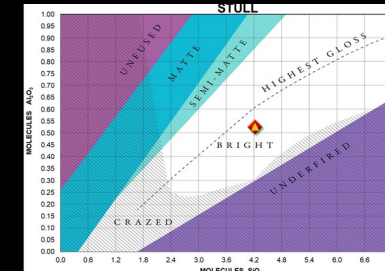
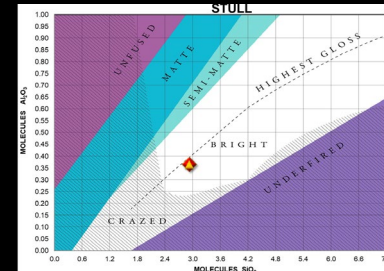
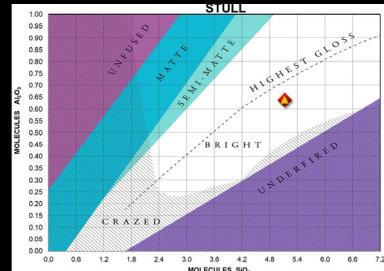
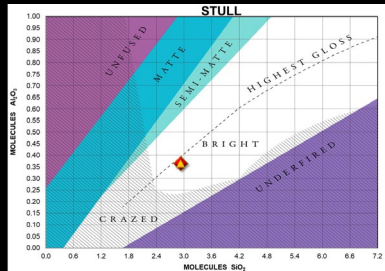
w/Barium Carb



w/Whiting



w/Bone Ash



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Zinc Pinc

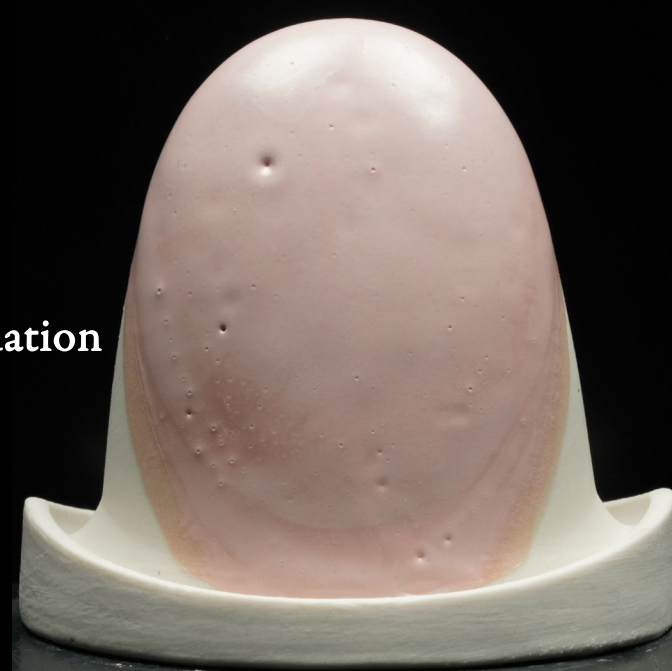
Original

030823-1

Neph Sy	40.00
Zinc Oxide	20.00
EPK	10.00
Flint	30.00
Chrome Oxide	1.00
Water	80



1-3 Second Dip



2-3 Second Dips



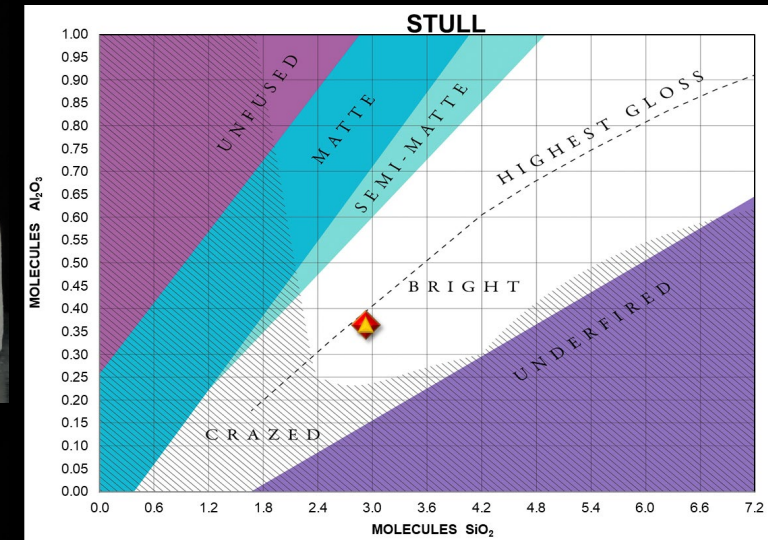
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.00 : 1		Alkali Metals 0.25		Alkaline Earths 0.75	
SiO ₂ 2.93	Collective "Al ₂ O ₃ " 0.37	Na ₂ O 0.20	K ₂ O 0.06	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.36	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.73	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 8.00 : 1		Alkali Metals 0.25		Alkaline Earths 0.75	
SiO ₂ 2.93	Collective "Al ₂ O ₃ " 0.37	Na ₂ O 0.20	K ₂ O 0.06	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.36	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.73	FeO 0.01
Cr ₂ O ₃ 0.02	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



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Zinc Pinc

Weight Substitution
Mahavir Feldspar
030823-7

Mahavir	40.00
Zinc Oxide	20.00
EPK	10.00
Flint	30.00
Chrome Oxide	1.00
Water	80



1-3 Second Dip



2-3 Second Dips



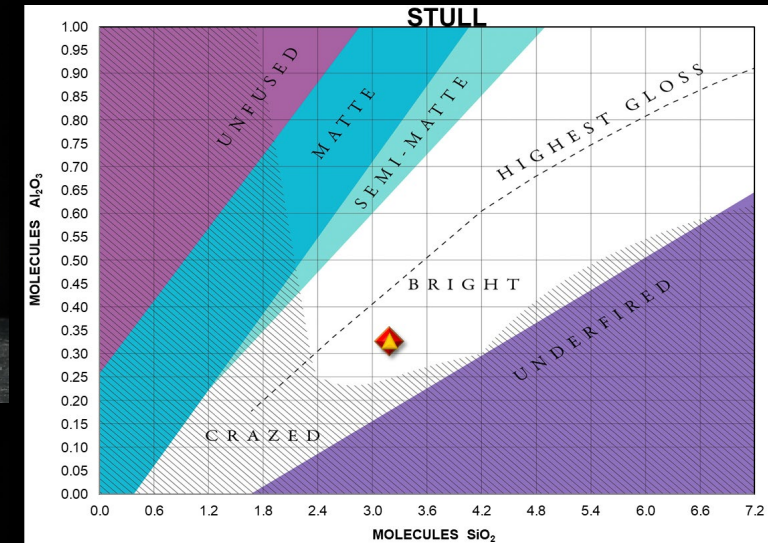
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.69 : 1		Alkali Metals 0.21		Alkaline Earths 0.79	
SiO ₂ 3.19	Collective "Al ₂ O ₃ " 0.33	Na ₂ O 0.06	K ₂ O 0.15	MgO 0.01	CaO 0.00
B ₂ O ₃	Al ₂ O ₃ 0.33	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.77	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 9.69 : 1		Alkali Metals 0.21		Alkaline Earths 0.79	
SiO ₂ 3.19	Collective "Al ₂ O ₃ " 0.33	Na ₂ O 0.06	K ₂ O 0.15	MgO 0.01	CaO 0.00
B ₂ O ₃	Al ₂ O ₃ 0.33	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.77	FeO 0.01
Cr ₂ O ₃ 0.02	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

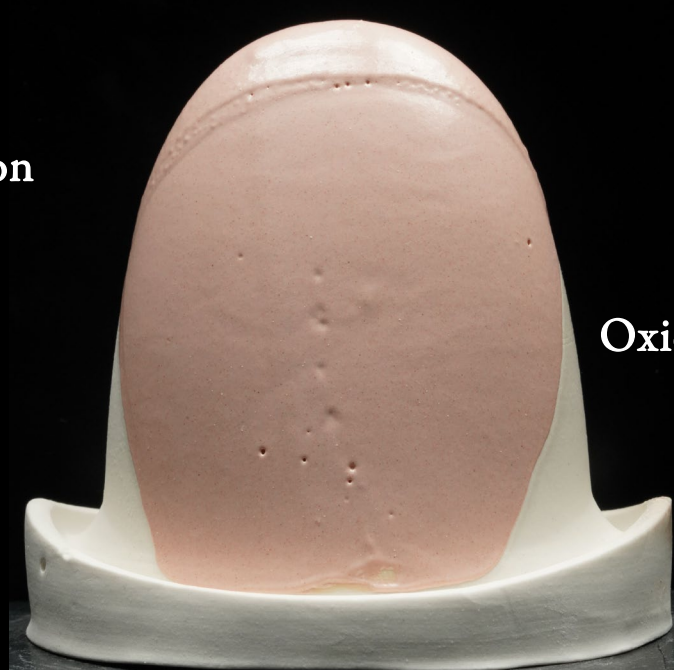


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Zinc Pinc

Weight Substitution
Custer Feldspar
030823-8

Custer	40.00
Zinc Oxide	20.00
EPK	10.00
Flint	30.00
Chrome Oxide	1.00
Water	80



1-3 Second Dip



2-3 Second Dips



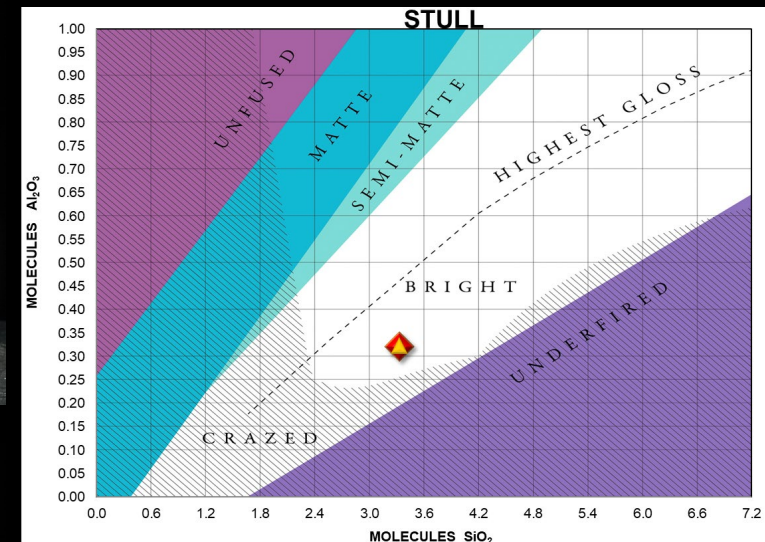
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 10.28 : 1		Alkali Metals 0.19		Alkaline Earths 0.81	
SiO ₂ 3.33	Collective "Al ₂ O ₃ " 0.32	Na ₂ O 0.04	K ₂ O 0.14	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.32	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.79	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 10.28 : 1		Alkali Metals 0.19		Alkaline Earths 0.81	
SiO ₂ 3.33	Collective "Al ₂ O ₃ " 0.32	Na ₂ O 0.04	K ₂ O 0.14	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.32	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.79	FeO 0.01
Cr ₂ O ₃ 0.02	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
Materials
Workshop

Zinc Pinc

Weight Substitution
G200 EU Feldspar
030823-9

G200 EU	40.40
Zinc Oxide	20.20
EPK	10.10
Flint	30.30
Chrome Oxide	1.00
Water	80



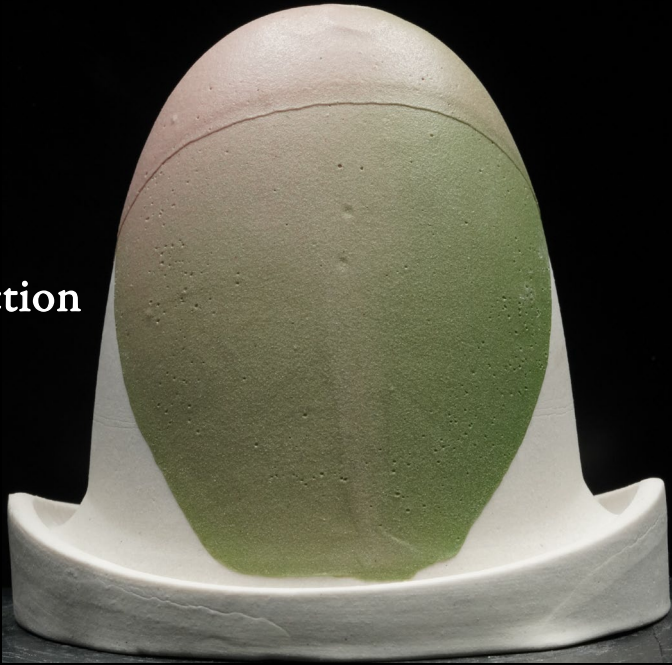
1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



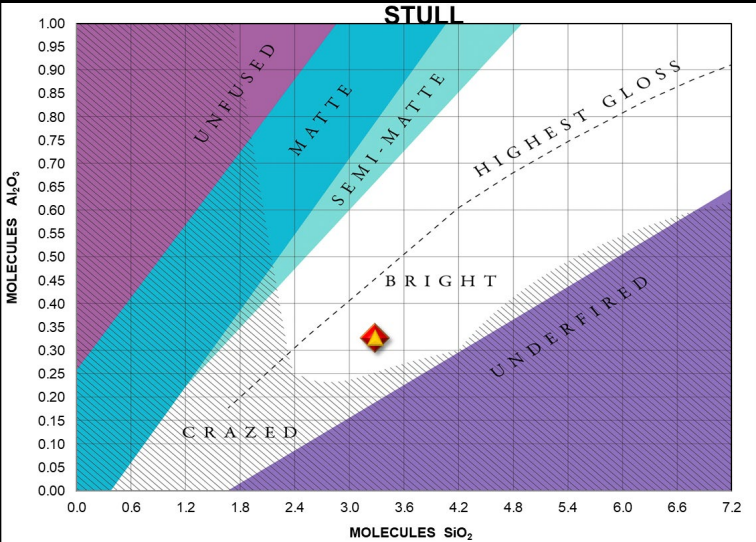
2-3 Second Dips

Oxidation

Reduction

UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.97 : 1		Alkali Metals 0.19		Alkaline Earths 0.81	
SiO ₂ 3.28	Collective "Al ₂ O ₃ " 0.33	Na ₂ O 0.04	K ₂ O 0.15	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.33	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.78	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 9.97 : 1		Alkali Metals 0.19		Alkaline Earths 0.81	
SiO ₂ 3.28	Collective "Al ₂ O ₃ " 0.33	Na ₂ O 0.04	K ₂ O 0.15	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.33	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.78	FeO 0.01
Cr ₂ O ₃ 0.02	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
Materials
Workshop

Zinc Pinc

Weight Substitution
Minspar Feldspar
030823-10

Minspar	40.00
Zinc Oxide	20.00
EPK	10.00
Flint	30.00
Chrome Oxide	1.00
Water	80



1-3 Second Dip



2-3 Second Dips



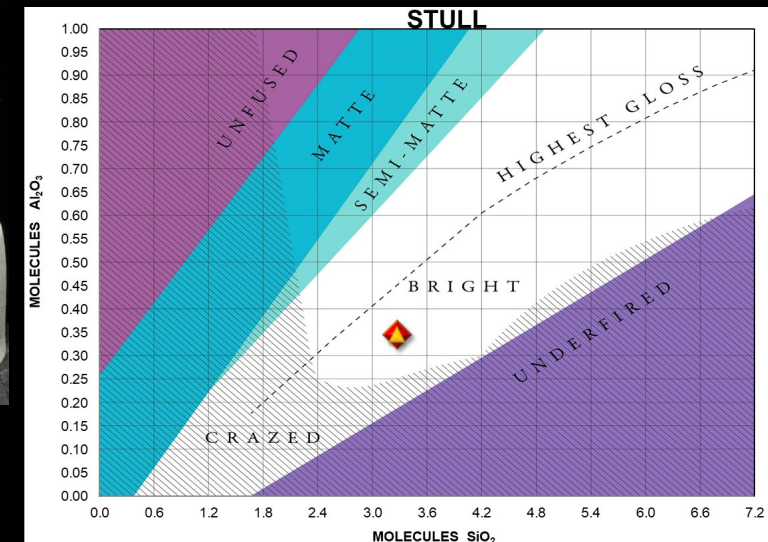
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.42 : 1		Alkali Metals 0.18		Alkaline Earths 0.82	
SiO ₂ 3.27	Collective "Al ₂ O ₃ " 0.35	Na ₂ O 0.13	K ₂ O 0.06	MgO 0.00	CaO 0.03
B ₂ O ₃	Al ₂ O ₃ 0.35	Li ₂ O	CuO	SrO 0.00	BaO 0.00
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.78	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 9.42 : 1		Alkali Metals 0.18		Alkaline Earths 0.82	
SiO ₂ 3.27	Collective "Al ₂ O ₃ " 0.35	Na ₂ O 0.13	K ₂ O 0.06	MgO 0.00	CaO 0.03
B ₂ O ₃	Al ₂ O ₃ 0.35	Li ₂ O	CuO	SrO 0.00	BaO 0.00
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.78	FeO 0.01
Cr ₂ O ₃ 0.02	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



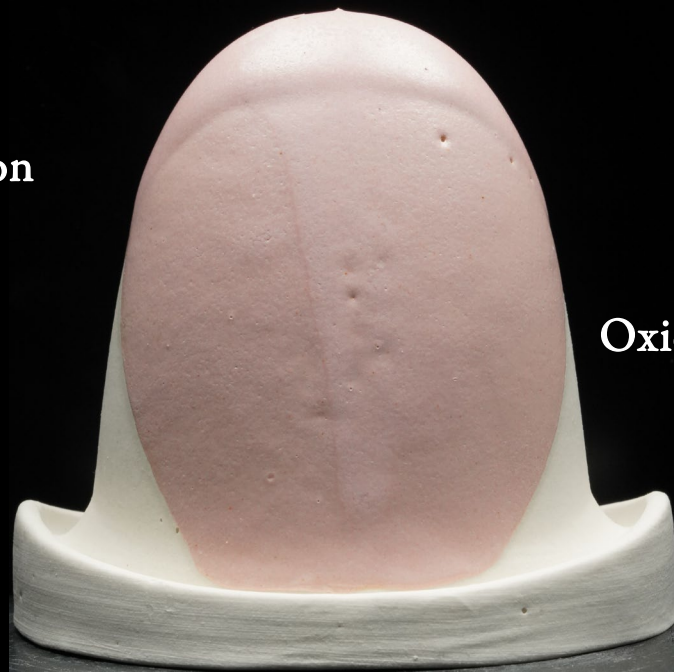
Ceramic
Materials
Workshop

Zinc Pinc

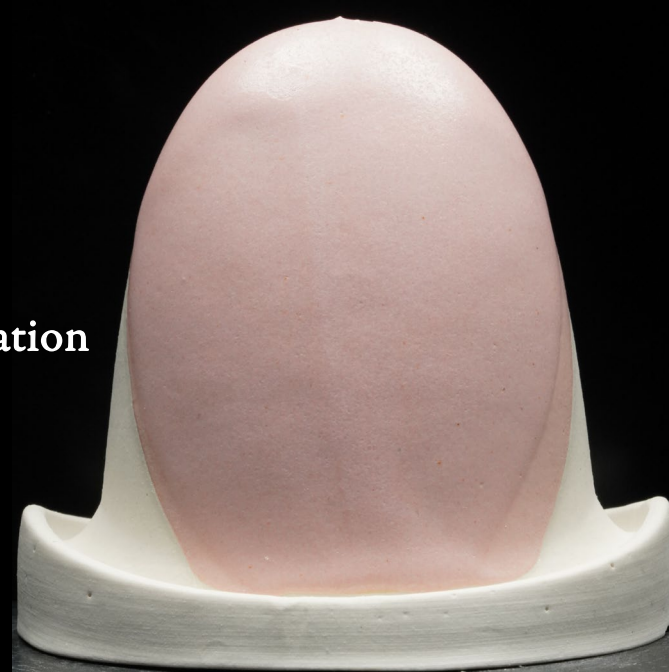
Weight Substitution Spodumene

030823-11

Spodumene	40.00
Zinc Oxide	20.00
EPK	10.00
Flint	30.00
Chrome Oxide	1.00
Water	80



1-3 Second Dip



2-3 Second Dips



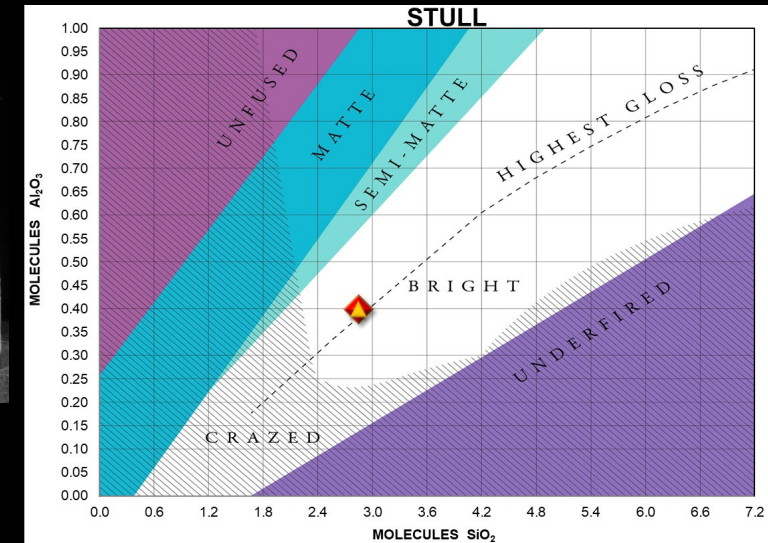
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 7.12 : 1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 2.85	Collective "Al ₂ O ₃ " 0.40	Na ₂ O 0.00	K ₂ O 0.00	MgO 0.00	CaO 0.00
B ₂ O ₃	Al ₂ O ₃ 0.40	Li ₂ O 0.29	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.70	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 7.12 : 1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 2.85	Collective "Al ₂ O ₃ " 0.40	Na ₂ O 0.00	K ₂ O 0.00	MgO 0.00	CaO 0.00
B ₂ O ₃	Al ₂ O ₃ 0.40	Li ₂ O 0.29	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.70	FeO 0.01
Cr ₂ O ₃ 0.02	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
Materials
Workshop

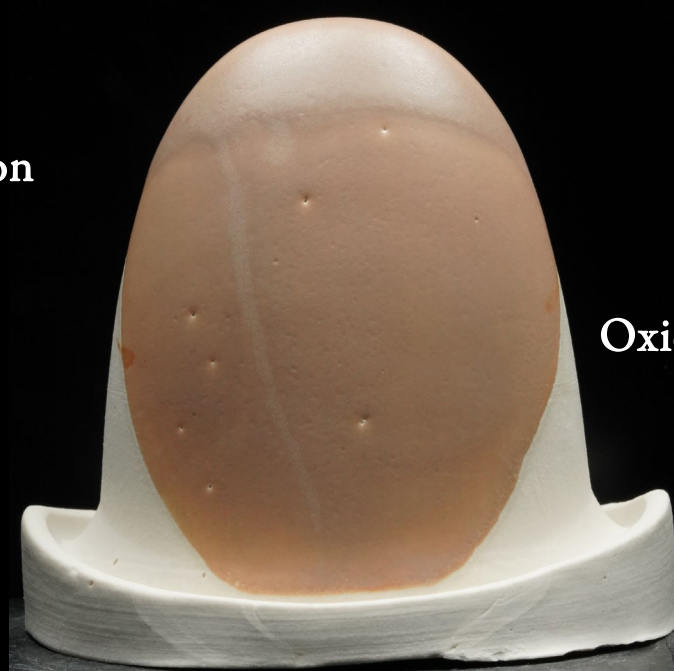
Zinc Pinc

Weight Substitution

Frit 3110

030823-13

3110	40.00
Zinc Oxide	20.00
EPK	10.00
Flint	30.00
Chrome Oxide	1.00
Water	80



1-3 Second Dip



2-3 Second Dips



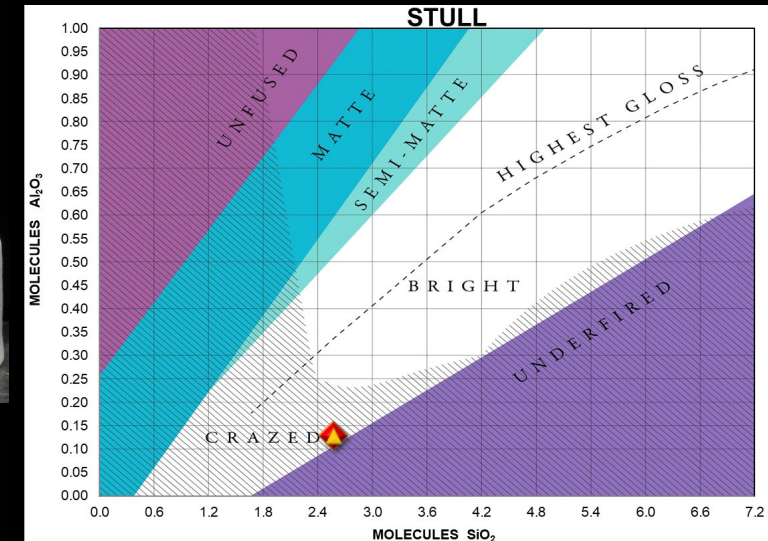
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 19.90 : 1		Alkali Metals 0.27		Alkaline Earths 0.73	
SiO ₂ 2.57	Collective "Al ₂ O ₃ " 0.13	Na ₂ O 0.25	K ₂ O 0.02	MgO 0.00	CaO 0.11
B ₂ O ₃ 0.04	Al ₂ O ₃ 0.13	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.61	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 19.90 : 1		Alkali Metals 0.27		Alkaline Earths 0.73	
SiO ₂ 2.57	Collective "Al ₂ O ₃ " 0.13	Na ₂ O 0.25	K ₂ O 0.02	MgO 0.00	CaO 0.11
B ₂ O ₃ 0.04	Al ₂ O ₃ 0.13	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.61	FeO 0.00
Cr ₂ O ₃ 0.02	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

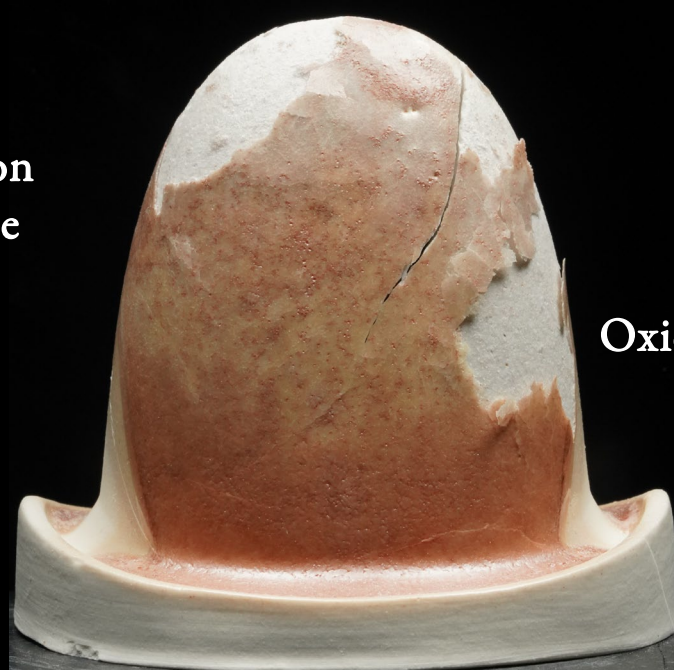


Ceramic
Materials
Workshop

Zinc Pinc

Weight Substitution
Lithium Carbonate
030823-15

Lithium Carb	40.00
Zinc Oxide	20.00
EPK	10.00
Flint	30.00
Chrome Oxide	1.00
Water	80



1-3 Second Dip



2-3 Second Dips



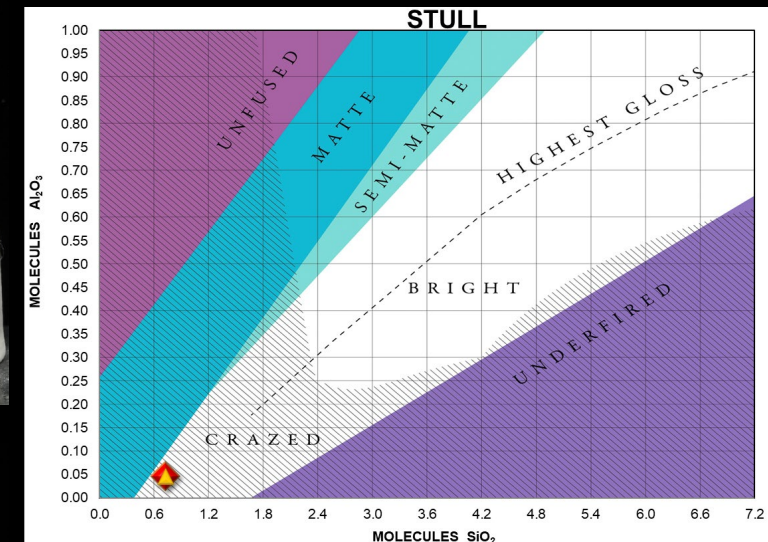
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 15.63 : 1		Alkali Metals 0.69		Alkaline Earths 0.31	
SiO ₂ 0.73	Collective "Al ₂ O ₃ " 0.05	Na ₂ O	K ₂ O 0.00	MgO 0.00	CaO 0.00
B ₂ O ₃	Al ₂ O ₃ 0.05	Li ₂ O 0.69	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.31	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 15.63 : 1		Alkali Metals 0.69		Alkaline Earths 0.31	
SiO ₂ 0.73	Collective "Al ₂ O ₃ " 0.05	Na ₂ O	K ₂ O 0.00	MgO 0.00	CaO 0.00
B ₂ O ₃	Al ₂ O ₃ 0.05	Li ₂ O 0.69	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.31	FeO 0.00
Cr ₂ O ₃ 0.01	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



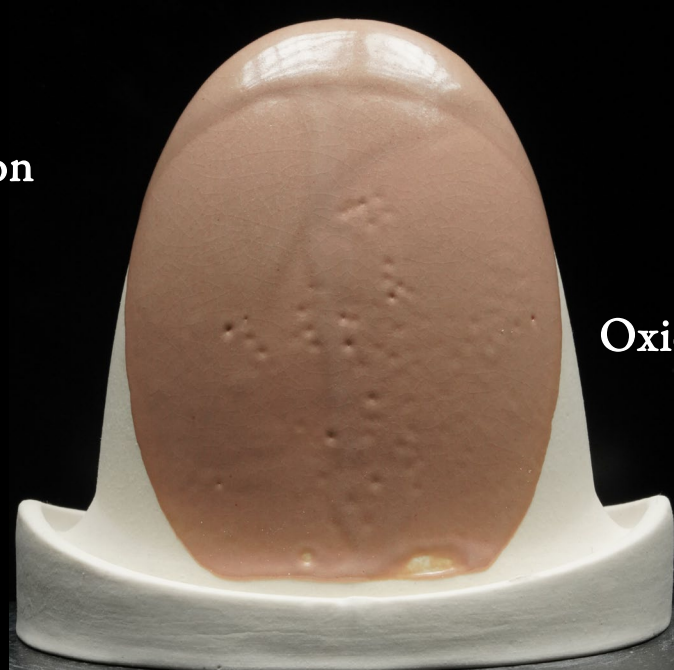
Ceramic
Materials
Workshop

Zinc Pinc

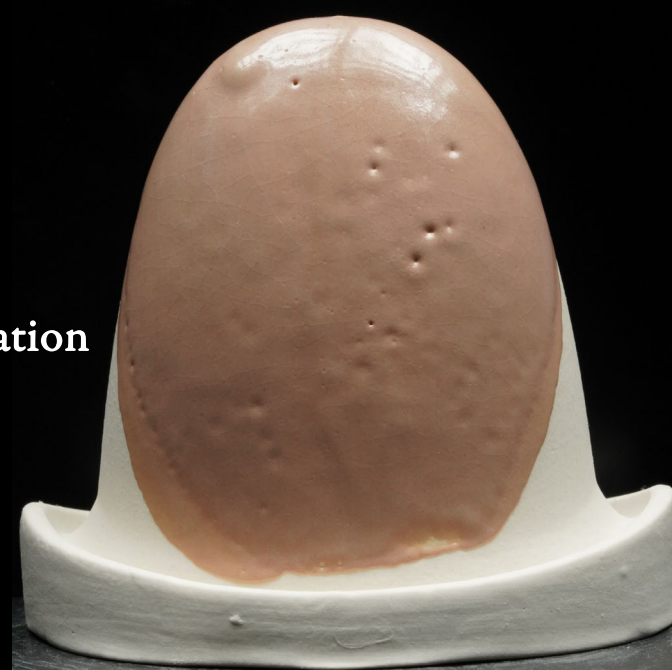
Weight Substitution
Talc

030823-16

Neph Sy	40.00
Talc	20.00
EPK	10.00
Flint	30.00
Chrome Oxide	1.00
Water	80



1-3 Second Dip



2-3 Second Dips



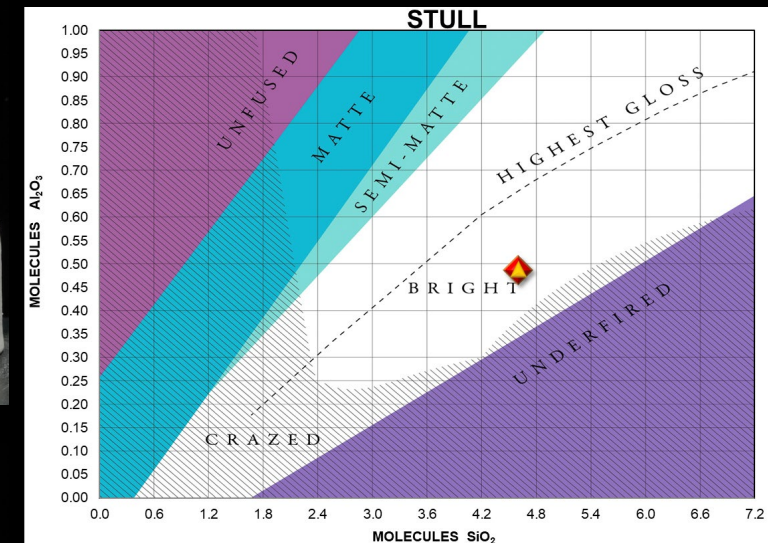
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.39 : 1		Alkali Metals 0.34		Alkaline Earths 0.66	
SiO ₂ 4.60	Collective "Al ₂ O ₃ " 0.49	Na ₂ O 0.26	K ₂ O 0.08	MgO 0.58	CaO 0.06
B ₂ O ₃	Al ₂ O ₃ 0.49	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.02
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 9.39 : 1		Alkali Metals 0.34		Alkaline Earths 0.66	
SiO ₂ 4.60	Collective "Al ₂ O ₃ " 0.49	Na ₂ O 0.26	K ₂ O 0.08	MgO 0.58	CaO 0.06
B ₂ O ₃	Al ₂ O ₃ 0.49	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.02
Cr ₂ O ₃ 0.03	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

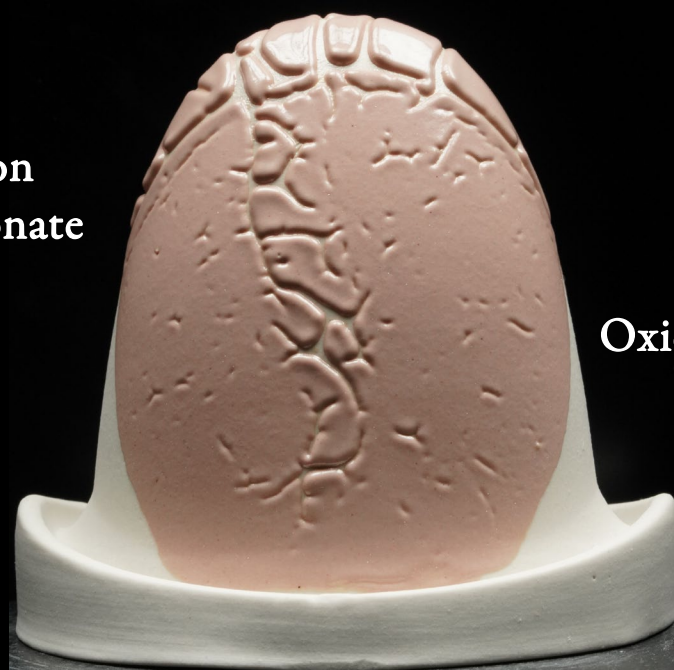


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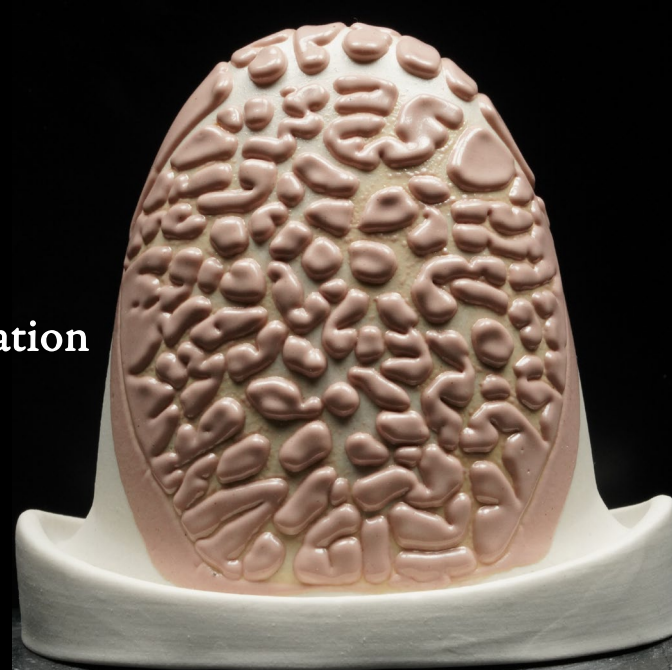
Zinc Pinc

Weight Substitution
Magnesium Carbonate
030823-17

Neph Sy	40.00
Mag Carbonate	20.00
EPK	10.00
Flint	30.00
Chrome Oxide	1.00
Water	140



1-3 Second Dip



2-3 Second Dips



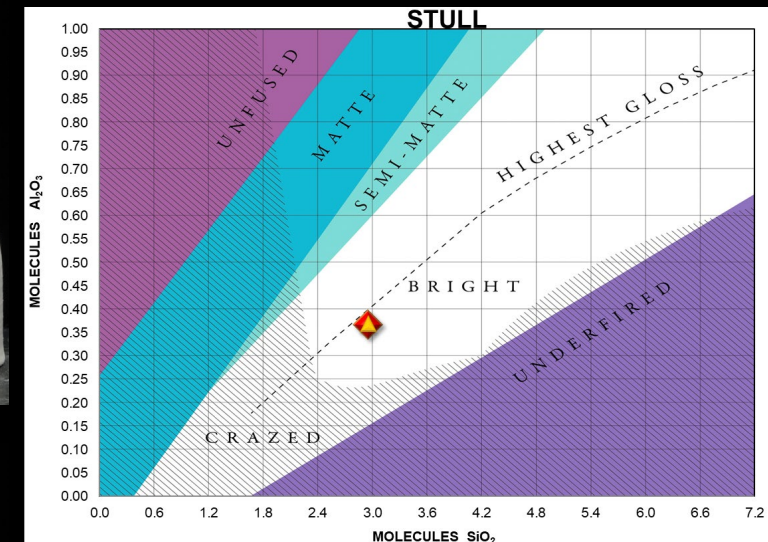
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 7.98 : 1		Alkali Metals 0.26		Alkaline Earths 0.74	
SiO ₂ 2.95	Collective "Al ₂ O ₃ " 0.37	Na ₂ O 0.20	K ₂ O 0.06	MgO 0.73	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.37	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 7.98 : 1		Alkali Metals 0.26		Alkaline Earths 0.74	
SiO ₂ 2.95	Collective "Al ₂ O ₃ " 0.37	Na ₂ O 0.20	K ₂ O 0.06	MgO 0.73	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.37	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃ 0.02	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

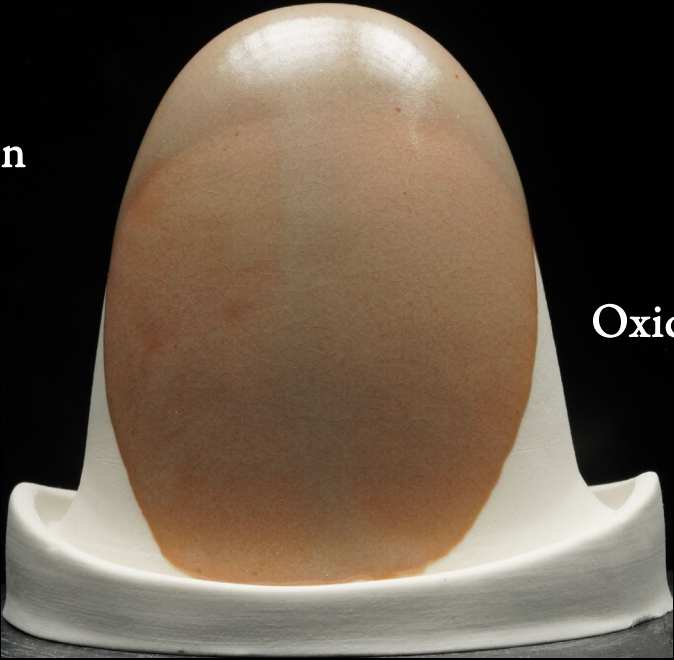


Ceramic
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Zinc Pinc

Weight Substitution
Dolomite
030823-18

Neph Sy	40.00
Dolomite	20.00
EPK	10.00
Flint	30.00
Chrome Oxide	1.00
Water	80



1-3 Second Dip



2-3 Second Dips



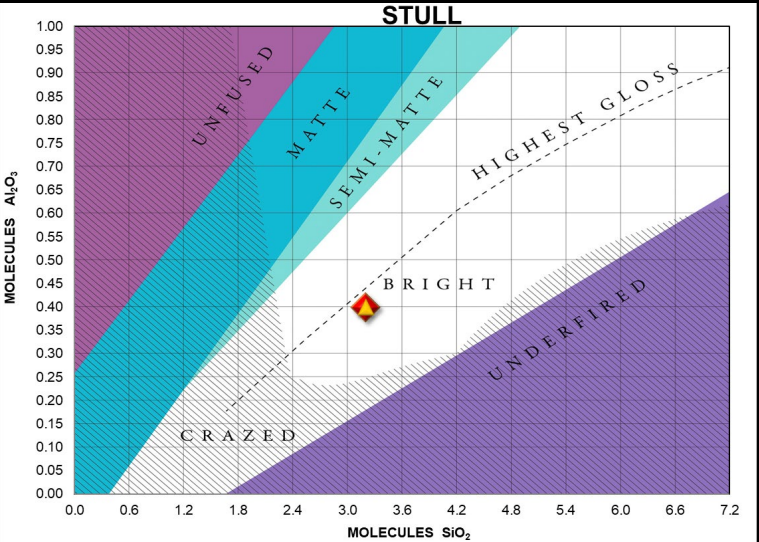
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.00 : 1		Alkali Metals 0.28		Alkaline Earths 0.72	
SiO ₂ 3.20	Collective "Al ₂ O ₃ " 0.40	Na ₂ O 0.22	K ₂ O 0.06	MgO 0.35	CaO 0.36
B ₂ O ₃	Al ₂ O ₃ 0.40	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 8.00 : 1		Alkali Metals 0.28		Alkaline Earths 0.72	
SiO ₂ 3.20	Collective "Al ₂ O ₃ " 0.40	Na ₂ O 0.22	K ₂ O 0.06	MgO 0.35	CaO 0.36
B ₂ O ₃	Al ₂ O ₃ 0.40	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃ 0.02	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

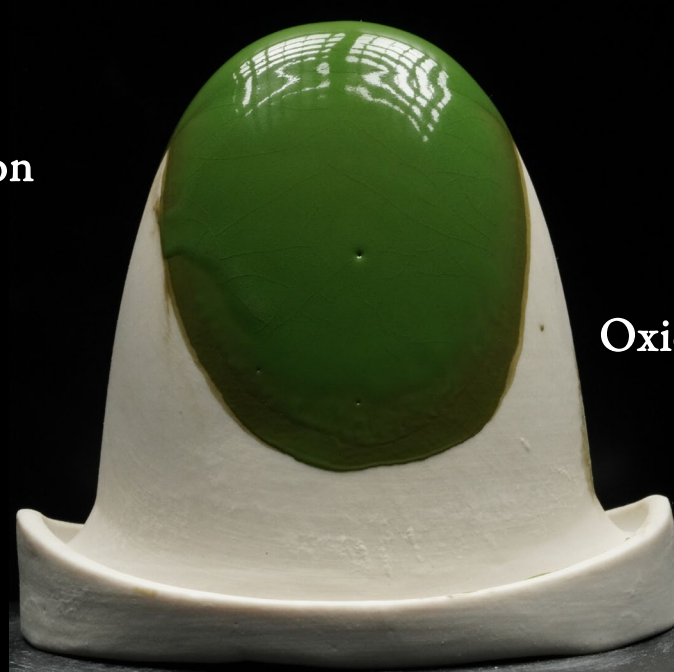


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Zinc Pinc

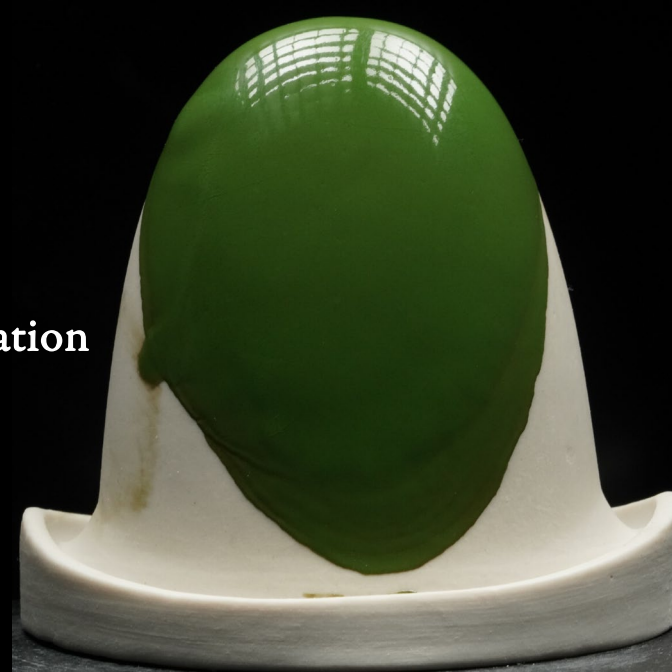
Weight Substitution
Wollastonite
030823-19

Neph Sy	40.00
Wollastonite	20.00
EPK	10.00
Flint	30.00
Chrome Oxide	1.00
Water	60



Oxidation

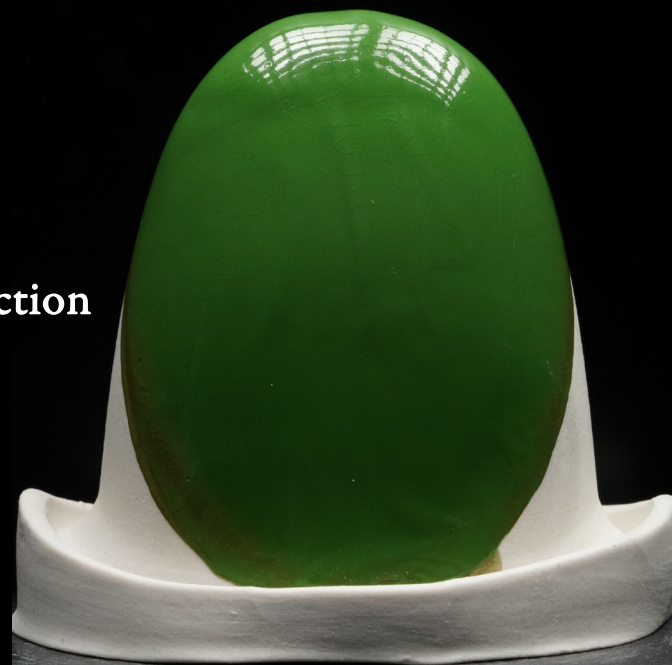
1-3 Second Dip



2-3 Second Dips

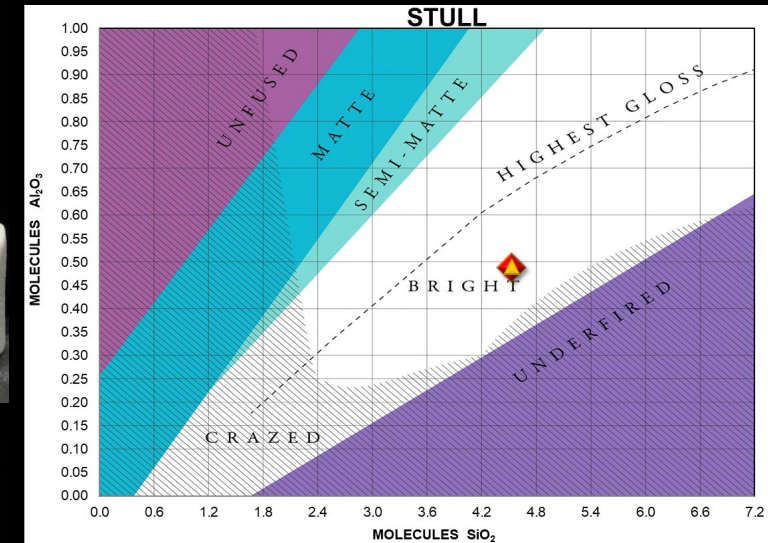


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.23 : 1		Alkali Metals 0.34		Alkaline Earths 0.66	
SiO ₂ 4.53	Collective "Al ₂ O ₃ " 0.49	Na ₂ O 0.26	K ₂ O 0.08	MgO 0.02	CaO 0.62
B ₂ O ₃	Al ₂ O ₃ 0.49	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.02
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 9.23 : 1		Alkali Metals 0.34		Alkaline Earths 0.66	
SiO ₂ 4.53	Collective "Al ₂ O ₃ " 0.49	Na ₂ O 0.26	K ₂ O 0.08	MgO 0.02	CaO 0.62
B ₂ O ₃	Al ₂ O ₃ 0.49	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.02
Cr ₂ O ₃ 0.03	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



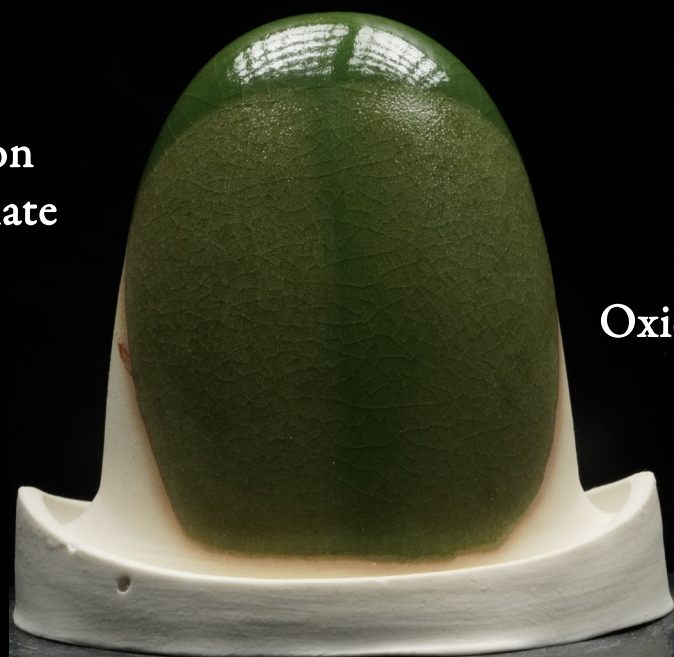
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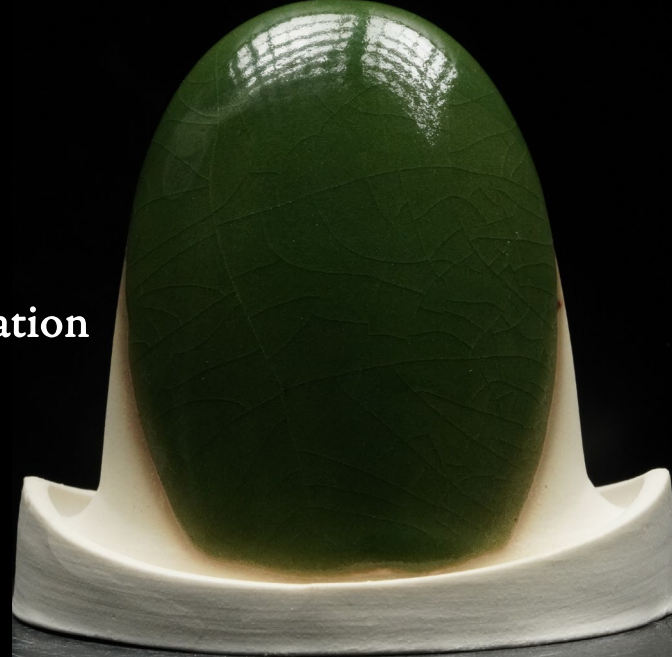
Zinc Pinc

Weight Substitution
Strontium Carbonate
030823-20

Neph Sy	40.00
Strontium Carb	20.00
EPK	10.00
Flint	30.00
Chrome Oxide	1.00
Water	60



1-3 Second Dip



2-3 Second Dips



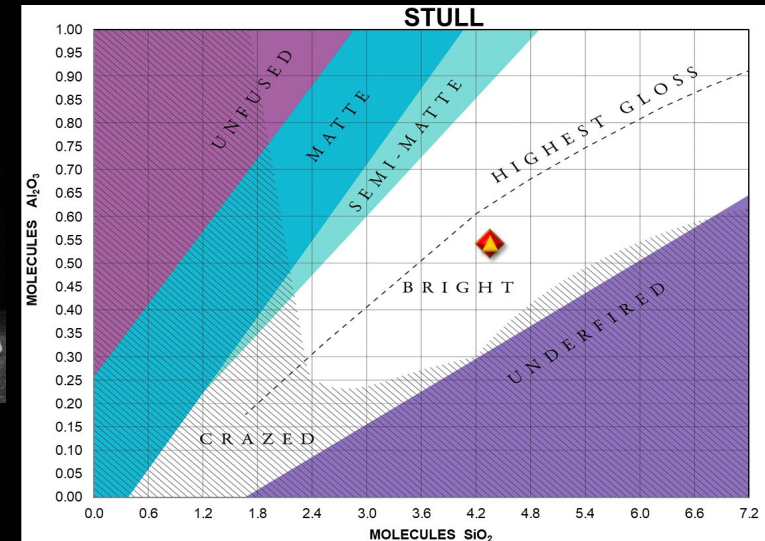
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.00 : 1		Alkali Metals 0.38		Alkaline Earths 0.62	
SiO ₂ 4.35	Collective "Al ₂ O ₃ " 0.54	Na ₂ O 0.29	K ₂ O 0.08	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.54	Li ₂ O	CuO	SrO 0.60	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 8.00 : 1		Alkali Metals 0.38		Alkaline Earths 0.62	
SiO ₂ 4.35	Collective "Al ₂ O ₃ " 0.54	Na ₂ O 0.29	K ₂ O 0.08	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.54	Li ₂ O	CuO	SrO 0.60	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃ 0.03	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

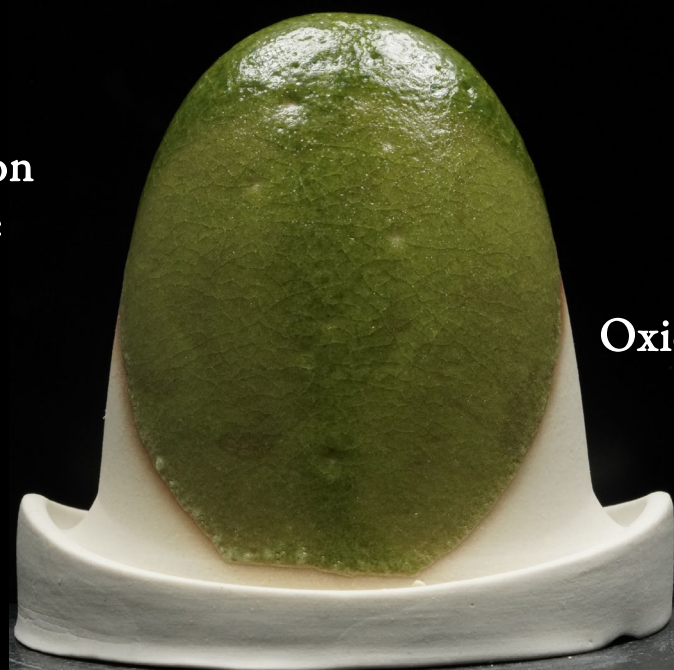


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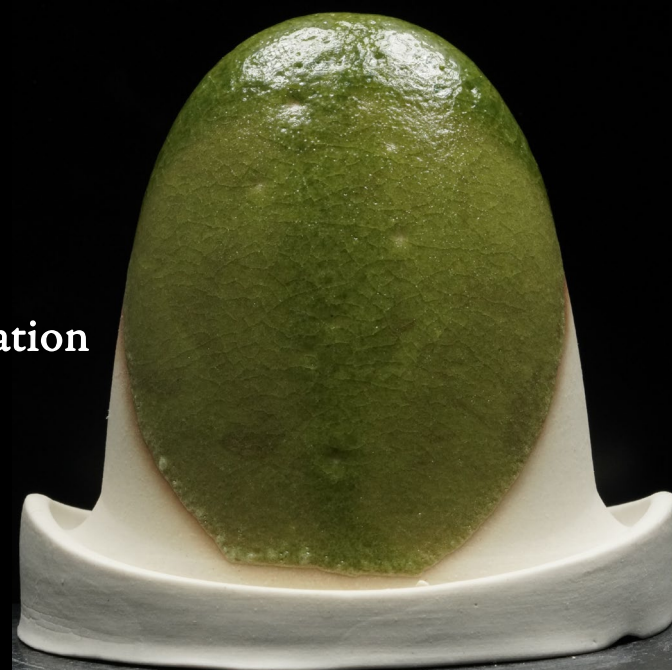
Zinc Pinc

Weight Substitution
Barium Carbonate
030823-21

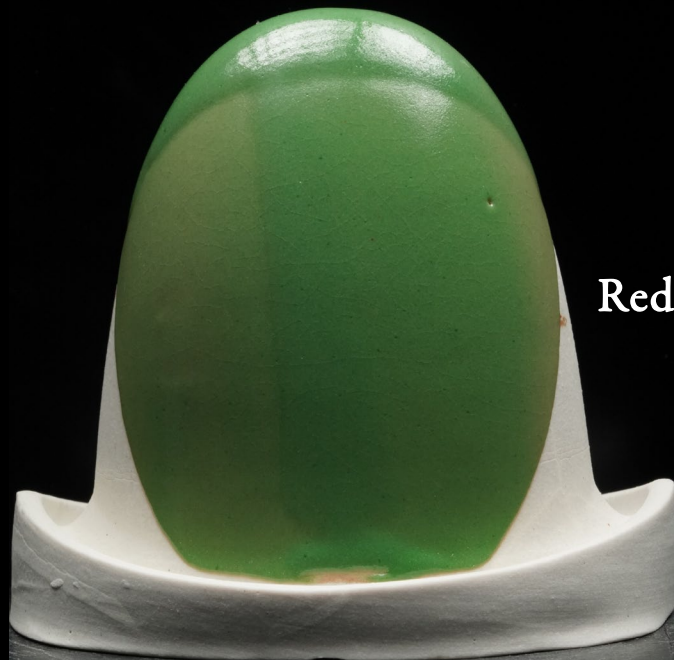
Neph Sy	40.00
Barium Carb	20.00
EPK	10.00
Flint	30.00
Chrome Oxide	1.00
Water	60



1-3 Second Dip



2-3 Second Dips



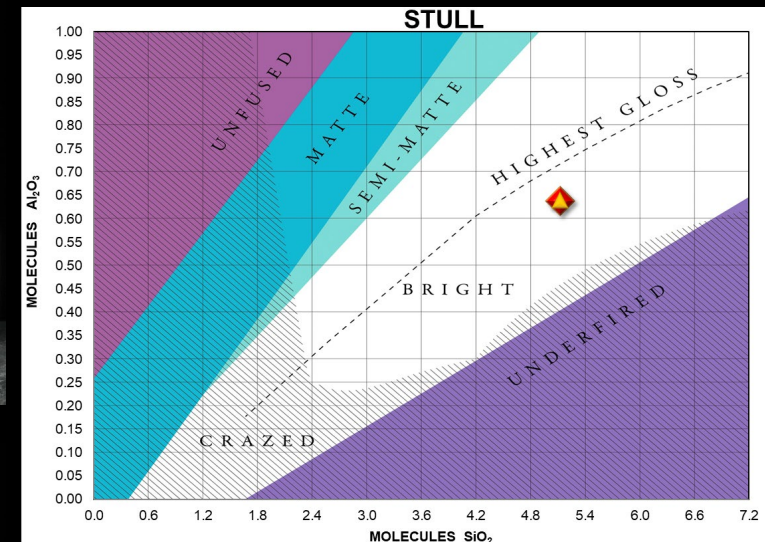
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.00 : 1		Alkali Metals 0.44		Alkaline Earths 0.56	
SiO ₂ 5.13	Collective "Al ₂ O ₃ " 0.64	Na ₂ O 0.35	K ₂ O 0.10	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.64	Li ₂ O	CuO	SrO	BaO 0.53
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 8.00 : 1		Alkali Metals 0.44		Alkaline Earths 0.56	
SiO ₂ 5.13	Collective "Al ₂ O ₃ " 0.64	Na ₂ O 0.35	K ₂ O 0.10	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.64	Li ₂ O	CuO	SrO	BaO 0.53
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃ 0.03	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



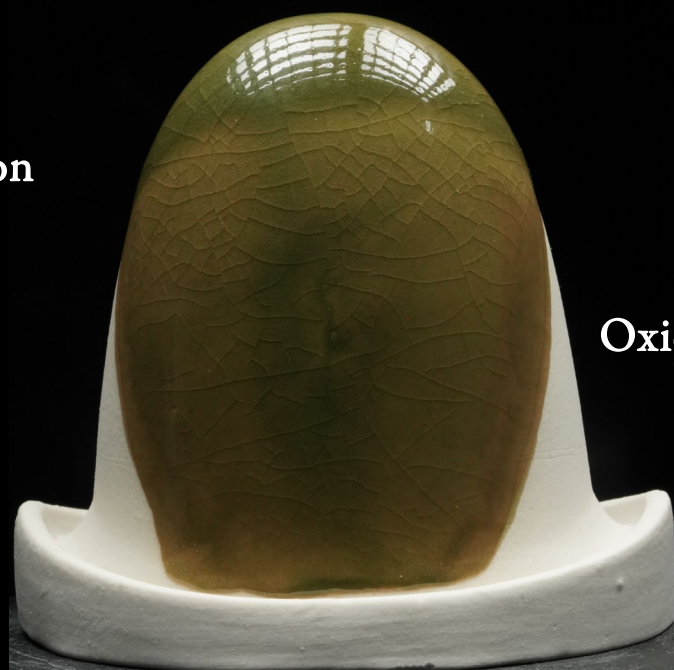
Ceramic
Materials
Workshop

Zinc Pinc

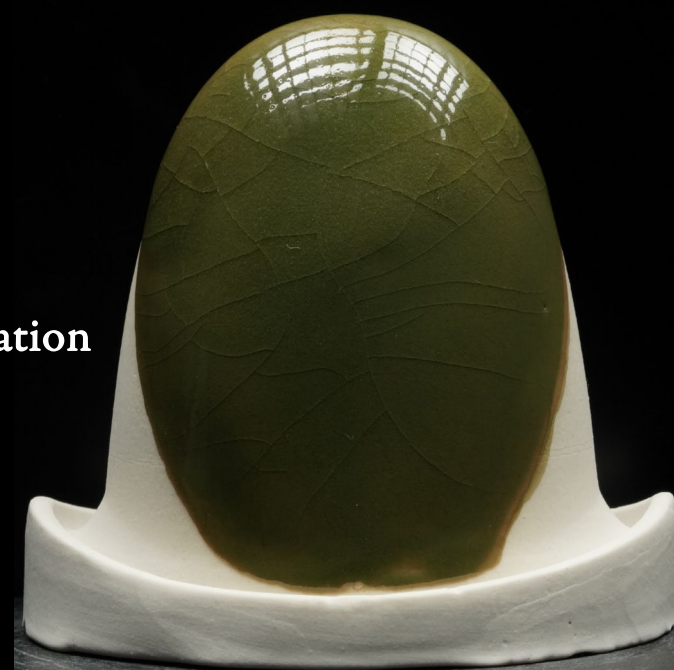
Weight Substitution
Whiting

030823-22

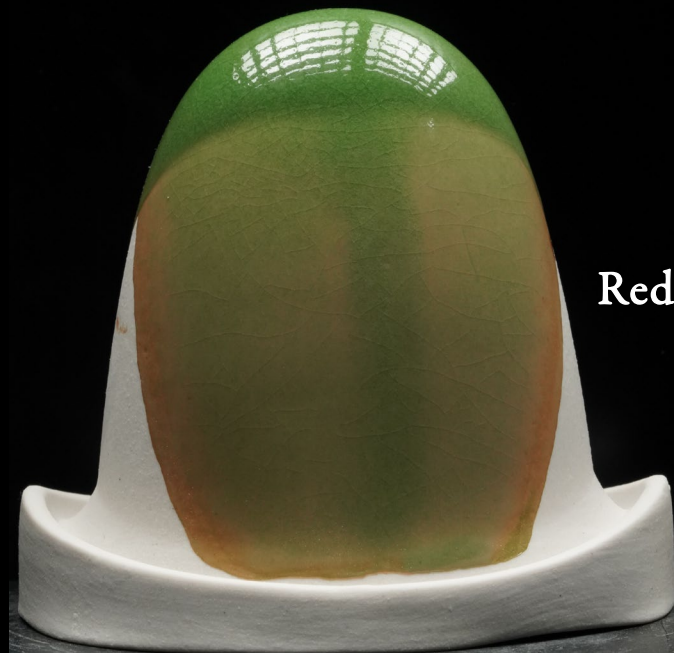
Neph Sy	40.00
Whiting	20.00
EPK	10.00
Flint	30.00
Chrome Oxide	1.00
Water	60



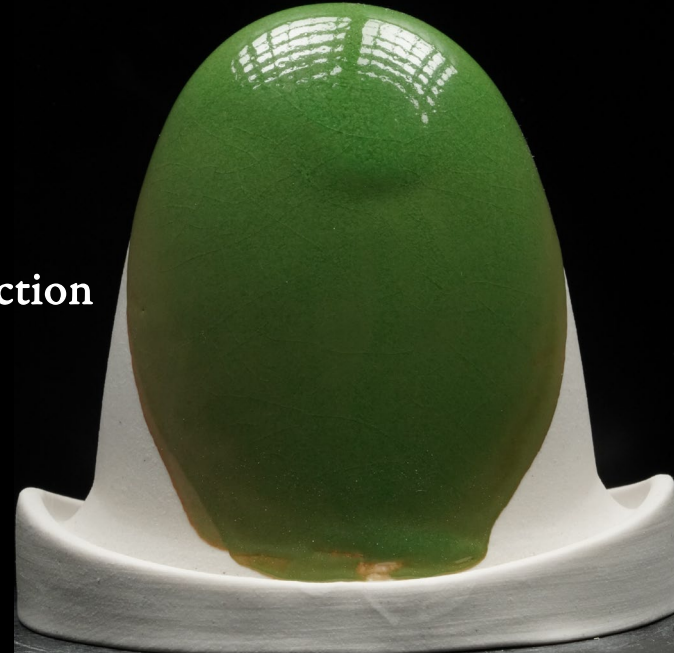
1-3 Second Dip



2-3 Second Dips



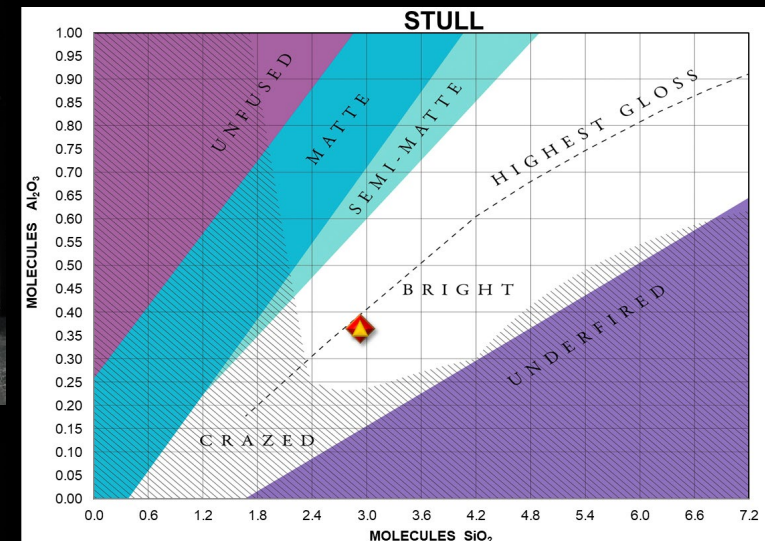
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.00 :1		Alkali Metals 0.25		Alkaline Earths 0.75	
SiO ₂ 2.93	Collective "Al ₂ O ₃ " 0.37	Na ₂ O 0.20	K ₂ O 0.06	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.36	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.73	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 8.00 :1		Alkali Metals 0.25		Alkaline Earths 0.75	
SiO ₂ 2.93	Collective "Al ₂ O ₃ " 0.37	Na ₂ O 0.20	K ₂ O 0.06	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.36	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.73	FeO 0.01
Cr ₂ O ₃ 0.02	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

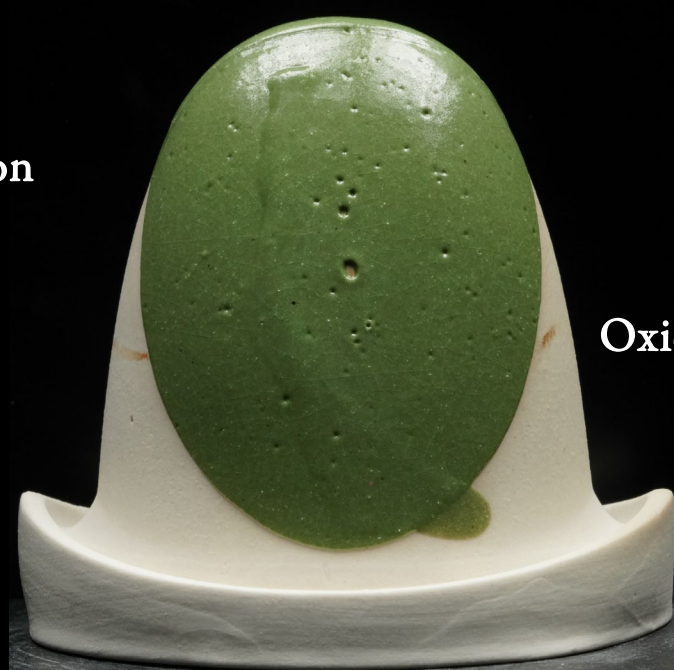


Ceramic
Materials
Workshop

Zinc Pinc

Weight Substitution
Bone Ash
030823-23

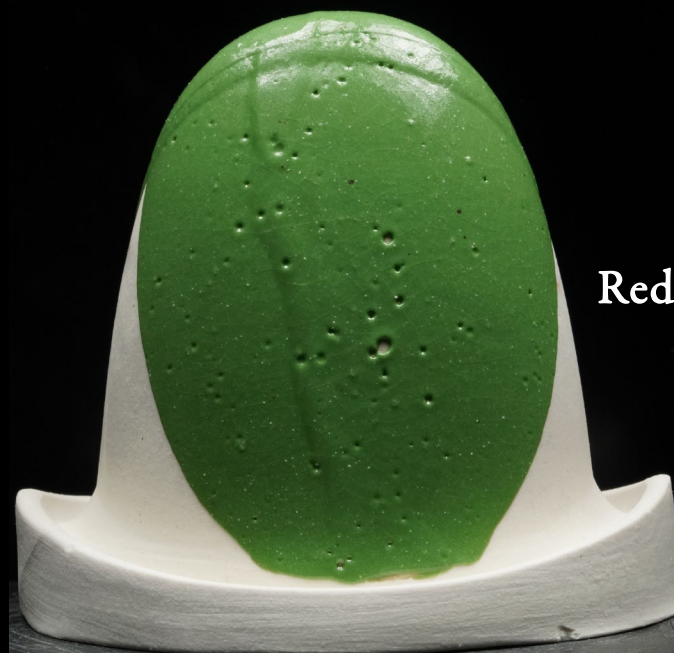
Neph Sy	40.00
Bone Ash	20.00
EPK	10.00
Flint	30.00
Chrome Oxide	1.00
Water	60



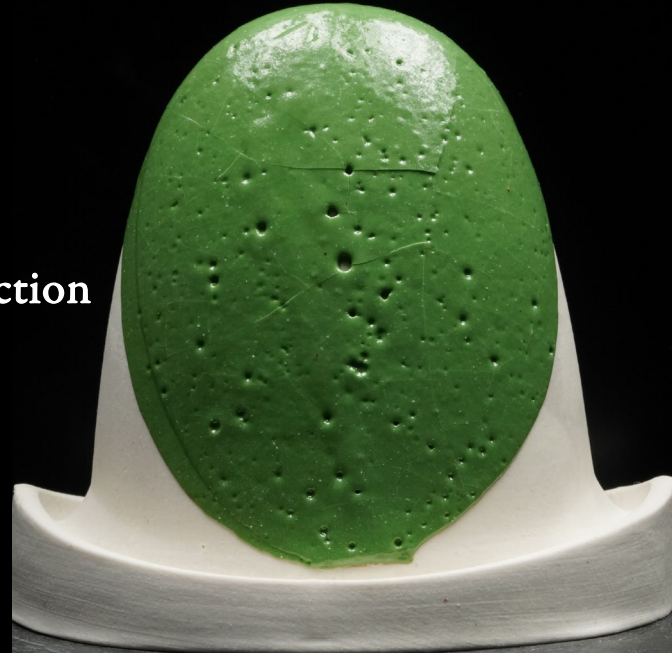
1-3 Second Dip



2-3 Second Dips



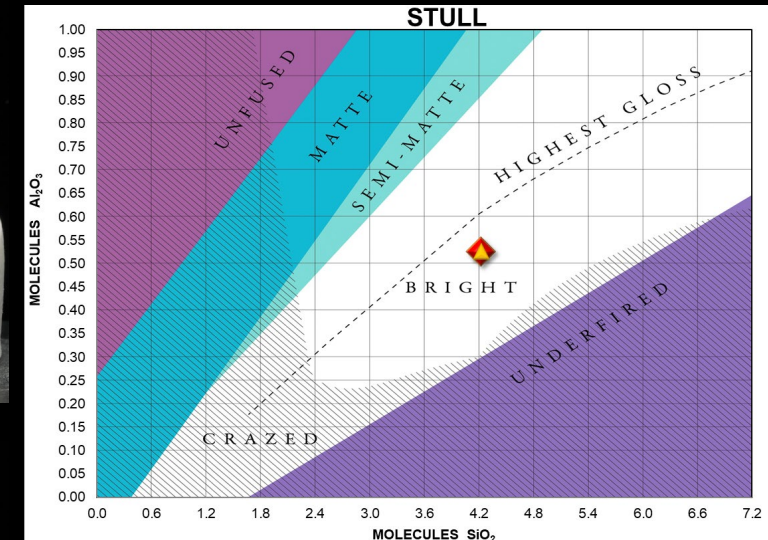
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.00 : 1		Alkali Metals 0.37		Alkaline Earths 0.63	
SiO ₂ 4.22	Collective "Al ₂ O ₃ " 0.53	Na ₂ O 0.28	K ₂ O 0.08	MgO 0.00	CaO 0.62
B ₂ O ₃	Al ₂ O ₃ 0.52	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅ 0.34		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 8.00 : 1		Alkali Metals 0.37		Alkaline Earths 0.63	
SiO ₂ 4.22	Collective "Al ₂ O ₃ " 0.53	Na ₂ O 0.28	K ₂ O 0.08	MgO 0.00	CaO 0.62
B ₂ O ₃	Al ₂ O ₃ 0.52	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃ 0.03	ZrO ₂	P ₂ O ₅ 0.34		MnO ₂	CoO



Ceramic
Materials
Workshop