

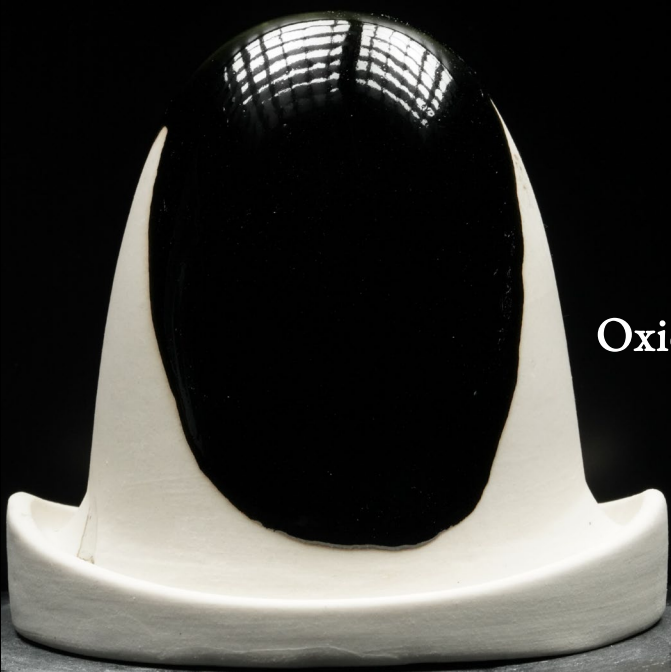
Absence- Δ 10

Lab 4-Back to the Flux Capacity

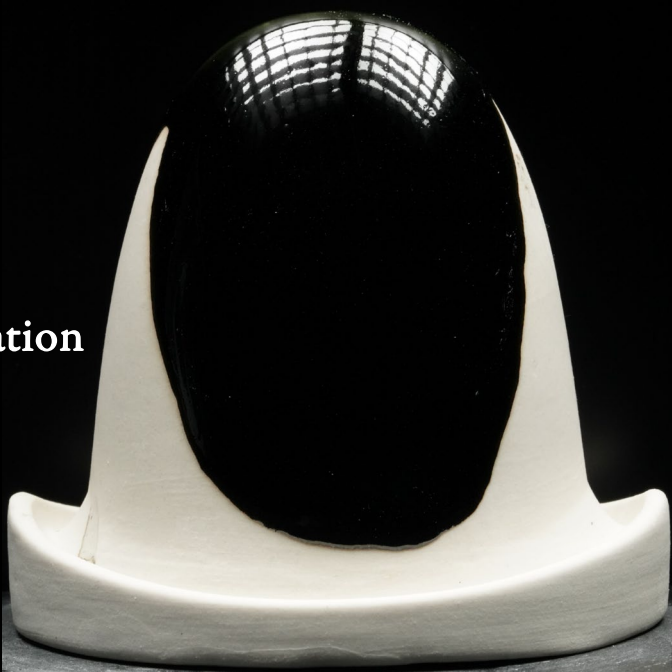
Absence

Original
062422-1

G200 EU	59.37
Whiting	18.04
EPK	3.55
Flint	19.05
Red Iron Oxide	7.68
Cobalt Carbonate	1.97
Water	60



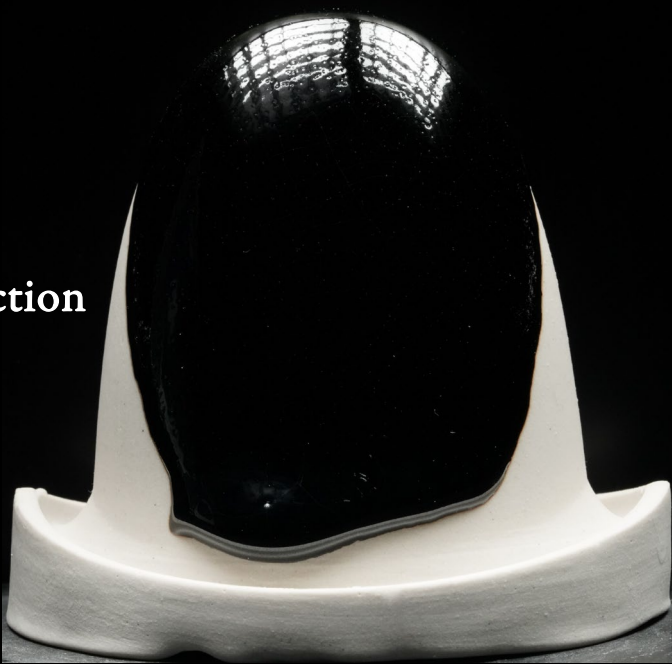
1-3 Second Dip



2-3 Second Dips

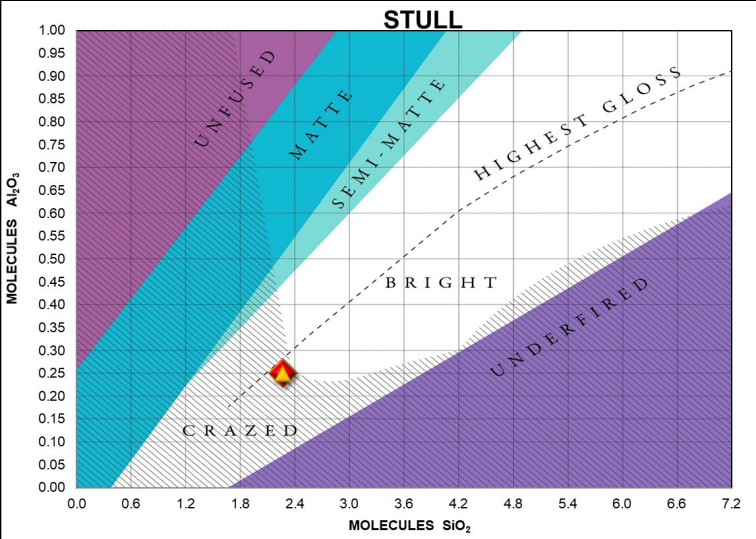


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.06 : 1		Alkali Metals 0.32		Alkaline Earths 0.68	
SiO ₂ 3.66	Collective "Al ₂ O ₃ " 0.40	Na ₂ O 0.07	K ₂ O 0.25	MgO 0.00	CaO 0.67
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 9.06 : 1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 2.27	Collective "Al ₂ O ₃ " 0.25	Na ₂ O 0.04	K ₂ O 0.15	MgO 0.00	CaO 0.41
B ₂ O ₃	Al ₂ O ₃ 0.25	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.35
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04

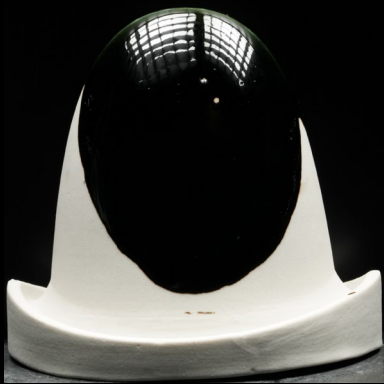


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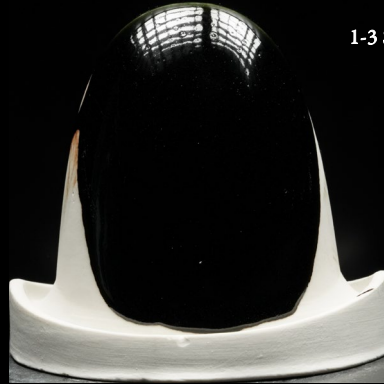
Lab 4-Alkali Metals-Oxidation



062422-1



062422-35



062422-36



062422-37

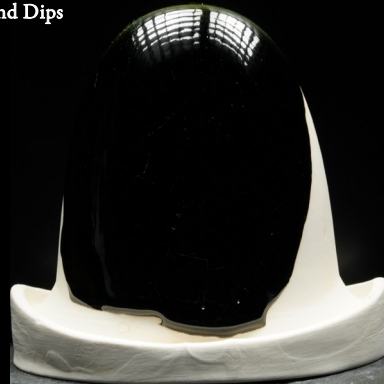


062422-X1



062422-38

1-3 Second Dip



2-3 Second Dips

Original (G200)

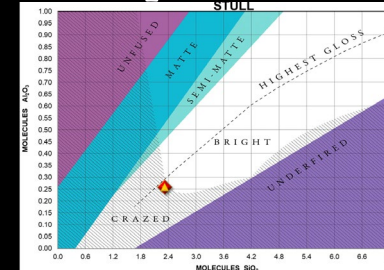
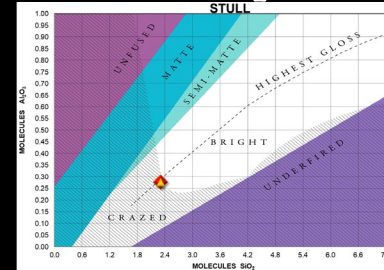
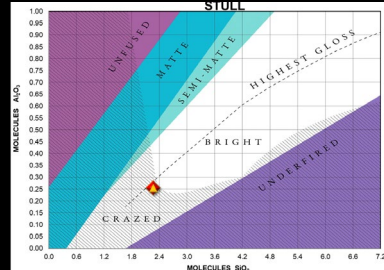
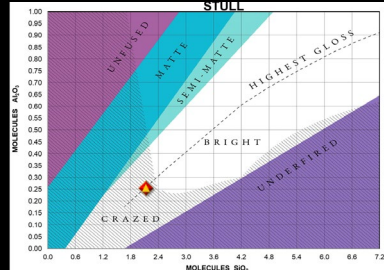
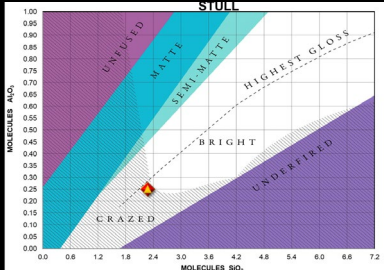
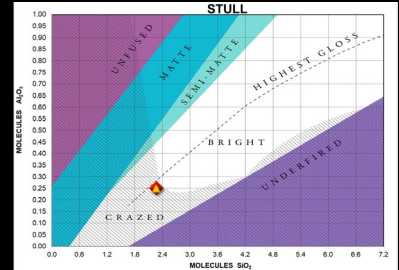
w/Mahavir

w/Custer

w/G200EU

w/Minspar

w/Spodumene

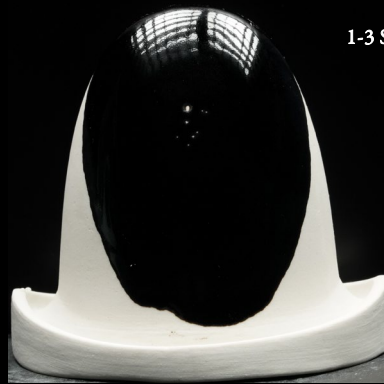


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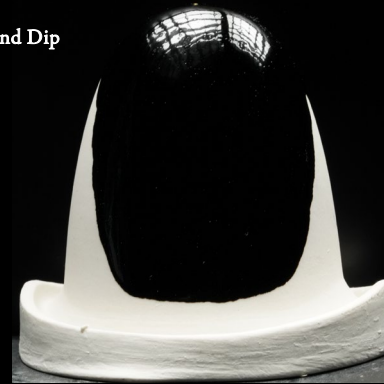
Lab 4-Alkali Metals-Oxidation



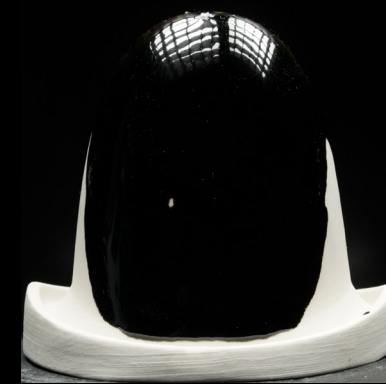
062422-1



062422-40



062422-41



062422-42

1-3 Second Dip

2-3 Second Dips



Original (G200)



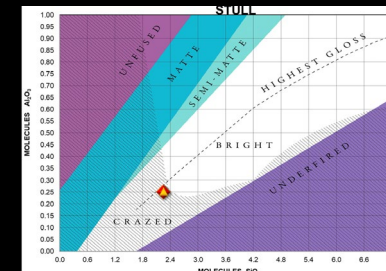
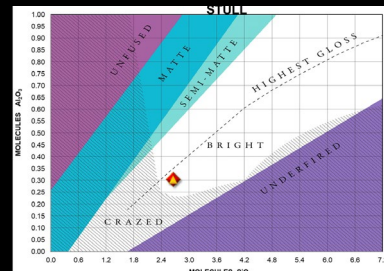
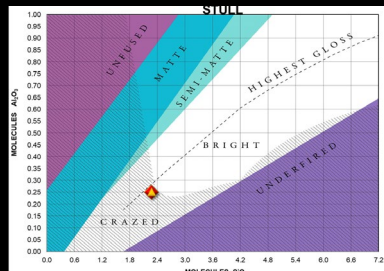
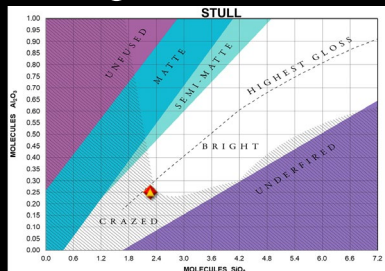
w/Frit 3110



w/Cornwall



w/Lithium Carbonate



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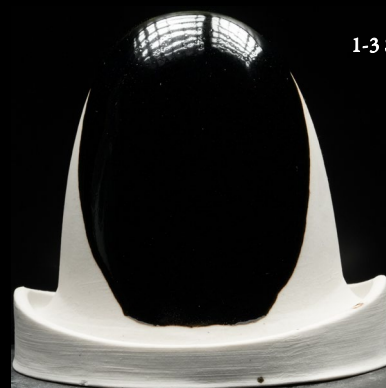
Lab 4-Alkali Metals-Reduction



062422-1



062422-35



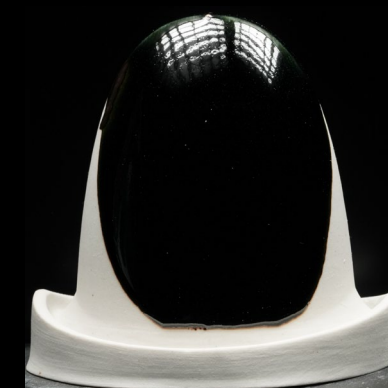
062422-36



062422-37



062422-X1



062422-38

1-3 Second Dip

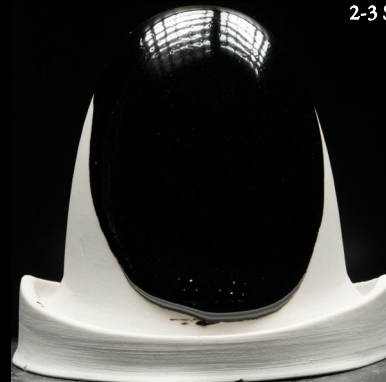
2-3 Second Dips



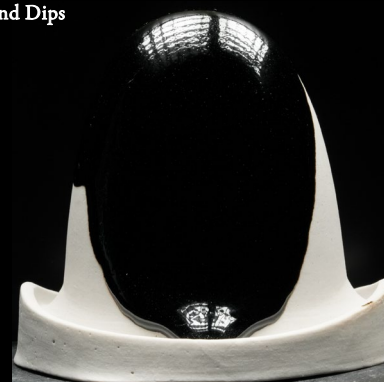
Original (G200)



w/Mahavir



w/Custer



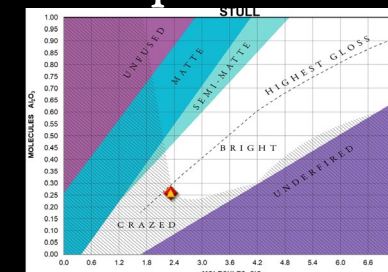
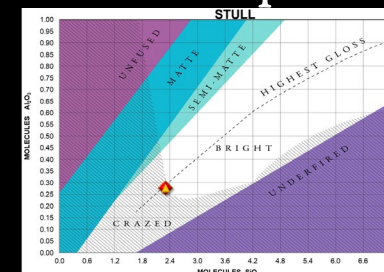
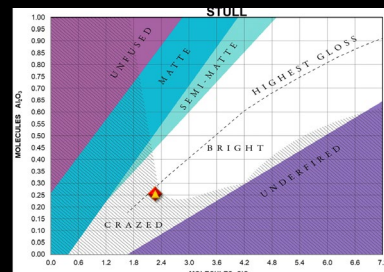
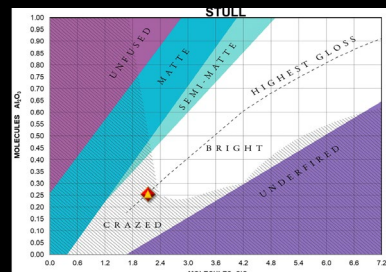
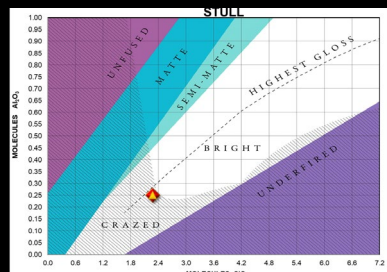
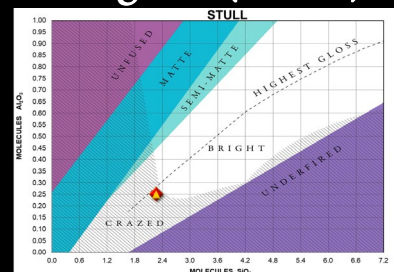
w/G200EU



w/Minspar



w/Spodumene



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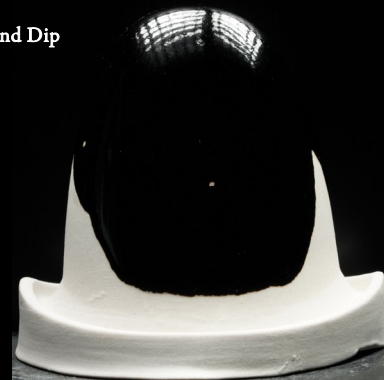
Lab 4-Alkali Metals-Reduction



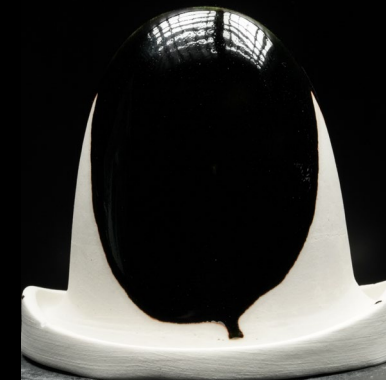
062422-1



062422-40



062422-41



062422-42

1-3 Second Dip

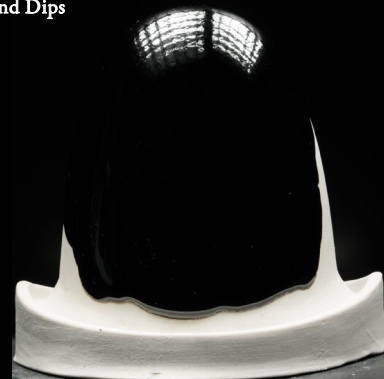
2-3 Second Dips



Original (G200)



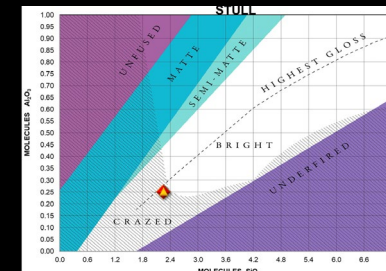
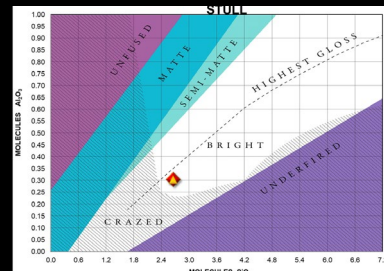
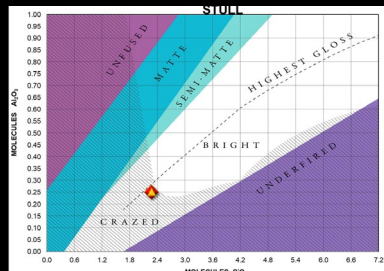
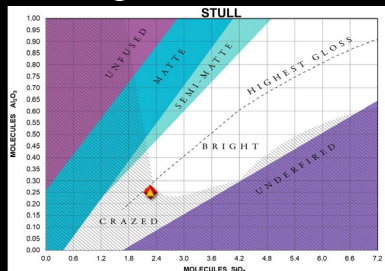
w/Frit 3110



w/Cornwall



w/Lithium Carbonate



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Lab 4-Alkaline Earth-Oxidation



062422-1



062422-43



062422-44

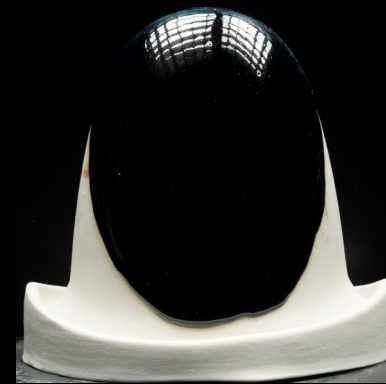
1-3 Second Dip



062422-45



062422-46



062422-47



Original (W)



w/Talc



w/Mag Carb

2-3 Second Dips



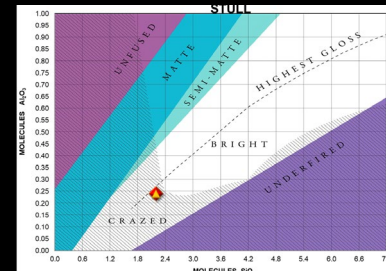
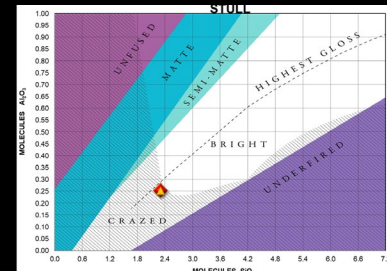
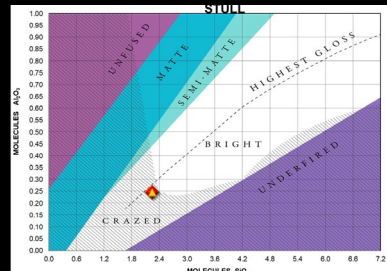
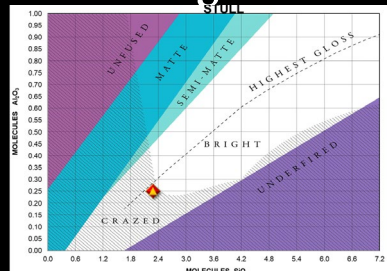
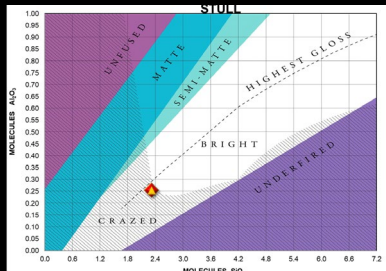
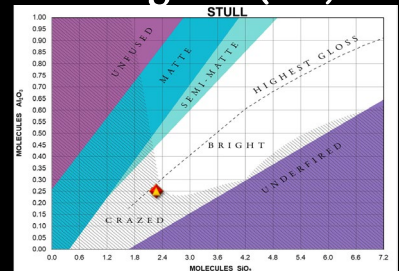
w/Dolomite



w/Wollastonite



w/Strontium Carb

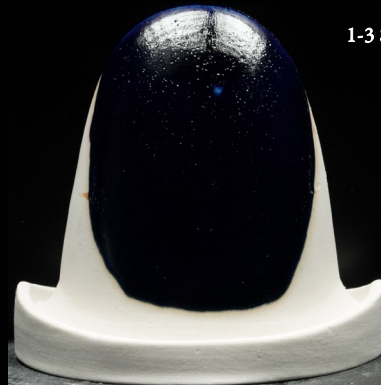


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Lab 4-Alkaline Earth-Oxidation



062422-1



062422-48



062422-49



062422-50

1-3 Second Dip

2-3 Second Dips



Original (W)



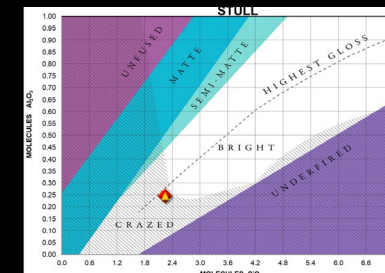
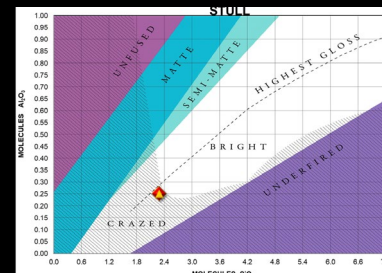
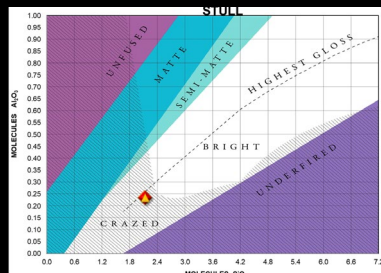
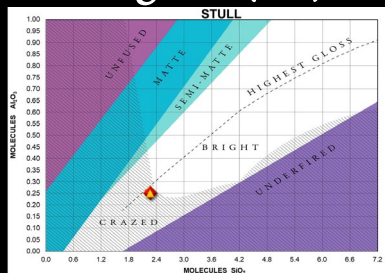
w/Barium Carb



w/Zinc Oxide



w/Bone Ash



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Lab 4-Alkaline Earth-Reduction



062422-1



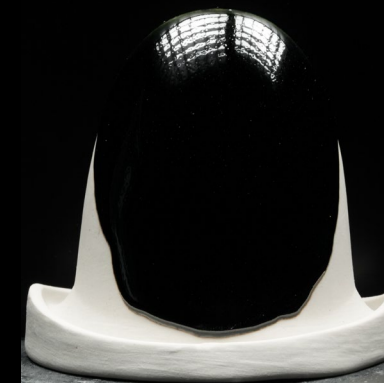
062422-43



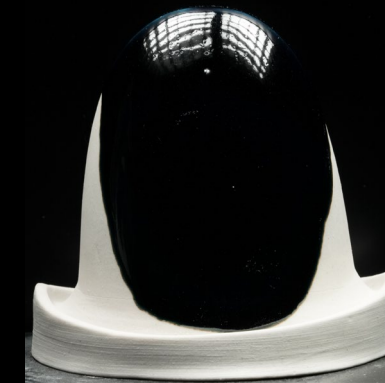
062422-44



062422-45



062422-46



062422-47



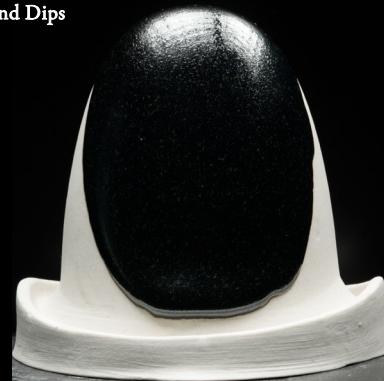
Original (W)



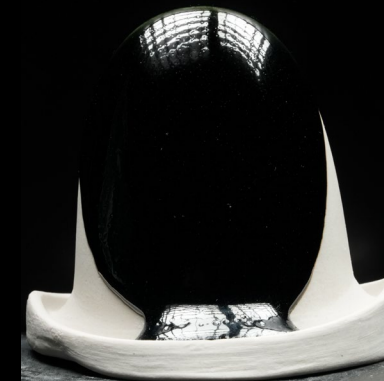
w/Talc



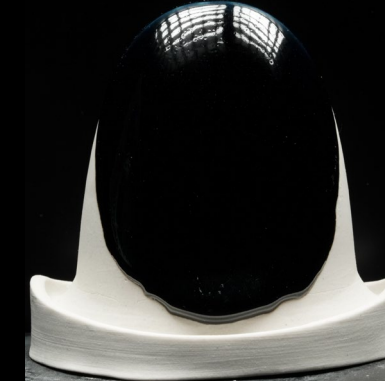
w/Mag Carb



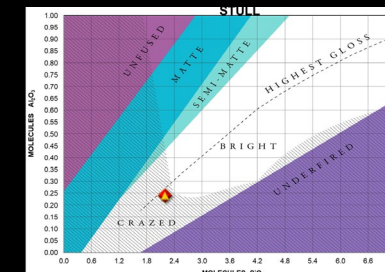
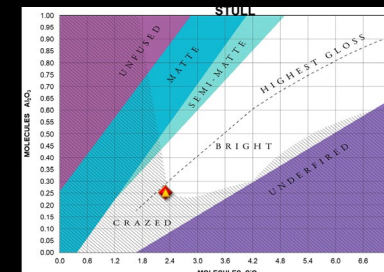
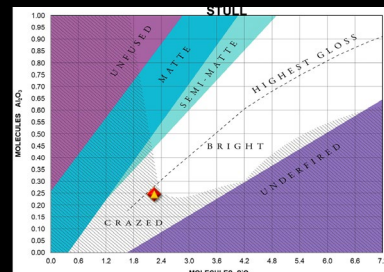
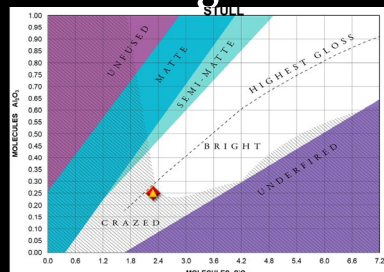
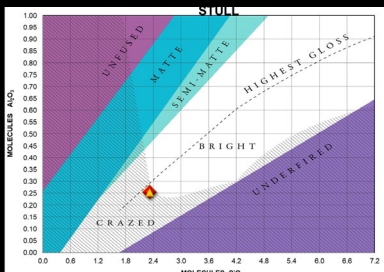
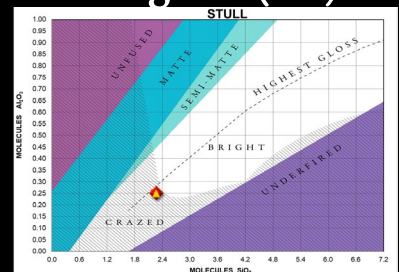
w/Dolomite



w/Wollastonite



w/Strontium Carb



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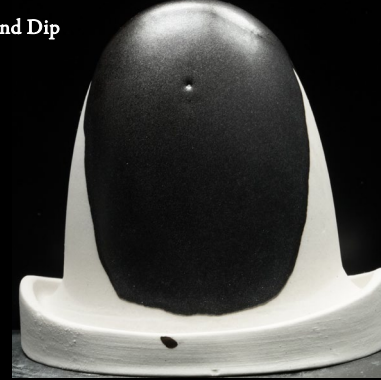
Lab 4-Alkaline Earth-Reduction



062422-1



062422-48



062422-49



062422-50

1-3 Second Dip

2-3 Second Dips



Original (W)



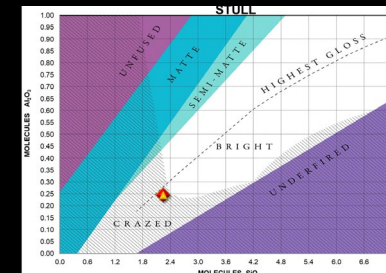
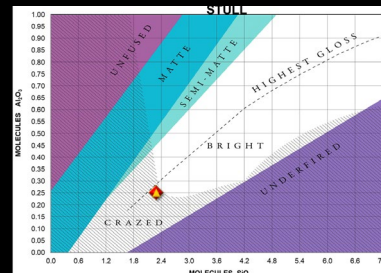
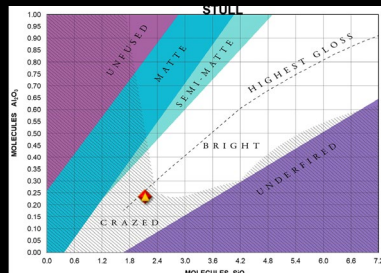
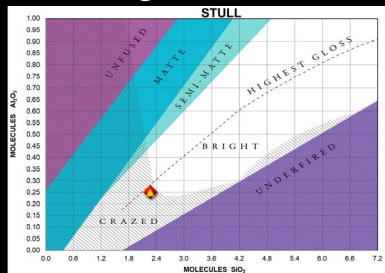
w/Barium Carb



w/Zinc Oxide



w/Bone Ash



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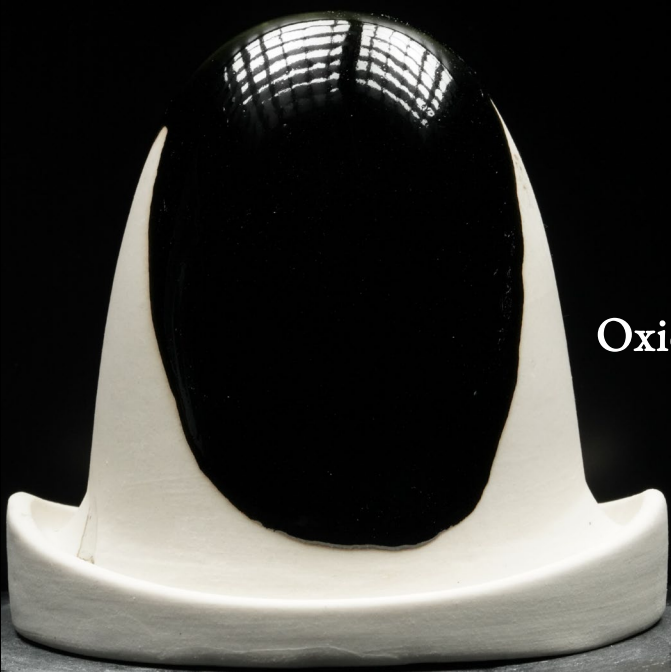
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Absence

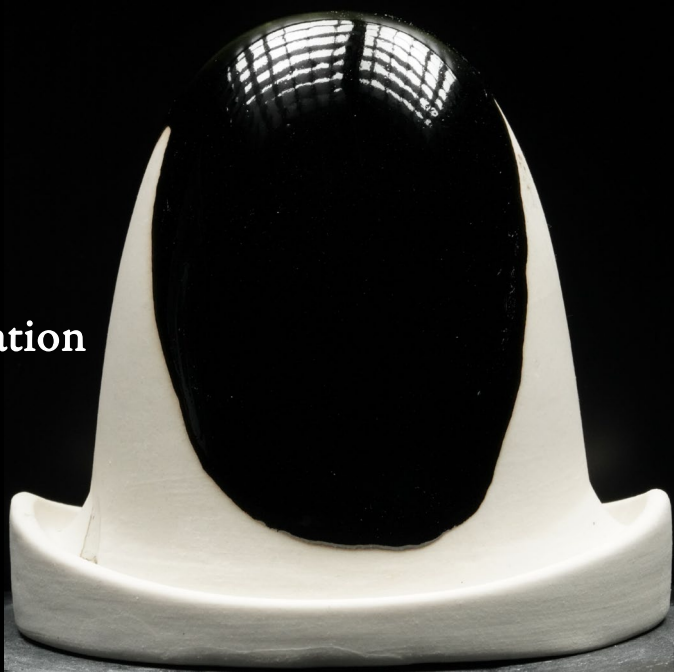
Original

062422-1

G200 EU	59.37
Whiting	18.04
EPK	3.55
Flint	19.05
Red Iron Oxide	7.68
Cobalt Carbonate	1.97
Water	60



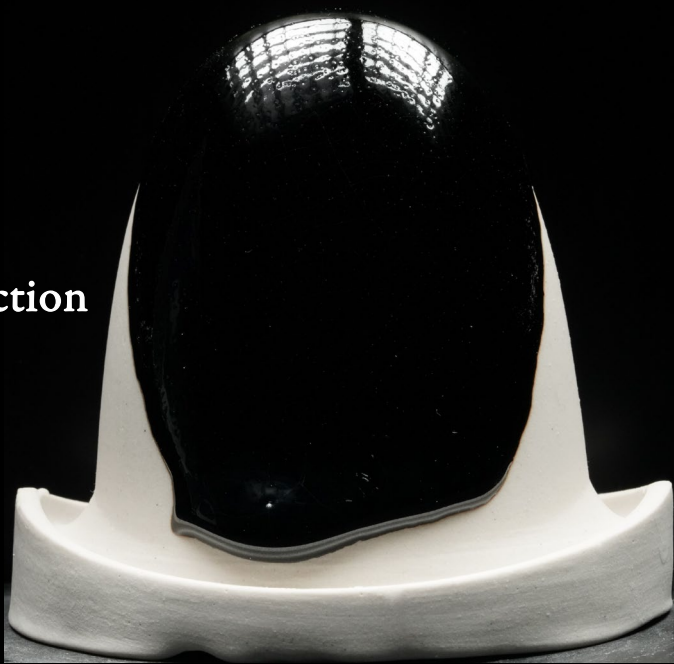
1-3 Second Dip



2-3 Second Dips

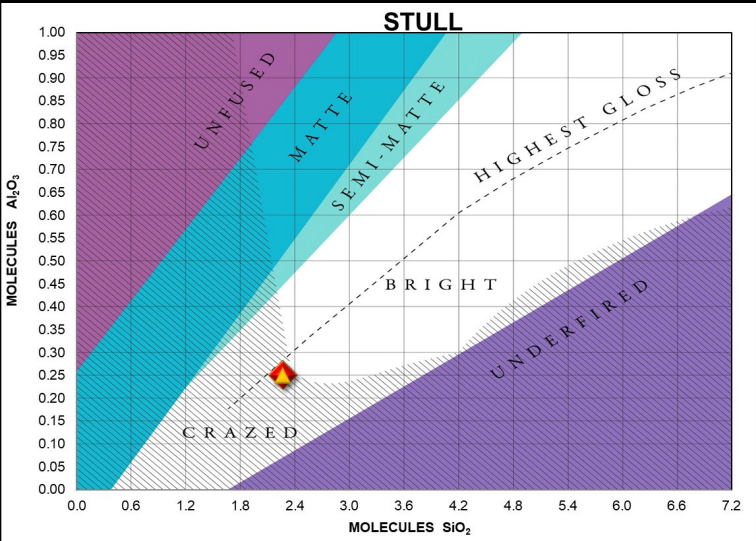


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.06 : 1		Alkali Metals 0.32		Alkaline Earths 0.68	
SiO ₂ 3.66	Collective "Al ₂ O ₃ " 0.40	Na ₂ O 0.07	K ₂ O 0.25	MgO 0.00	CaO 0.67
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 9.06 : 1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 2.27	Collective "Al ₂ O ₃ " 0.25	Na ₂ O 0.04	K ₂ O 0.15	MgO 0.00	CaO 0.41
B ₂ O ₃	Al ₂ O ₃ 0.25	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.35
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04

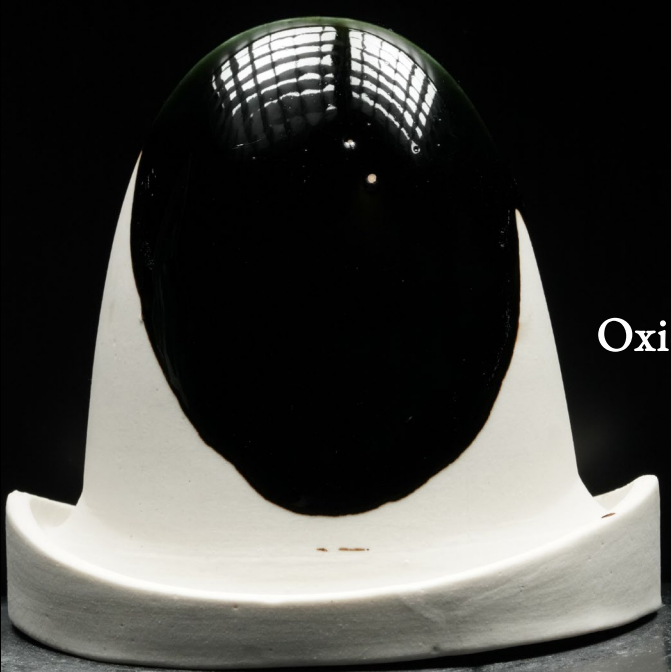


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Absence

Chemical Match
Nepheline Syenite
062422-35

Neph Sy	43.05
Whiting	18.54
EPK	5.30
Flint	33.11
Red Iron Oxide	7.67
Cobalt Carbonate	1.97
Water	60



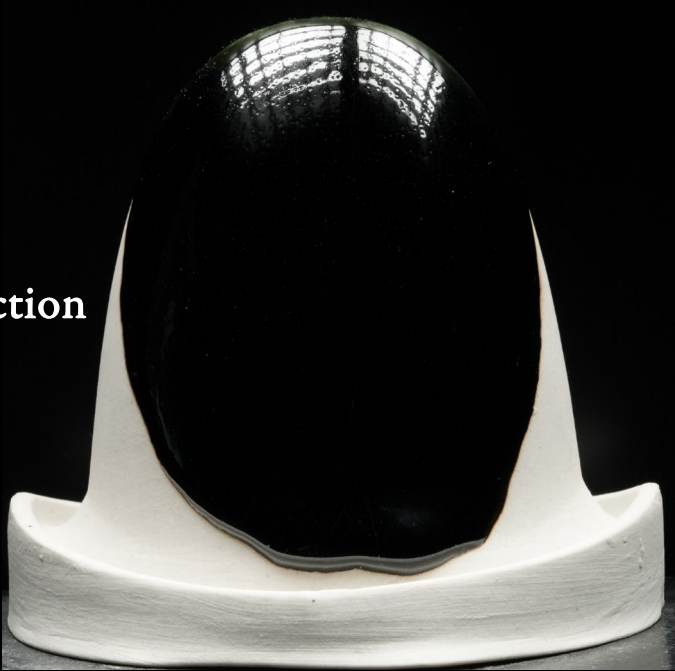
1-3 Second Dip



2-3 Second Dips



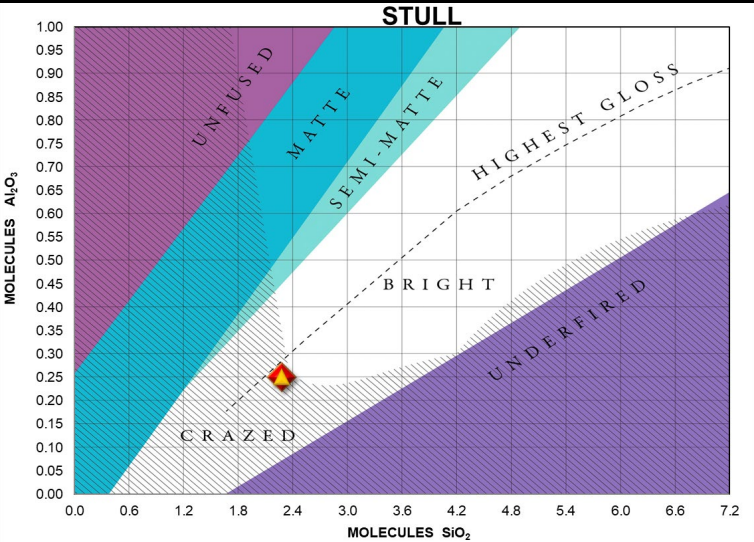
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.07 : 1		Alkali Metals 0.33		Alkaline Earths 0.67	
SiO ₂ 3.65	Collective "Al ₂ O ₃ " 0.40	Na ₂ O 0.25	K ₂ O 0.07	MgO 0.00	CaO 0.67
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 9.07 : 1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 2.28	Collective "Al ₂ O ₃ " 0.25	Na ₂ O 0.16	K ₂ O 0.04	MgO 0.00	CaO 0.42
B ₂ O ₃	Al ₂ O ₃ 0.25	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.34
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04

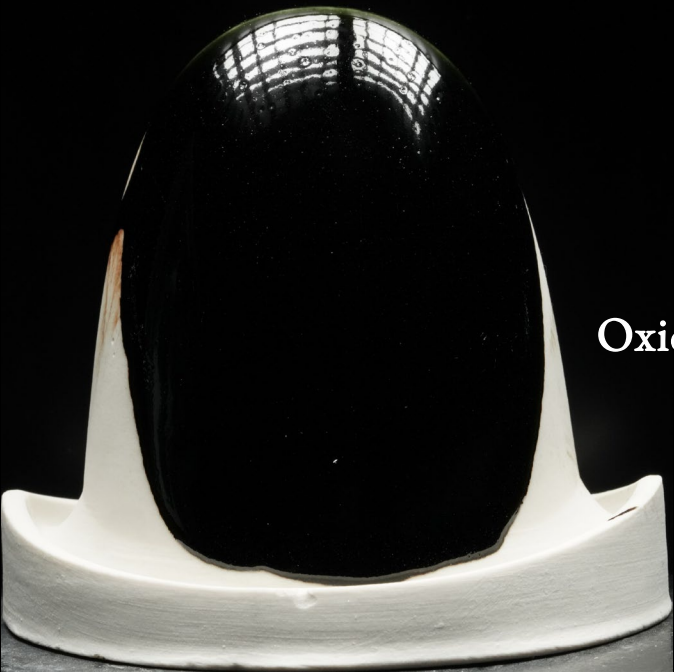


Ceramic
Materials
Workshop

Absence

Chemical Match
Custer Feldspar
062422-36

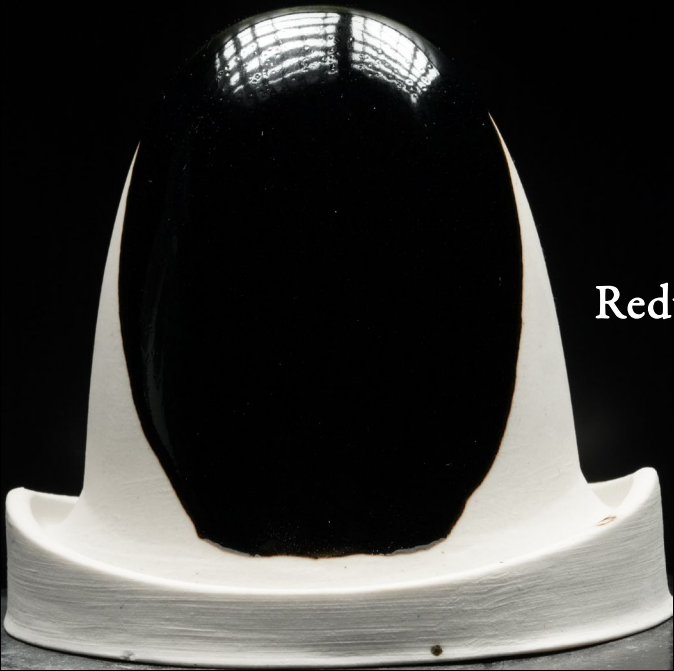
Custer 2022	63.08
Whiting	17.88
EPK	3.26
Flint	15.77
Red Iron Oxide	7.67
Cobalt Carbonate	1.97
Water	60



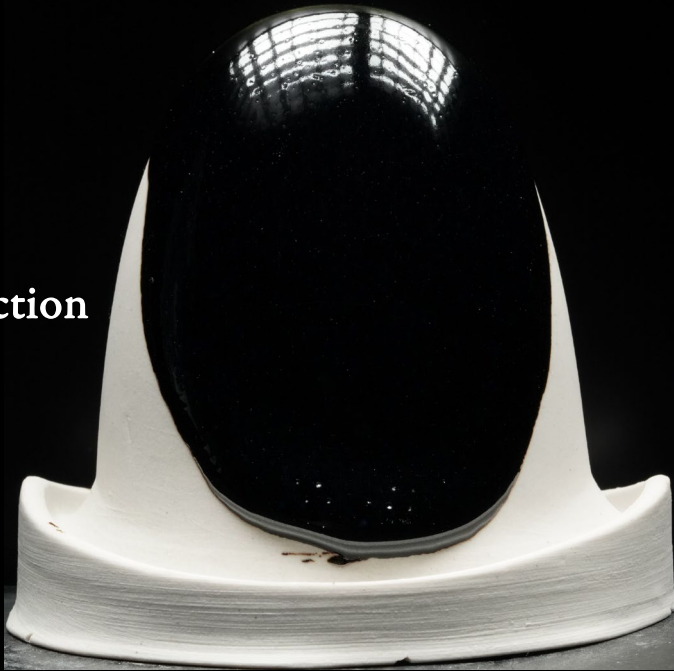
1-3 Second Dip



2-3 Second Dips



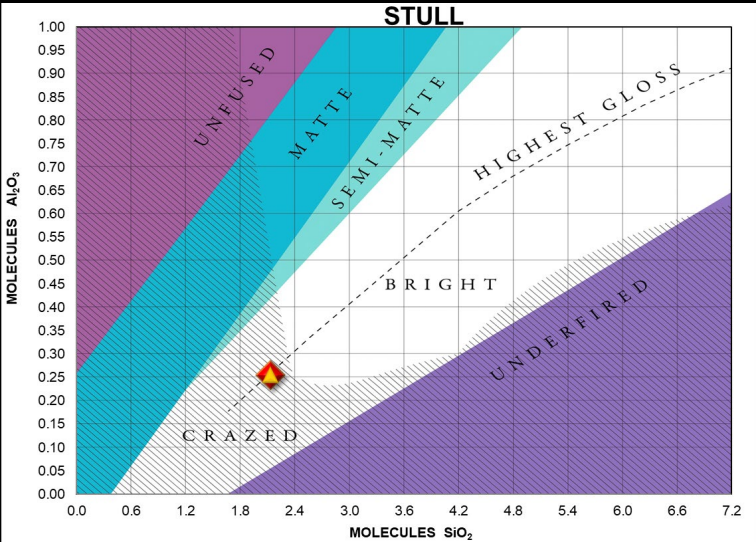
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.32 :1		Alkali Metals 0.38		Alkaline Earths 0.62	
SiO ₂ 3.35	Collective "Al ₂ O ₃ " 0.40	Na ₂ O 0.15	K ₂ O 0.23	MgO 0.00	CaO 0.61
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 8.32 :1		Alkali Metals 0.24		Alkaline Earths 0.76	
SiO ₂ 2.13	Collective "Al ₂ O ₃ " 0.26	Na ₂ O 0.10	K ₂ O 0.14	MgO 0.00	CaO 0.39
B ₂ O ₃	Al ₂ O ₃ 0.25	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.33
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04



Ceramic
Materials
Workshop

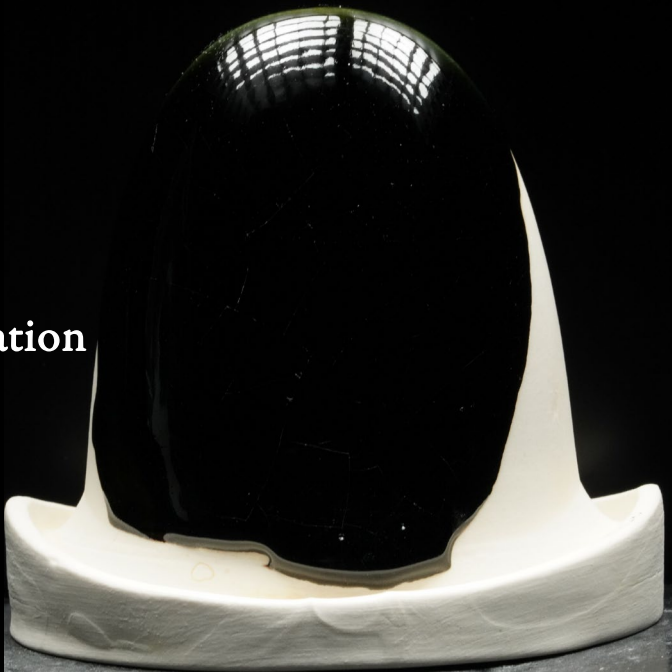
Absence

Chemical Match
Mahavir Feldspar
062422-37

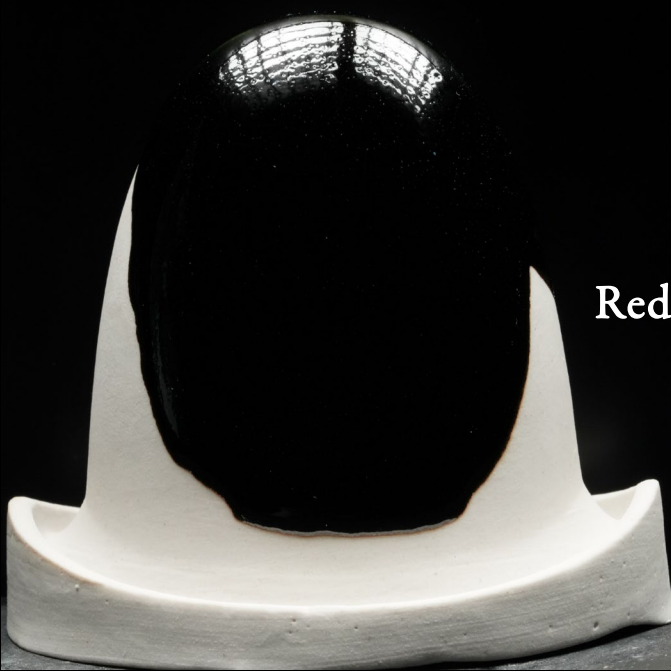
Mahavir	53.45
Whiting	18.03
EPK	6.06
Flint	22.46
Red Iron Oxide	7.68
Cobalt Carbonate	1.97
Water	60



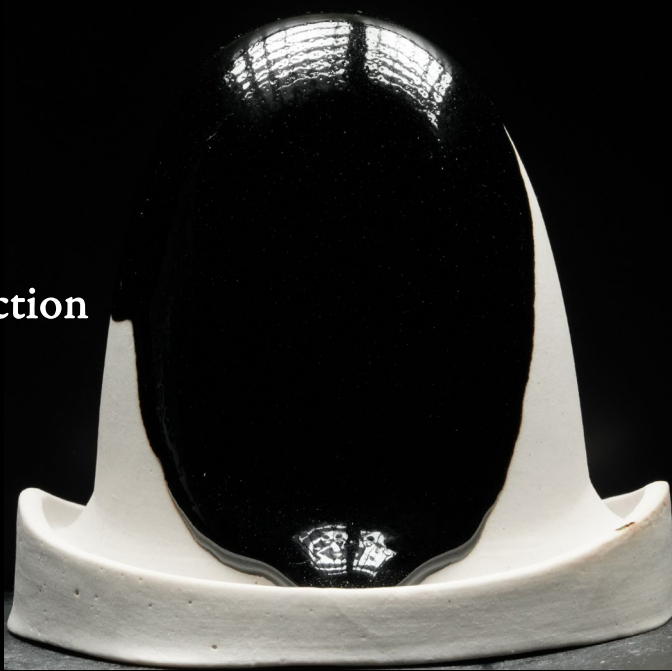
1-3 Second Dip



2-3 Second Dips

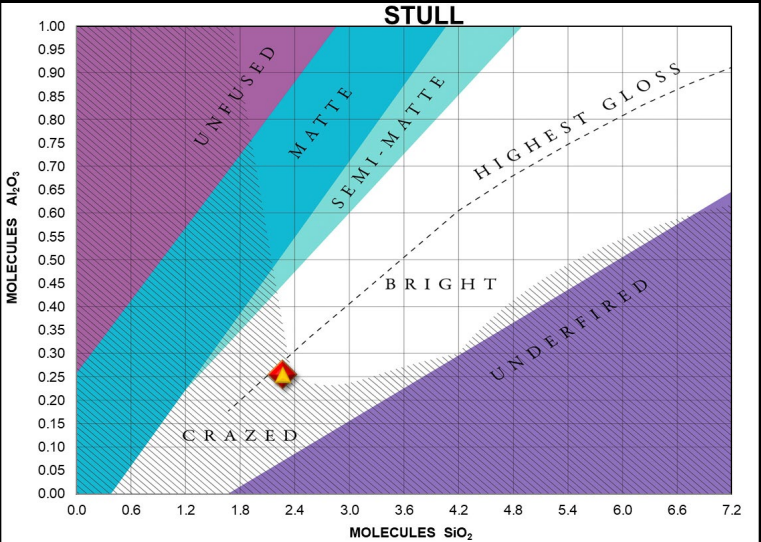


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.88 : 1		Alkali Metals 0.33		Alkaline Earths 0.67	
SiO ₂ 3.65	Collective "Al ₂ O ₃ " 0.41	Na ₂ O 0.09	K ₂ O 0.24	MgO 0.01	CaO 0.65
B ₂ O ₃	Al ₂ O ₃ 0.41	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 8.88 : 1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 2.27	Collective "Al ₂ O ₃ " 0.26	Na ₂ O 0.06	K ₂ O 0.15	MgO 0.01	CaO 0.41
B ₂ O ₃	Al ₂ O ₃ 0.25	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.35
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04

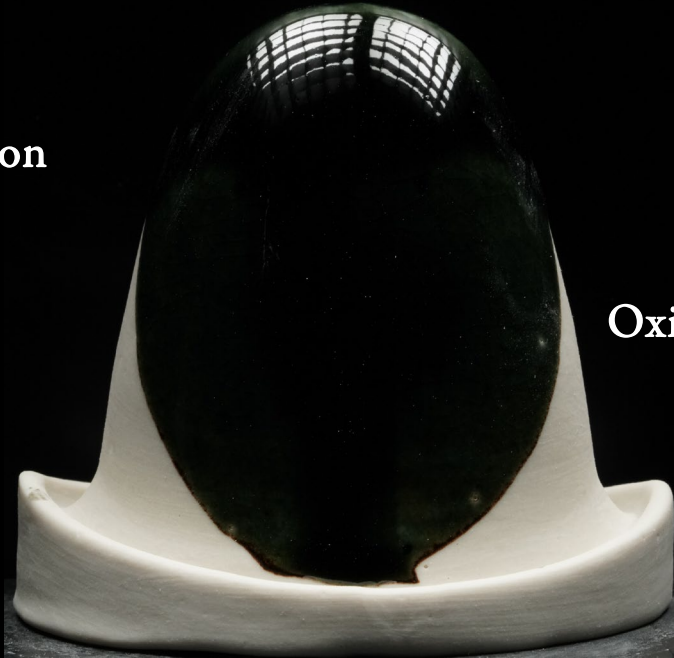


Ceramic
Materials
Workshop

Absence

Weight Substitution
Minspar Feldspar
062422-X1

Minspar	62.91
Whiting	17.76
EPK	
Flint	17.37
Red Iron Oxide	7.68
Cobalt Carbonate	1.97
Water	60



1-3 Second Dip



2-3 Second Dips



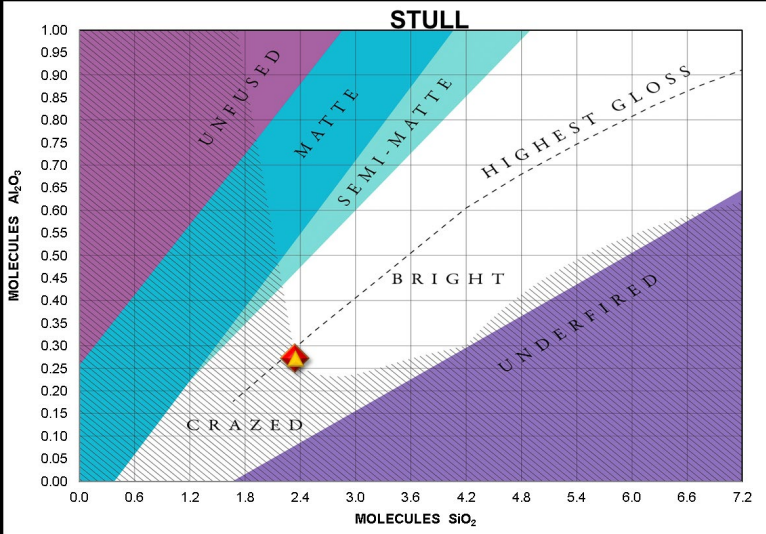
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.58 :1		Alkali Metals 0.32		Alkaline Earths 0.68	
SiO ₂ 3.59	Collective "Al ₂ O ₃ " 0.42	Na ₂ O 0.22	K ₂ O 0.09	MgO 0.00	CaO 0.67
B ₂ O ₃	Al ₂ O ₃ 0.42	Li ₂ O	CuO	SrO 0.00	BaO 0.00
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.00	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 8.58 :1		Alkali Metals 0.21		Alkaline Earths 0.79	
SiO ₂ 2.35	Collective "Al ₂ O ₃ " 0.27	Na ₂ O 0.15	K ₂ O 0.06	MgO 0.00	CaO 0.44
B ₂ O ₃	Al ₂ O ₃ 0.27	Li ₂ O	CuO	SrO 0.00	BaO 0.00
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.00	FeO 0.32
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.03

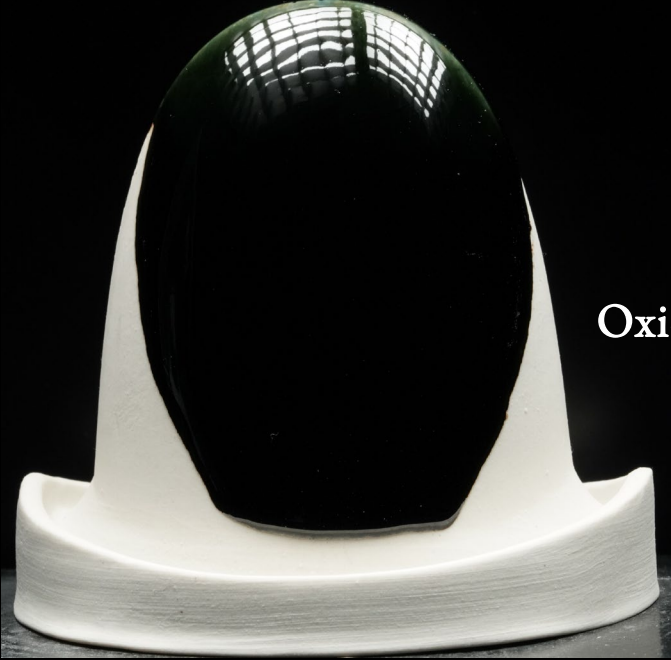


Ceramic
Materials
Workshop

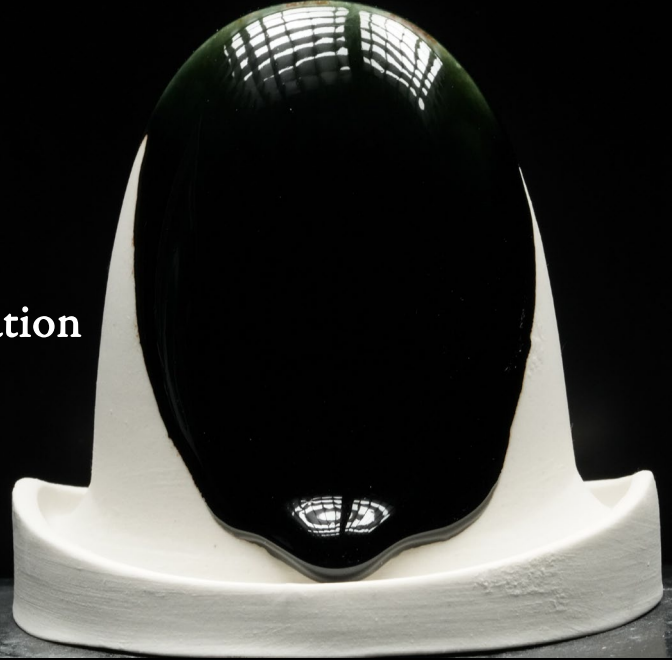
Absence

Chemical Match
Spodumene
062422-38

Spodumene	36.20
Whiting	19.25
EPK	6.47
Flint	38.08
Red Iron Oxide	7.72
Cobalt Carbonate	1.99
Water	60



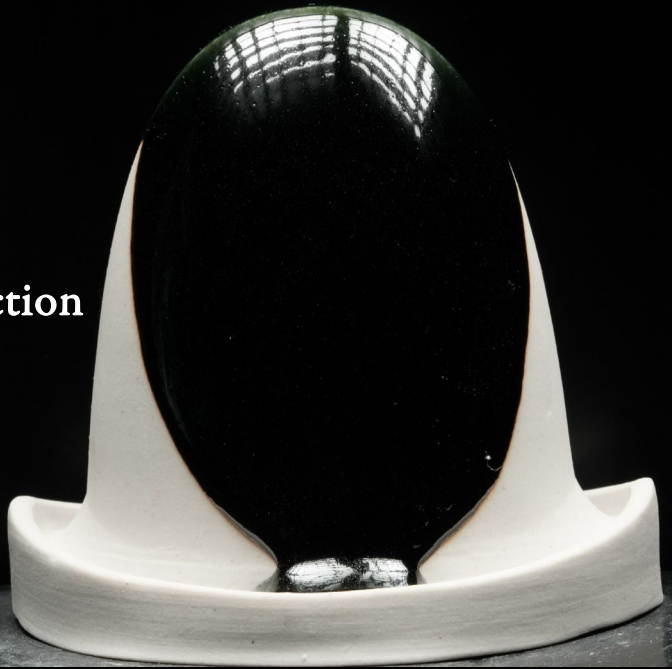
1-3 Second Dip



2-3 Second Dips

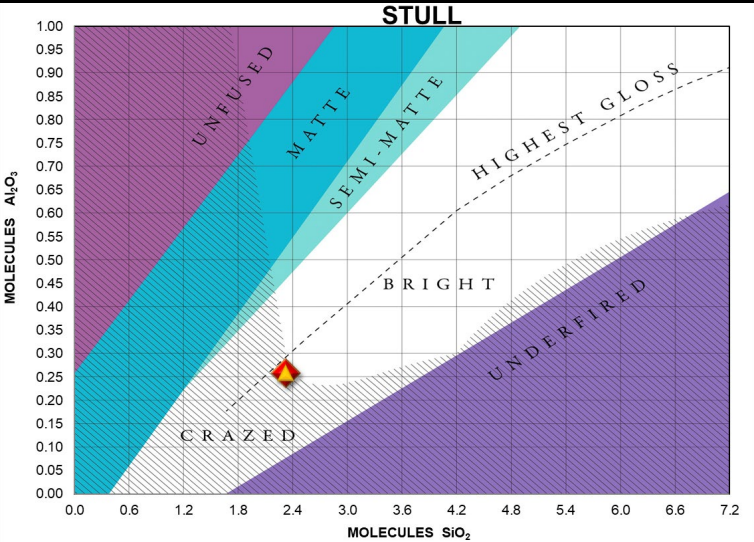


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.95 : 1		Alkali Metals 0.33		Alkaline Earths 0.67	
SiO ₂ 3.70	Collective "Al ₂ O ₃ " 0.41	Na ₂ O 0.00	K ₂ O 0.00	MgO 0.00	CaO 0.67
B ₂ O ₃	Al ₂ O ₃ 0.41	Li ₂ O 0.32	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 8.95 : 1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 2.32	Collective "Al ₂ O ₃ " 0.26	Na ₂ O 0.00	K ₂ O 0.00	MgO 0.00	CaO 0.42
B ₂ O ₃	Al ₂ O ₃ 0.26	Li ₂ O 0.20	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.34
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04

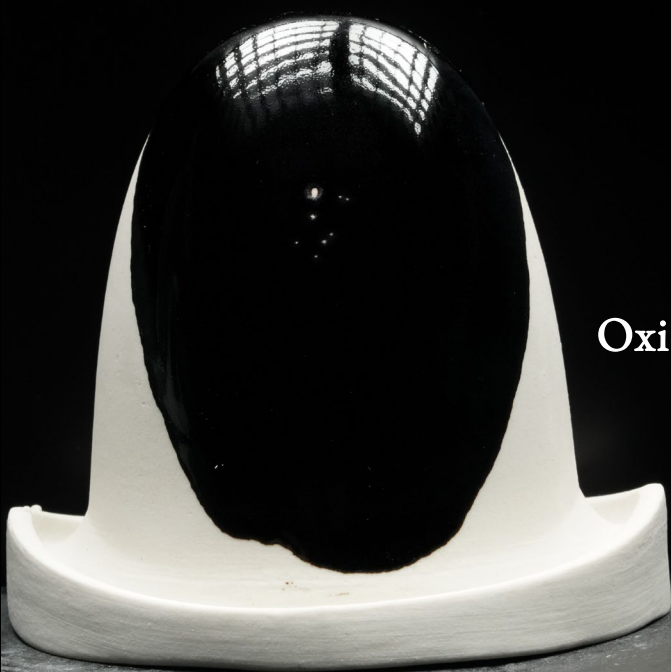


Ceramic
Materials
Workshop

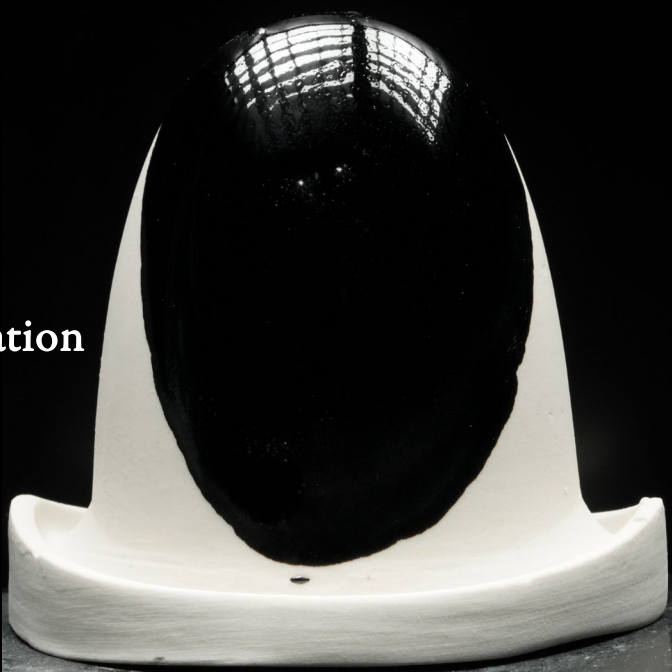
Absence

Chemical Match
Frit 3110
062422-40

3110	32.41
Whiting	14.48
EPK	28.25
Flint	24.86
Red Iron Oxide	7.67
Cobalt Carbonate	1.97
Water	60



1-3 Second Dip



2-3 Second Dips

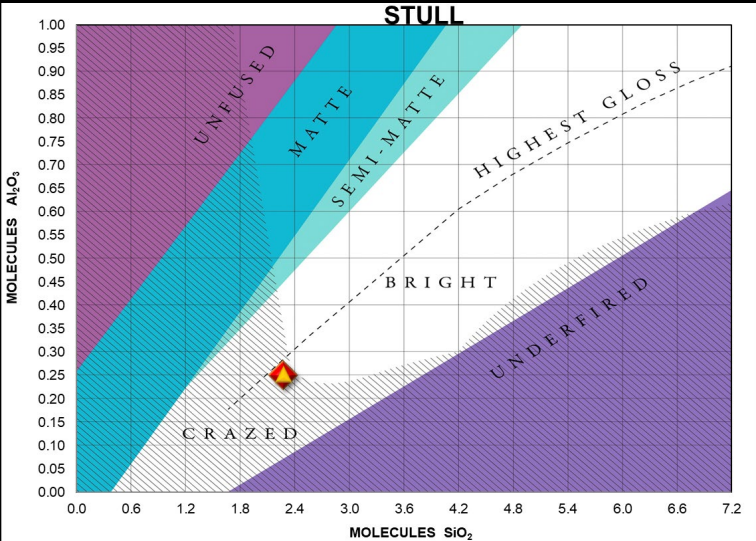


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.96 : 1		Alkali Metals 0.33		Alkaline Earths 0.67	
SiO ₂ 3.67	Collective "Al ₂ O ₃ " 0.41	Na ₂ O 0.29	K ₂ O 0.03	MgO 0.00	CaO 0.66
B ₂ O ₃ 0.04	Al ₂ O ₃ 0.40	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.01	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 8.96 : 1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 2.27	Collective "Al ₂ O ₃ " 0.25	Na ₂ O 0.18	K ₂ O 0.02	MgO 0.00	CaO 0.41
B ₂ O ₃ 0.03	Al ₂ O ₃ 0.25	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.35
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04



Ceramic
Materials
Workshop

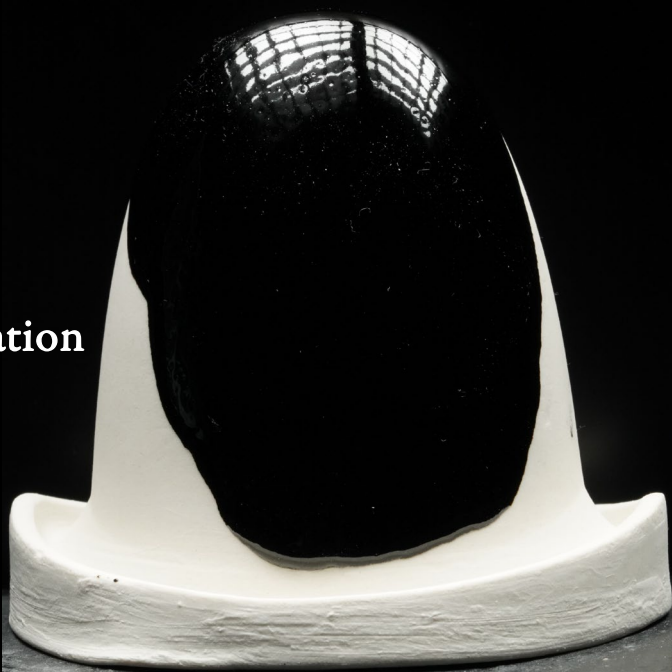
Absence

Chemical Match
Cornwall
062422-41

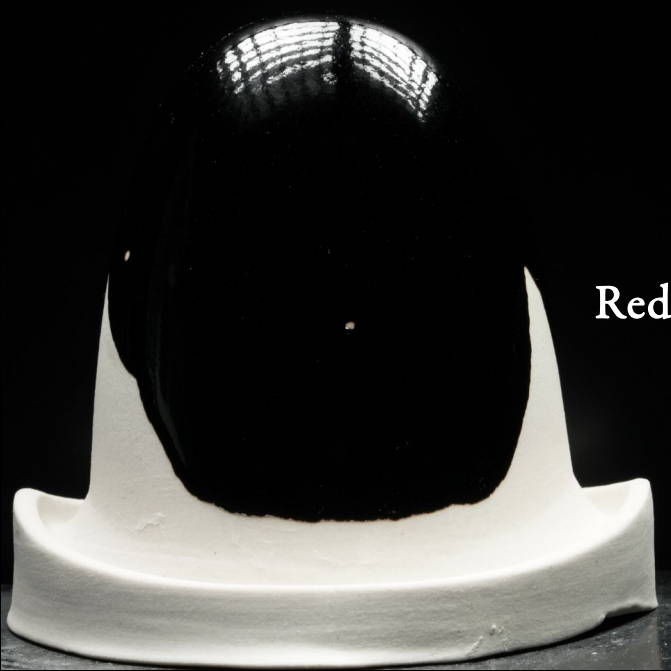
Cornwall	84.72
Whiting	13.06
EPK	
Flint	
Bentonite	2.21
Red Iron Oxide	7.66
Cobalt Carbonate	1.97
Water	60



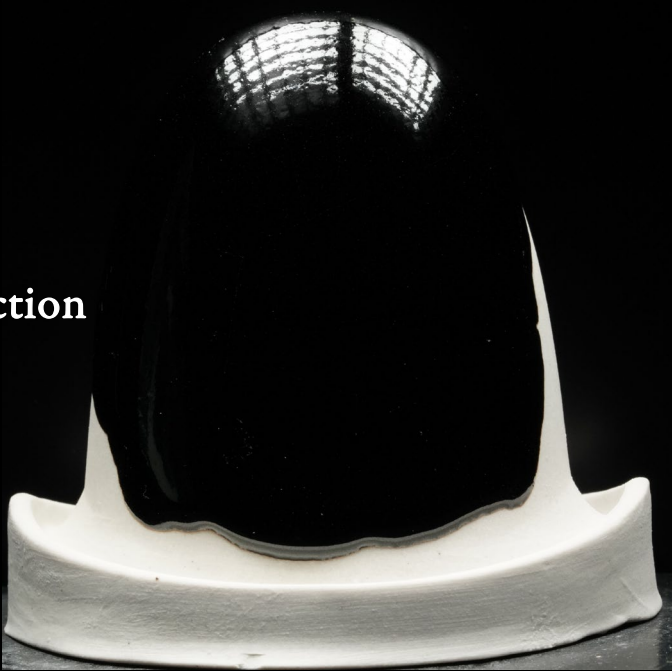
1-3 Second Dip



2-3 Second Dips

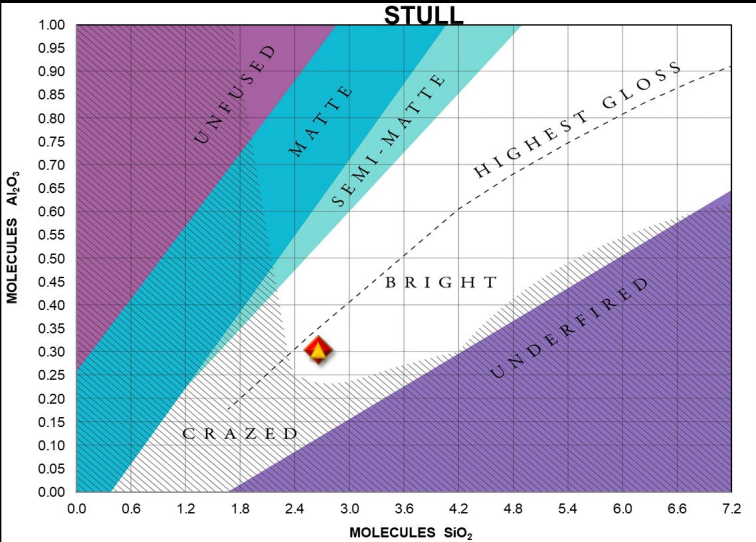


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.85 : 1		Alkali Metals 0.32		Alkaline Earths 0.68	
SiO ₂ 4.52	Collective "Al ₂ O ₃ " 0.51	Na ₂ O 0.17	K ₂ O 0.14	MgO 0.01	CaO 0.66
B ₂ O ₃	Al ₂ O ₃ 0.51	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 8.72 : 1		Alkali Metals 0.18		Alkaline Earths 0.82	
SiO ₂ 2.66	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.10	K ₂ O 0.08	MgO 0.01	CaO 0.38
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.39
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04

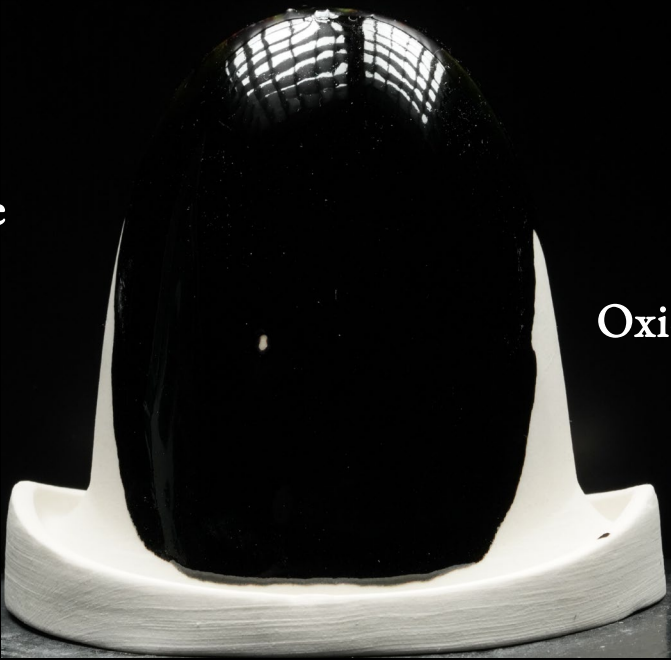


Ceramic
Materials
Workshop

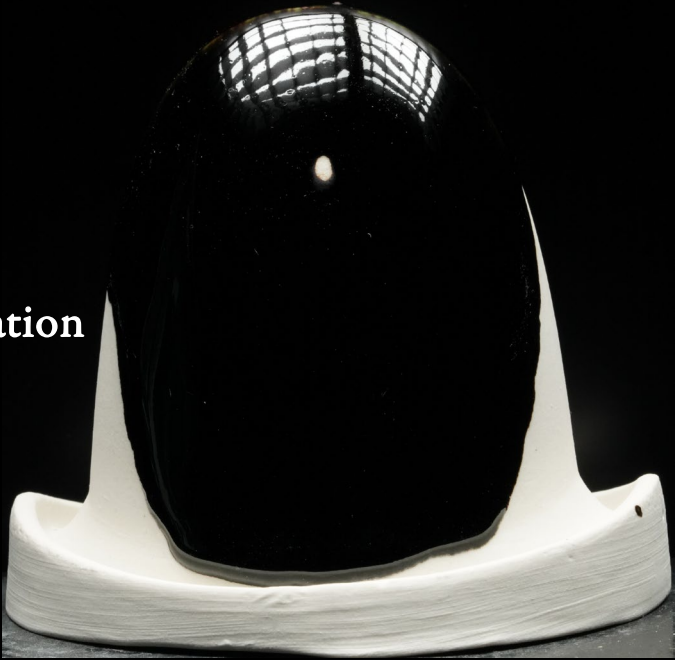
Absence

Chemical Match
Lithium Carbonite
062422-42

Lithium Carb	6.36
Whiting	17.67
EPK	31.07
Flint	44.90
Red Iron Oxide	7.66
Cobalt Carbonate	1.97
Water	60



1-3 Second Dip



2-3 Second Dips

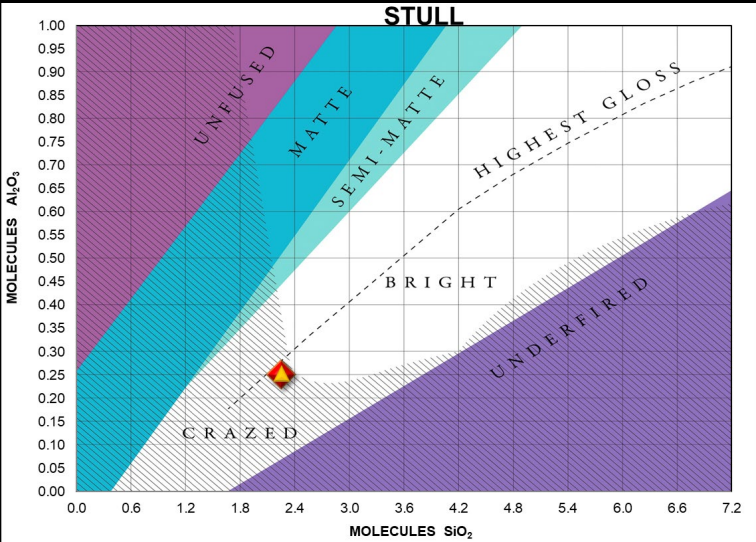


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.88 : 1		Alkali Metals 0.32		Alkaline Earths 0.68	
SiO ₂ 3.67	Collective "Al ₂ O ₃ " 0.41	Na ₂ O	K ₂ O 0.00	MgO 0.00	CaO 0.65
B ₂ O ₃	Al ₂ O ₃ 0.41	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.01	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 8.88 : 1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 2.25	Collective "Al ₂ O ₃ " 0.25	Na ₂ O	K ₂ O 0.00	MgO 0.00	CaO 0.40
B ₂ O ₃	Al ₂ O ₃ 0.25	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.36
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04



Ceramic
Materials
Workshop

Absence

Chemical Match
Talc

062422-43

G200 EU	63.82
Talc	24.63
EPK	3.94
Flint	7.60
Red Iron Oxide	7.72
Cobalt Carbonate	1.98
Water	60



1-3 Second Dip



2-3 Second Dips



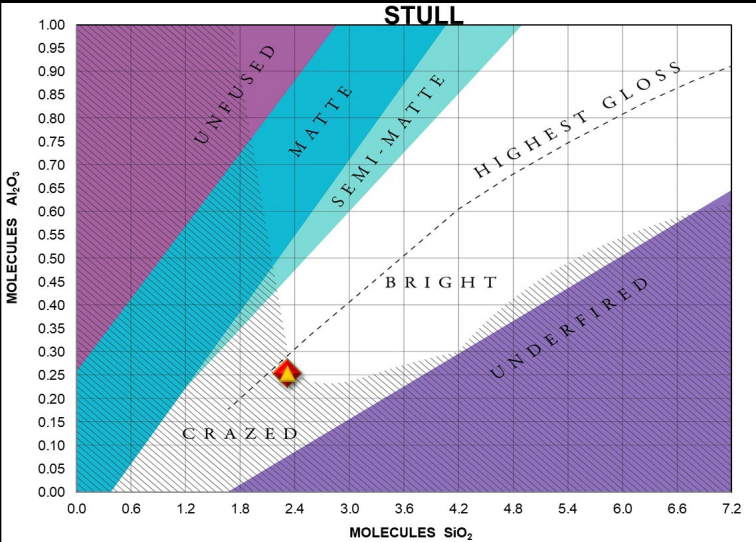
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.09 : 1		Alkali Metals 0.32		Alkaline Earths 0.68	
SiO ₂ 3.62	Collective "Al ₂ O ₃ " 0.40	Na ₂ O 0.07	K ₂ O 0.25	MgO 0.60	CaO 0.07
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 0.02
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 9.09 : 1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 2.32	Collective "Al ₂ O ₃ " 0.26	Na ₂ O 0.05	K ₂ O 0.16	MgO 0.38	CaO 0.04
B ₂ O ₃	Al ₂ O ₃ 0.25	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.34
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04



Ceramic
Materials
Workshop

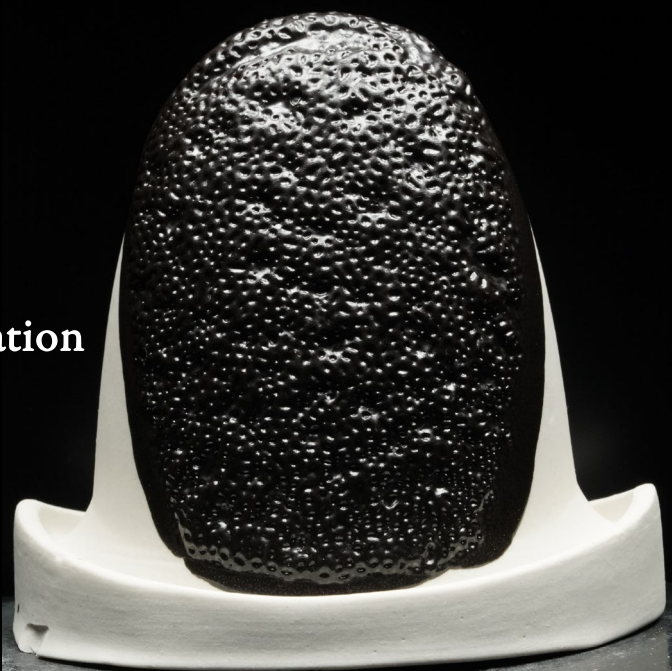
Absence

Chemical Match
Magnesium Carbonate
062422-44

G200 EU	61.25
Mag Carbonate	15.46
EPK	3.57
Flint	19.72
Red Iron Oxide	7.69
Cobalt Carbonate	1.98
Water	130



1-3 Second Dip



2-3 Second Dips

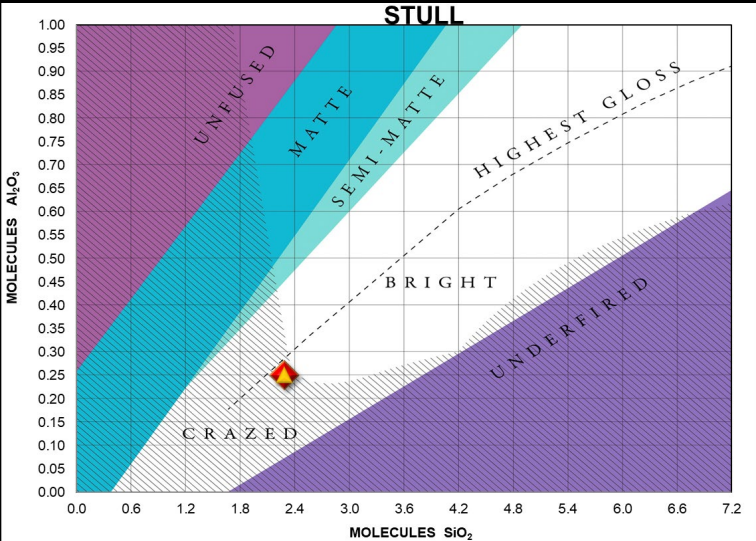


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.08 : 1		Alkali Metals 0.32		Alkaline Earths 0.68	
SiO ₂ 3.63	Collective "Al ₂ O ₃ " 0.40	Na ₂ O 0.07	K ₂ O 0.25	MgO 0.65	CaO 0.02
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 9.08 : 1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 2.29	Collective "Al ₂ O ₃ " 0.25	Na ₂ O 0.05	K ₂ O 0.16	MgO 0.41	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.25	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.34
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04



Ceramic
Materials
Workshop

Absence

Chemical Match
Dolomite
062422-45

G200 EU	59.82
Dolomite	17.42
EPK	3.49
Flint	19.27
Red Iron Oxide	7.65
Cobalt Carbonate	1.97
Water	60

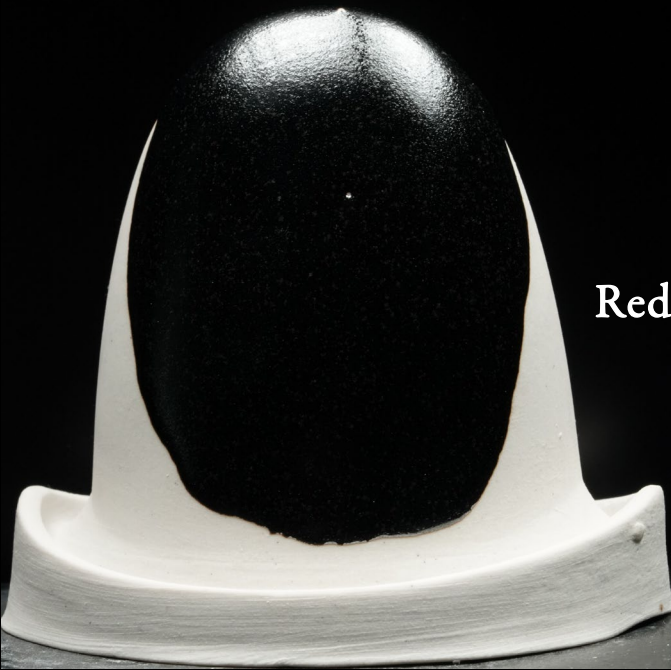


Oxidation



1-3 Second Dip

2-3 Second Dips

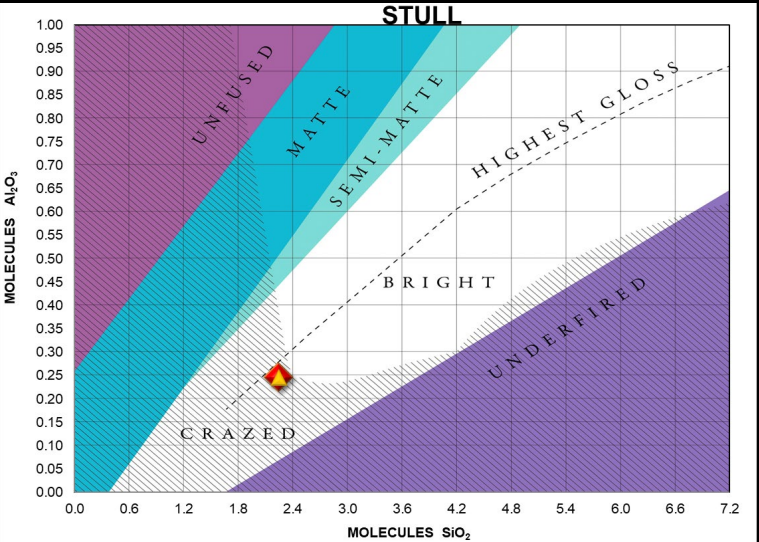


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.10 : 1		Alkali Metals 0.31		Alkaline Earths 0.69	
SiO ₂ 3.57	Collective "Al ₂ O ₃ " 0.39	Na ₂ O 0.07	K ₂ O 0.24	MgO 0.33	CaO 0.35
B ₂ O ₃	Al ₂ O ₃ 0.39	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 9.10 : 1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 2.24	Collective "Al ₂ O ₃ " 0.25	Na ₂ O 0.04	K ₂ O 0.15	MgO 0.21	CaO 0.22
B ₂ O ₃	Al ₂ O ₃ 0.25	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.34
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04



Ceramic
Materials
Workshop

Absence

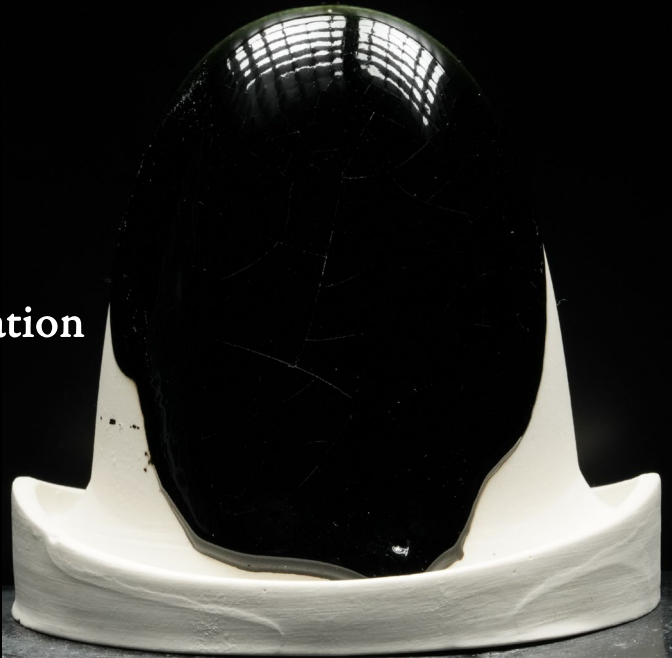
Chemical Match
Wollastonite
062422-46

G200 EU	63.47
Wollastonite	24.53
EPK	3.53
Flint	8.46
Red Iron Oxide	7.71
Cobalt Carbonate	1.98
Water	60



Oxidation

1-3 Second Dip



2-3 Second Dips

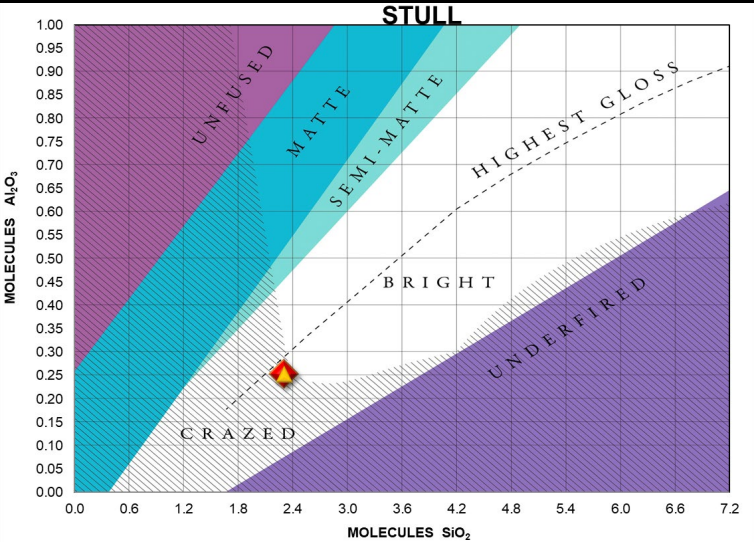


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.10 : 1		Alkali Metals 0.32		Alkaline Earths 0.68	
SiO ₂ 3.59	Collective "Al ₂ O ₃ " 0.39	Na ₂ O 0.07	K ₂ O 0.24	MgO 0.03	CaO 0.64
B ₂ O ₃	Al ₂ O ₃ 0.39	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 9.10 : 1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 2.30	Collective "Al ₂ O ₃ " 0.25	Na ₂ O 0.05	K ₂ O 0.16	MgO 0.02	CaO 0.41
B ₂ O ₃	Al ₂ O ₃ 0.25	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.33
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.03

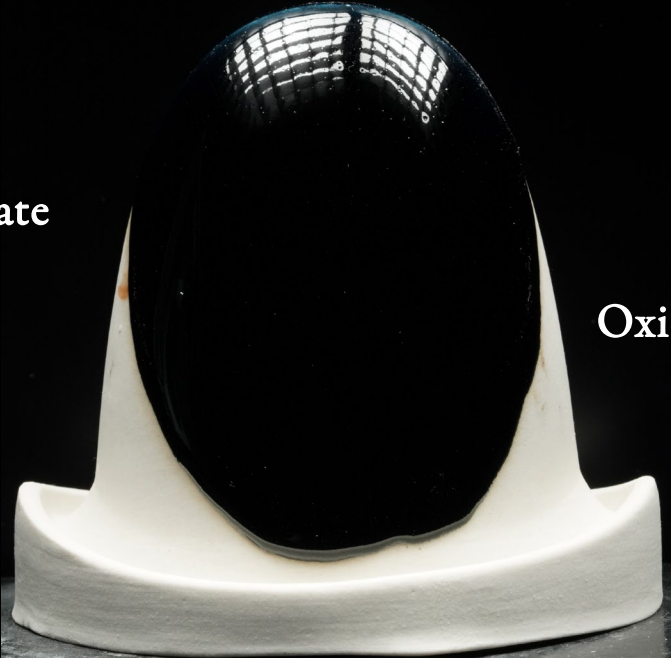


Ceramic
Materials
Workshop

Absence

Chemical Match
Strontium Carbonate
062422-47

G200 EU	54.62
Strontium Carb	24.71
EPK	3.14
Flint	17.53
Red Iron Oxide	7.60
Cobalt Carbonate	1.95
Water	60



Oxidation



2-3 Second Dips

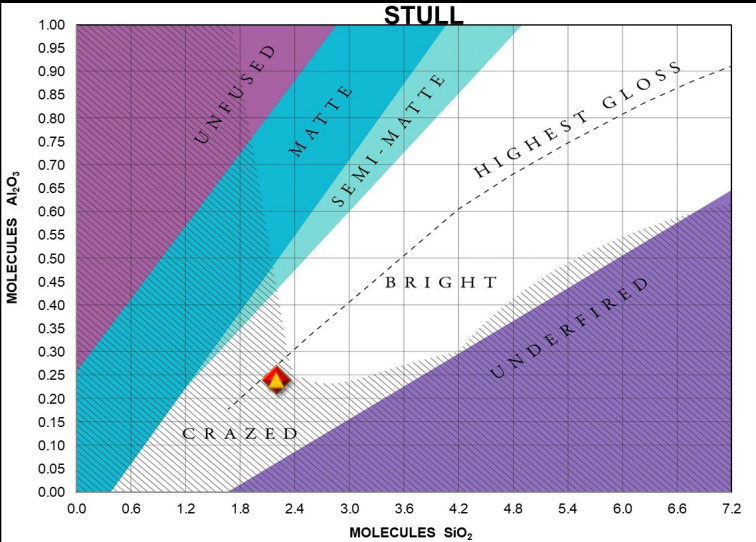


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.10 : 1		Alkali Metals 0.32		Alkaline Earths 0.68	
SiO ₂ 3.63	Collective "Al ₂ O ₃ " 0.40	Na ₂ O 0.07	K ₂ O 0.25	MgO 0.00	CaO 0.02
B ₂ O ₃	Al ₂ O ₃ 0.40	Li ₂ O	CuO	SrO 0.65	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 9.10 : 1		Alkali Metals 0.19		Alkaline Earths 0.81	
SiO ₂ 2.20	Collective "Al ₂ O ₃ " 0.24	Na ₂ O 0.04	K ₂ O 0.15	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.24	Li ₂ O	CuO	SrO 0.39	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.36
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04

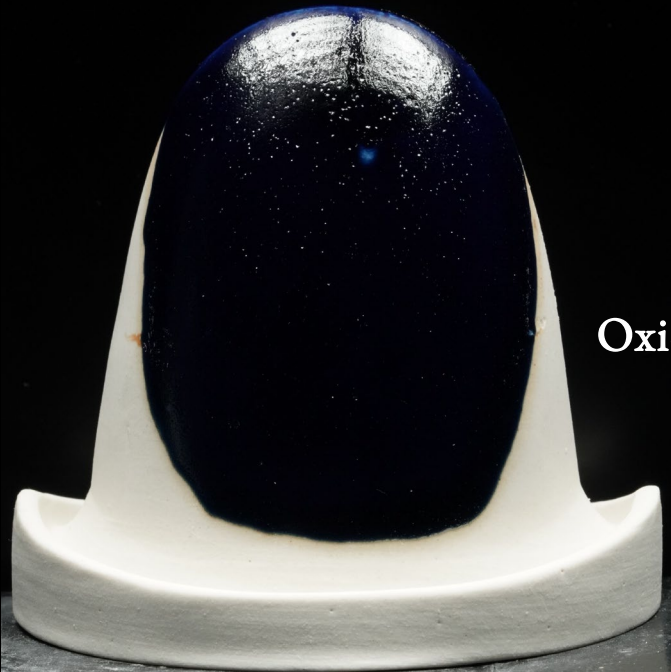


Ceramic
Materials
Workshop

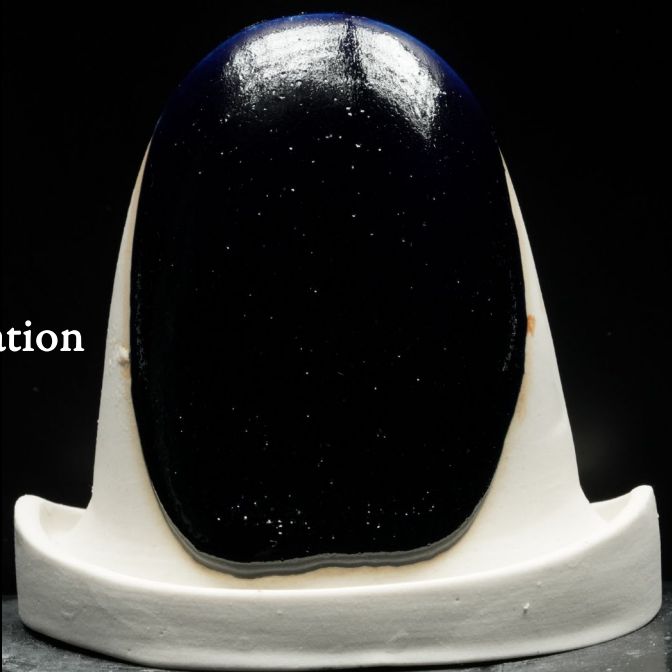
Absence

Chemical Match
Barium Carbonate
062422-48

G200 EU	50.60
Barium Carb	30.12
EPK	3.00
Flint	16.28
Red Iron Oxide	7.67
Cobalt Carbonate	1.97
Water	60



Oxidation



1-3 Second Dip

2-3 Second Dips

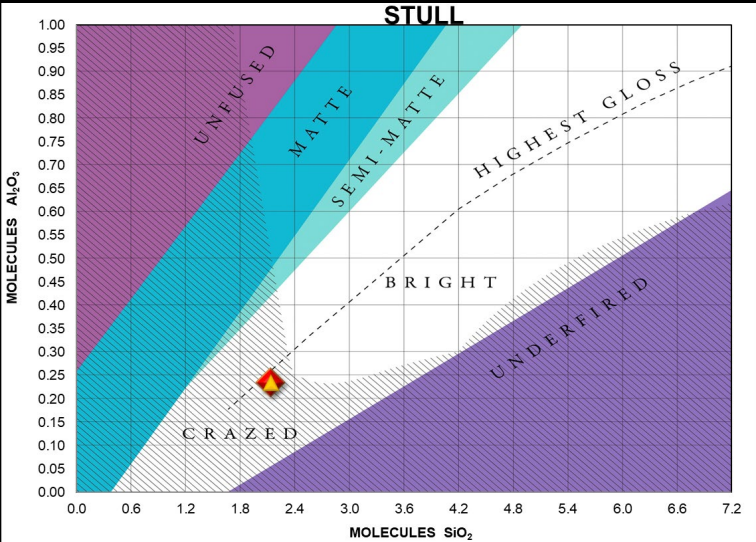


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.08 : 1		Alkali Metals 0.32		Alkaline Earths 0.68	
SiO ₂ 3.67	Collective "Al ₂ O ₃ " 0.40	Na ₂ O 0.07	K ₂ O 0.25	MgO 0.00	CaO 0.02
B ₂ O ₃	Al ₂ O ₃ 0.40	Li ₂ O	CuO	SrO	BaO 0.65
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 9.08 : 1		Alkali Metals 0.19		Alkaline Earths 0.81	
SiO ₂ 2.14	Collective "Al ₂ O ₃ " 0.24	Na ₂ O 0.04	K ₂ O 0.15	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.23	Li ₂ O	CuO	SrO	BaO 0.38
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.38
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04



Ceramic
Materials
Workshop

Absence

Chemical Match
Zinc Oxide
062422-49

G200 EU	61.35
Zinc Oxide	15.27
EPK	3.69
Flint	19.70
Red Iron Oxide	7.69
Cobalt Carbonate	1.98
Water	60



1-3 Second Dip



2-3 Second Dips



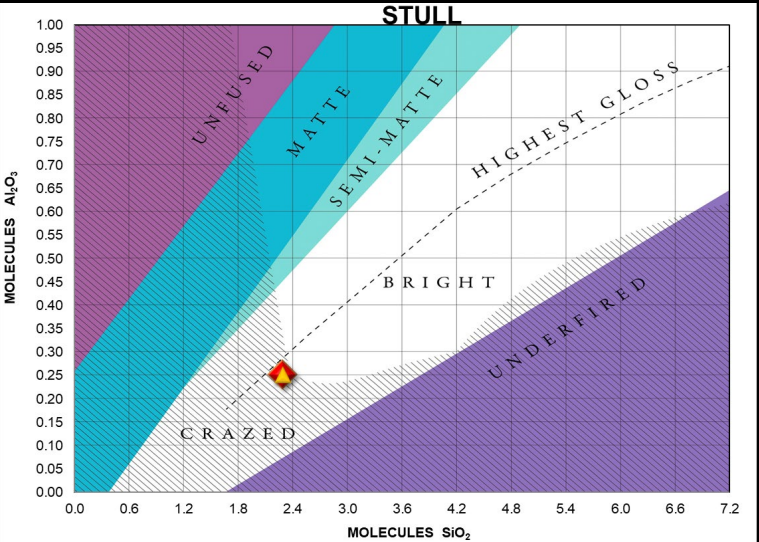
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.06 : 1		Alkali Metals 0.32		Alkaline Earths 0.68	
SiO ₂ 3.64	Collective "Al ₂ O ₃ " 0.40	Na ₂ O 0.07	K ₂ O 0.25	MgO 0.00	CaO 0.02
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 0.65	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 9.06 : 1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 2.29	Collective "Al ₂ O ₃ " 0.25	Na ₂ O 0.05	K ₂ O 0.16	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.25	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.41	FeO 0.34
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04



Ceramic
Materials
Workshop

Absence

Chemical Match
Bone Ash
062422-50

G200 EU	55.66
Bone Ash	23.06
EPK	3.31
Flint	17.97
Red Iron Oxide	7.67
Cobalt Carbonate	1.97
Water	60



Oxidation



1-3 Second Dip

2-3 Second Dips

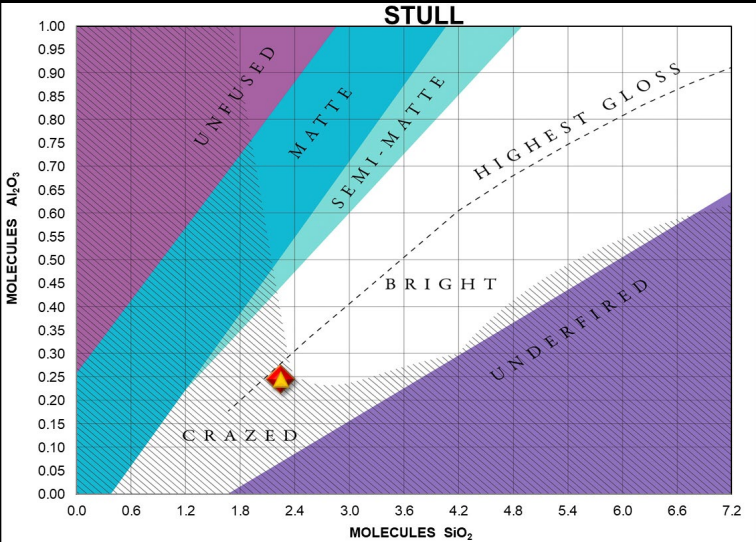


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.10 : 1		Alkali Metals 0.33		Alkaline Earths 0.67	
SiO ₂ 3.73	Collective "Al ₂ O ₃ " 0.41	Na ₂ O 0.07	K ₂ O 0.25	MgO 0.01	CaO 0.66
B ₂ O ₃	Al ₂ O ₃ 0.41	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 0.35		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 9.10 : 1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 2.25	Collective "Al ₂ O ₃ " 0.25	Na ₂ O 0.04	K ₂ O 0.15	MgO 0.00	CaO 0.40
B ₂ O ₃	Al ₂ O ₃ 0.25	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.36
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅ 0.21		MnO ₂	CoO 0.04



Ceramic
Materials
Workshop