

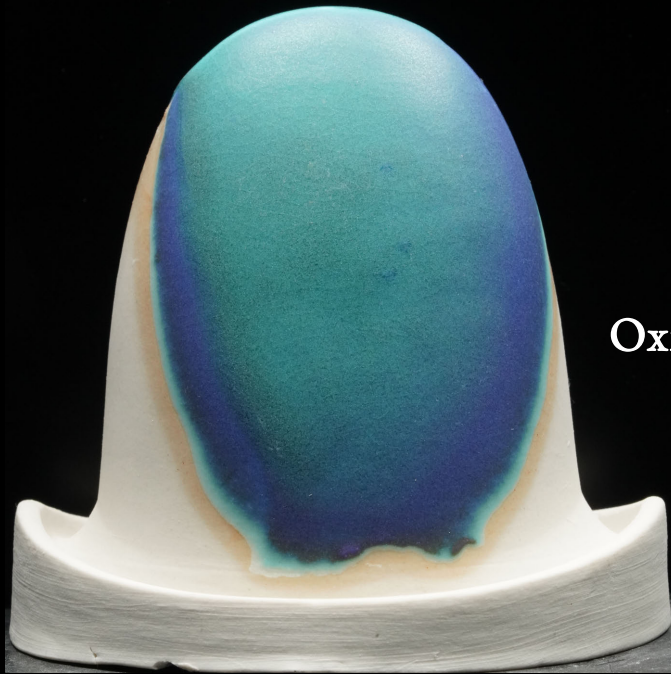
Peacock- Δ 10

Lab 5a-Color Wheel

Peacock

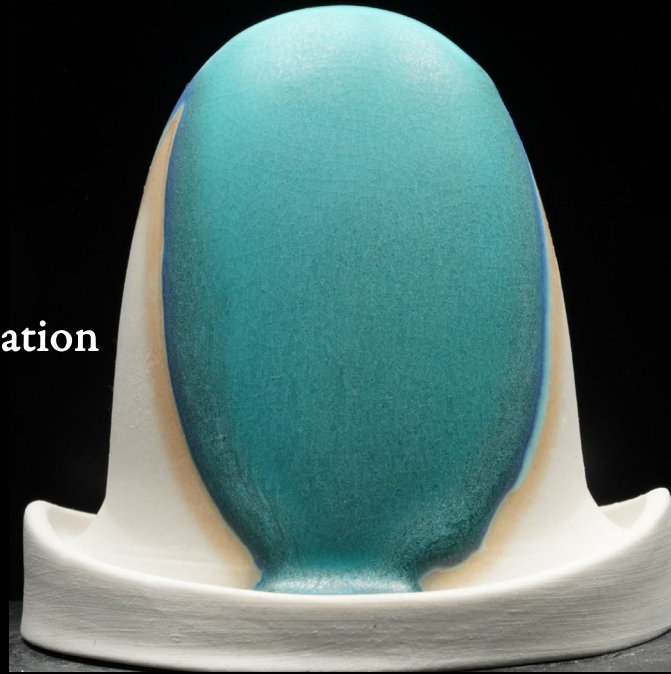
Original
062922-1

Neph Sy	36.62
Barium Carb	46.57
EPK	6.63
Flint	10.19
Copper Carbonate	3.09
Water	60



1-3 Second Dip

Oxidation



2-3 Second Dips

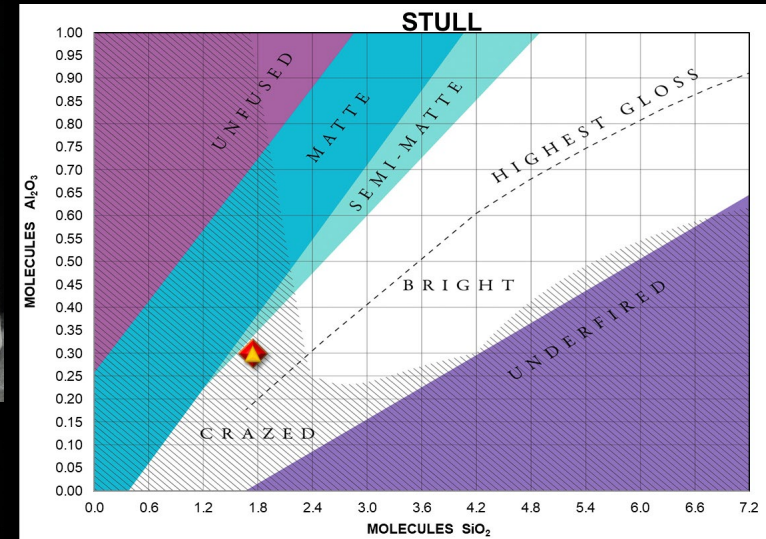


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.25		Alkaline Earths 0.75	
SiO ₂ 1.88	Collective "Al ₂ O ₃ " 0.32	Na ₂ O 0.19	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.32	Li ₂ O	CuO	SrO	BaO 0.74
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.74	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



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Chrome Oxide

0.5%

Oxidation

Reduction

1-3 Second Dip

2-3 Second Dips

1-3 Second Dip

2-3 Second Dips

2%



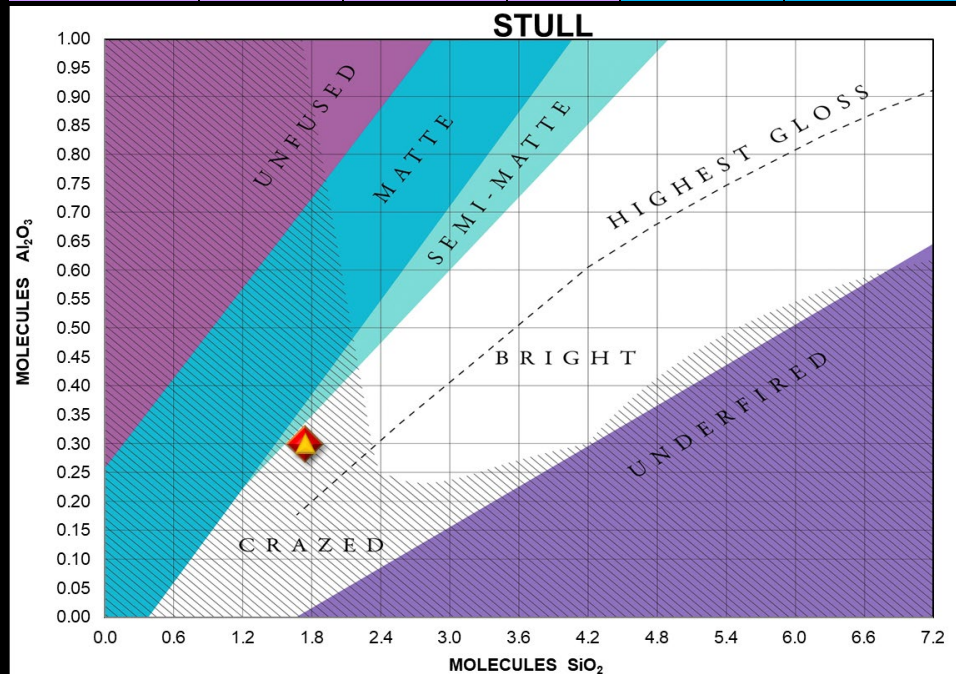
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Chrome Oxide

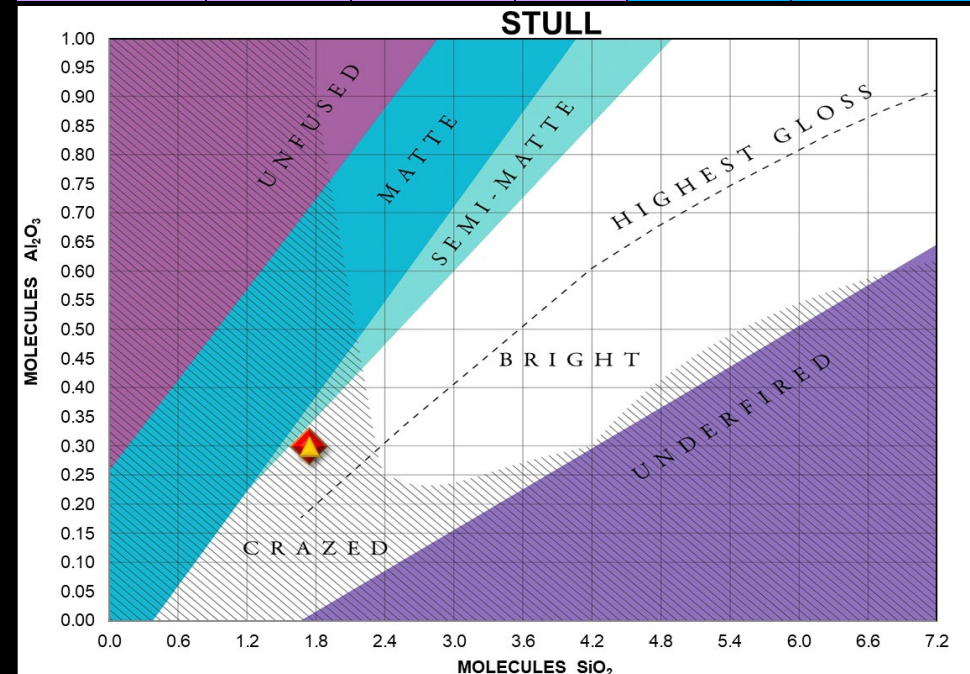
0.5%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.74	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃ 0.01	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



2%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.74	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃ 0.04	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Cobalt Carbonate

0.5%

Oxidation

Reduction

1-3 Second Dip

2-3 Second Dips

1-3 Second Dip

2-3 Second Dips

2%



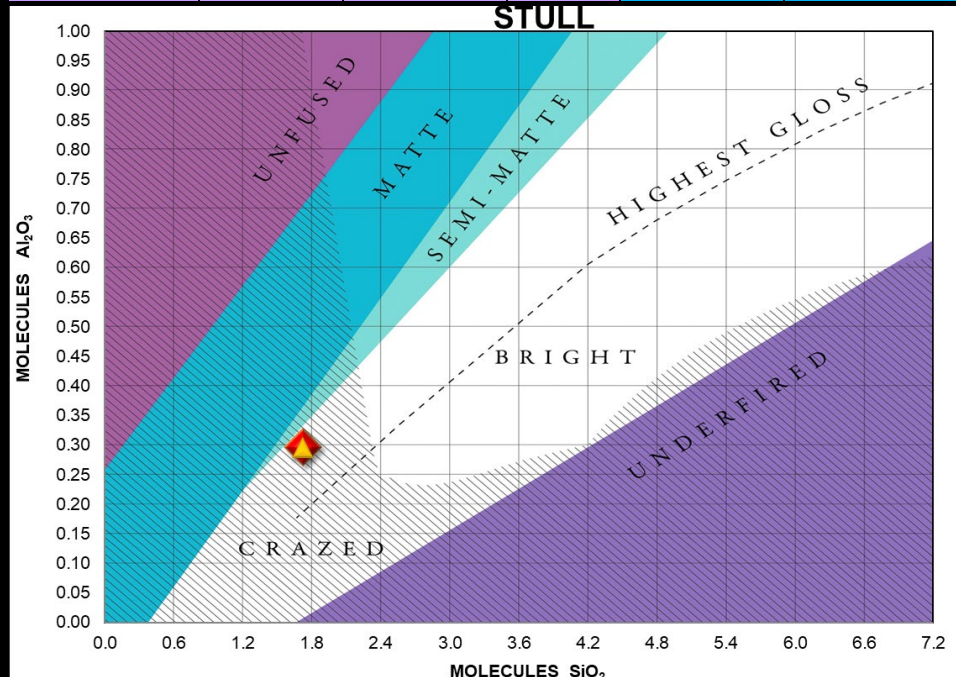
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Cobalt Carbonate

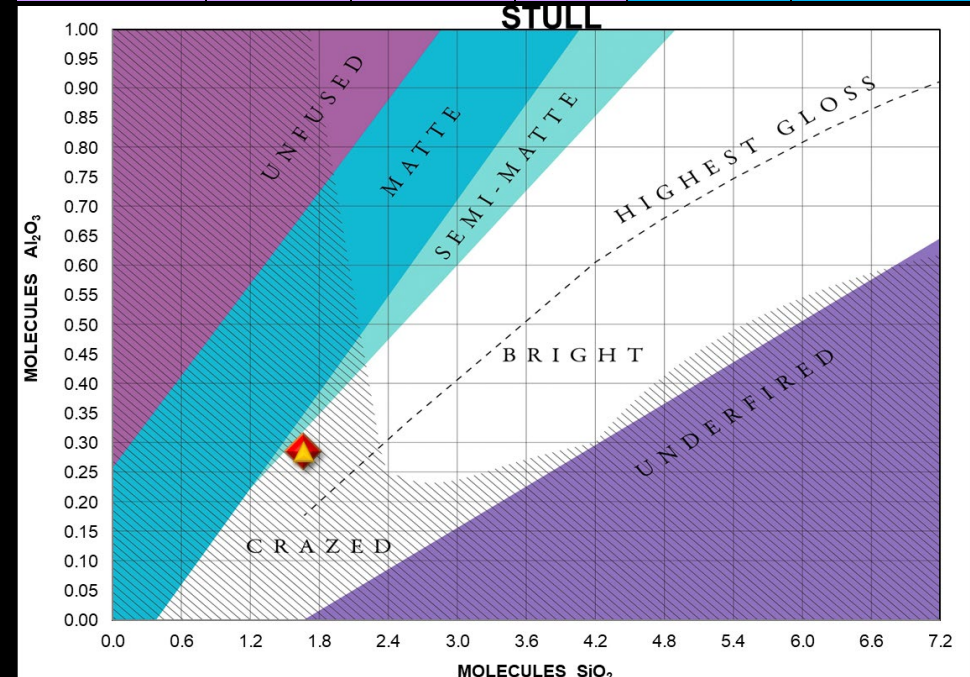
0.5%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.72	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO	SrO	BaO 0.68
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.01



2%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 1.66	Collective "Al ₂ O ₃ " 0.29	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.29	Li ₂ O	CuO	SrO	BaO 0.65
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.05



Cobalt Oxide

0.5%

Oxidation

Reduction

1-3 Second Dip

2-3 Second Dips

1-3 Second Dip

2-3 Second Dips

2%



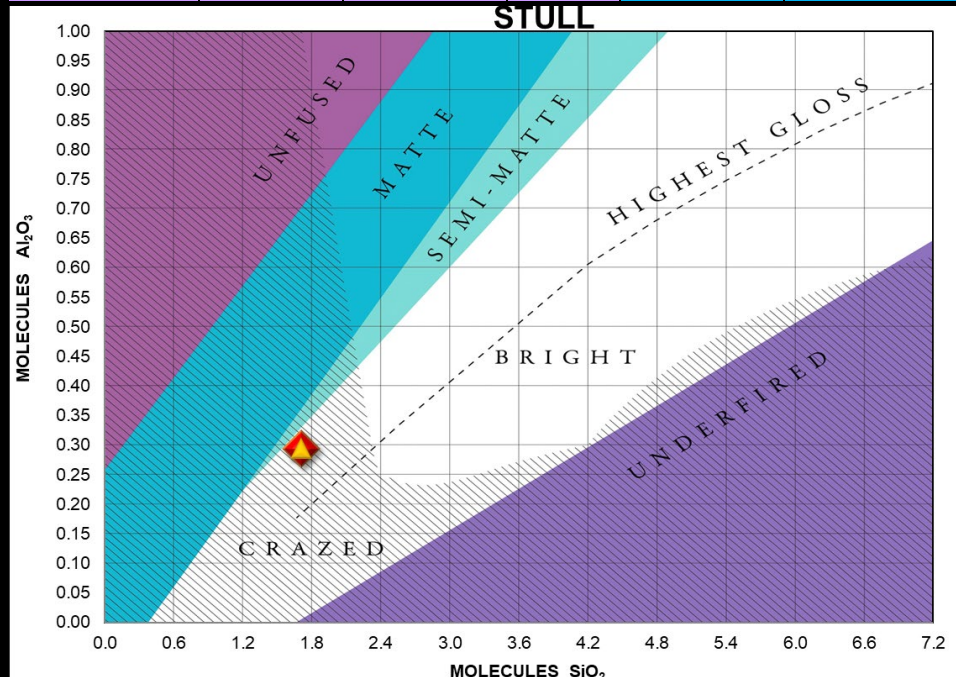
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Cobalt Oxide

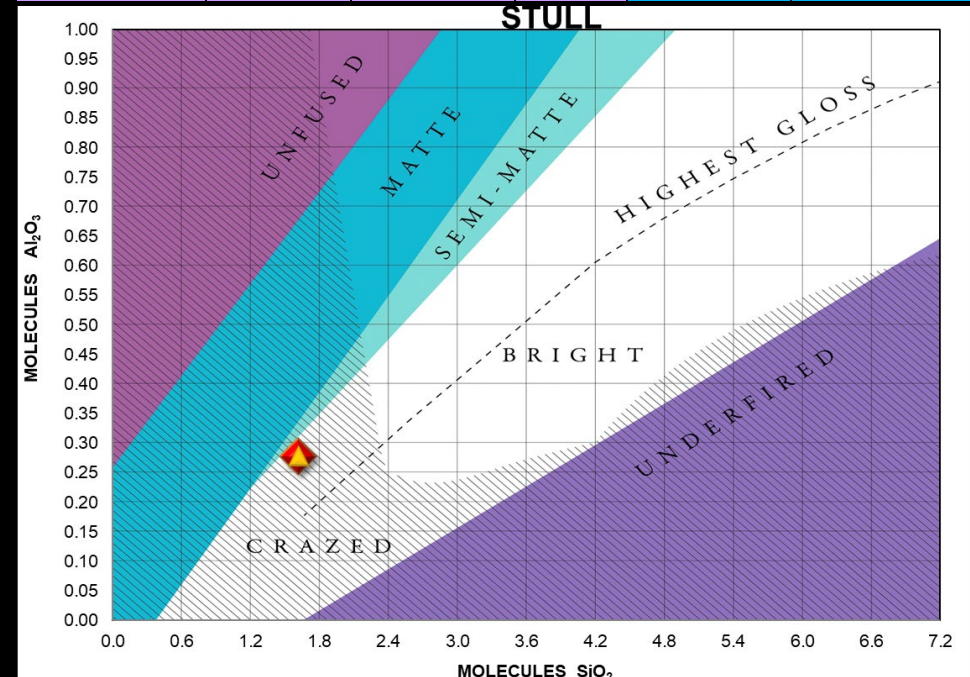
0.5%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 1.71	Collective "Al ₂ O ₃ " 0.29	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.29	Li ₂ O	CuO	SrO	BaO 0.67
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.02



2%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.28		Alkaline Earths 0.72	
SiO ₂ 1.62	Collective "Al ₂ O ₃ " 0.28	Na ₂ O 0.16	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.28	Li ₂ O	CuO	SrO	BaO 0.64
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.07



Copper Carbonate

Oxidation

Reduction

1%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

4%



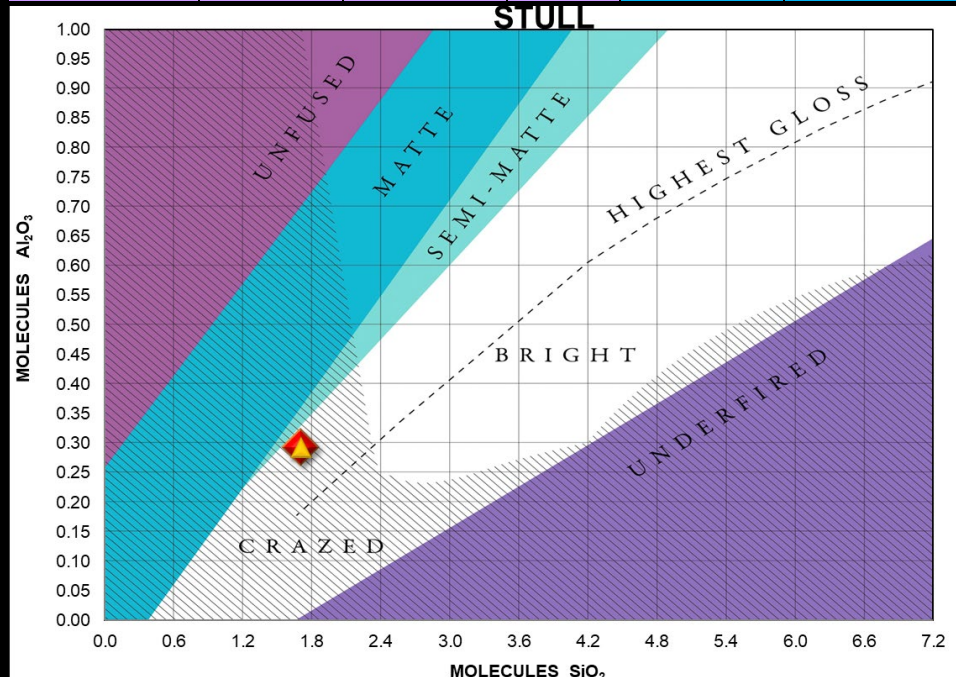
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Copper Carbonate

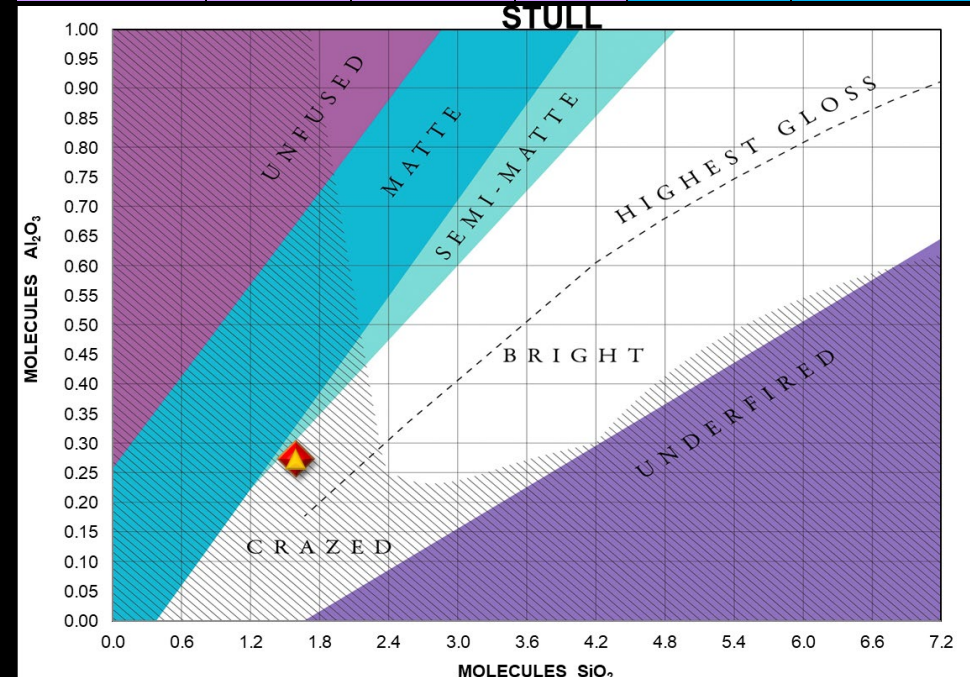
1%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.32		Alkaline Earths 0.68	
SiO ₂ 1.70	Collective "Al ₂ O ₃ " 0.29	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.29	Li ₂ O	CuO	SrO	BaO 0.67
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



4%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.36		Alkaline Earths 0.64	
SiO ₂ 1.59	Collective "Al ₂ O ₃ " 0.27	Na ₂ O 0.16	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.27	Li ₂ O	CuO	SrO	BaO 0.63
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

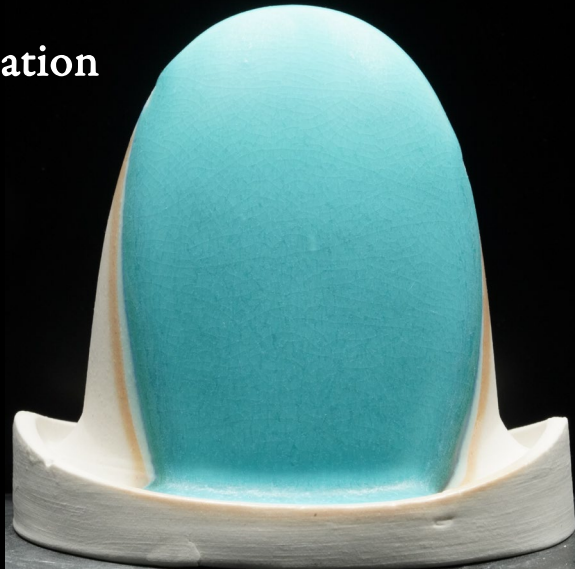
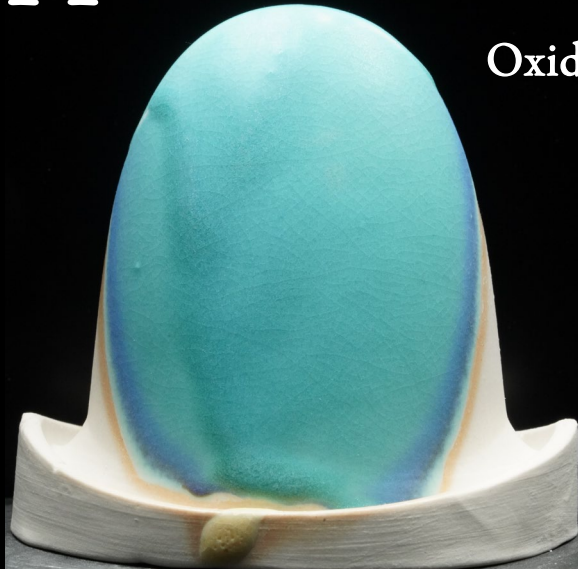


Copper Oxide-Black

Oxidation

Reduction

1%



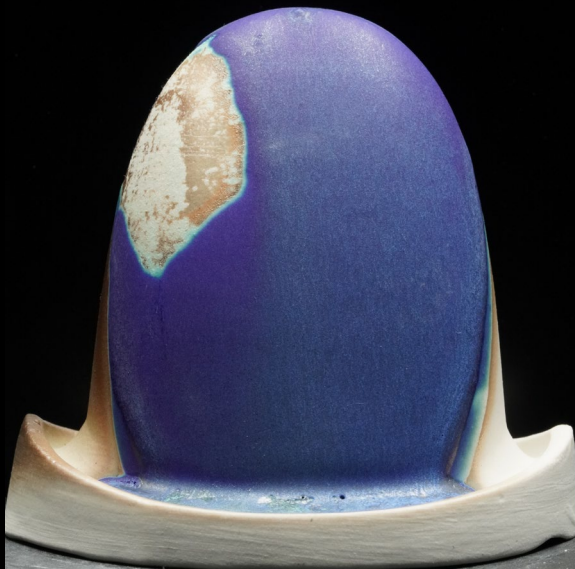
1-3 Second Dip

2-3 Second Dips

1-3 Second Dip

2-3 Second Dips

4%



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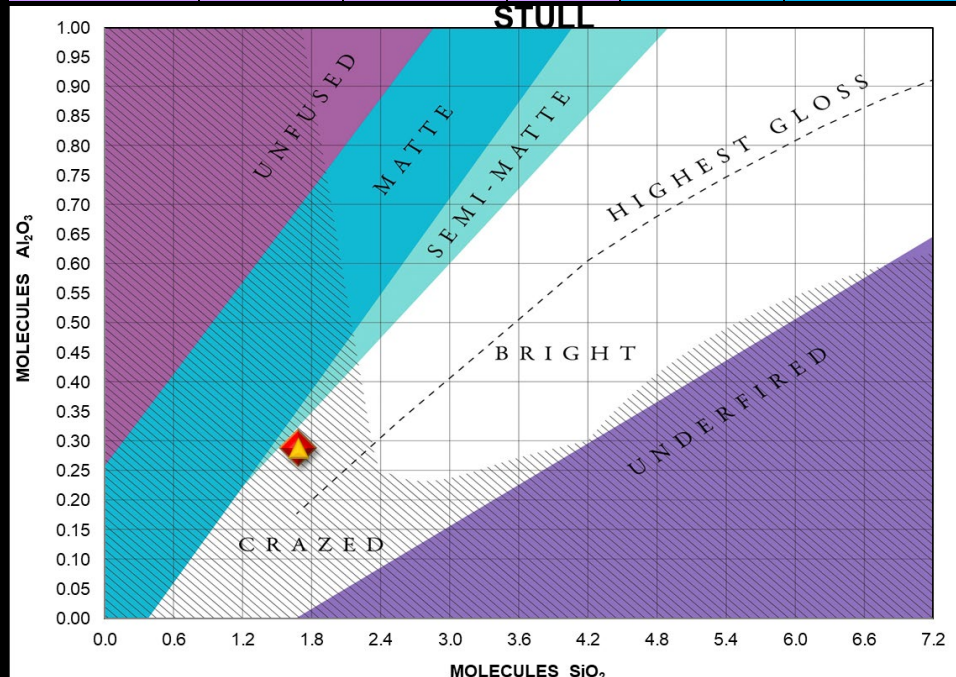
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Copper Oxide-Black

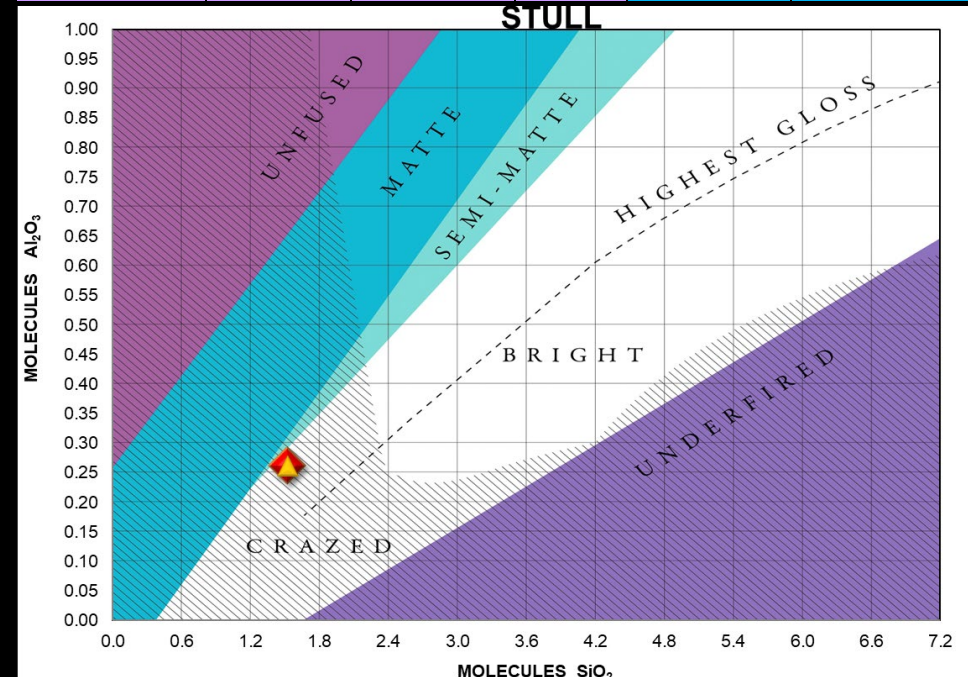
1%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.33		Alkaline Earths 0.67	
SiO ₂ 1.68	Collective "Al ₂ O ₃ " 0.29	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.29	Li ₂ O	CuO 0.11	SrO	BaO 0.66
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



4%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.39		Alkaline Earths 0.61	
SiO ₂ 1.52	Collective "Al ₂ O ₃ " 0.26	Na ₂ O 0.15	K ₂ O 0.04	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.26	Li ₂ O	CuO 0.19	SrO	BaO 0.60
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Red Iron Oxide

Oxidation

Reduction

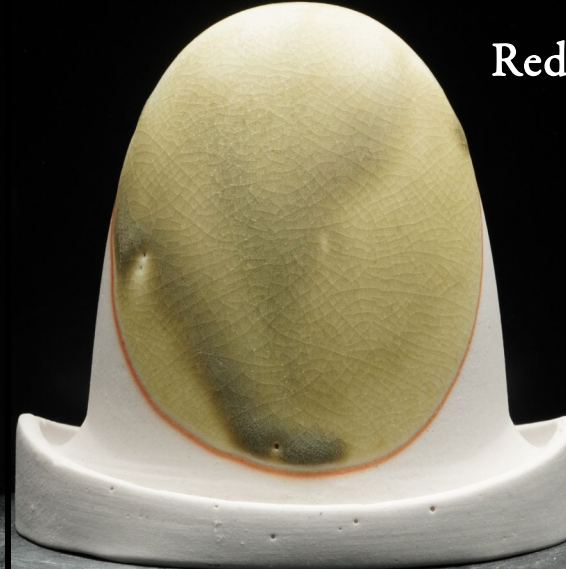
3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



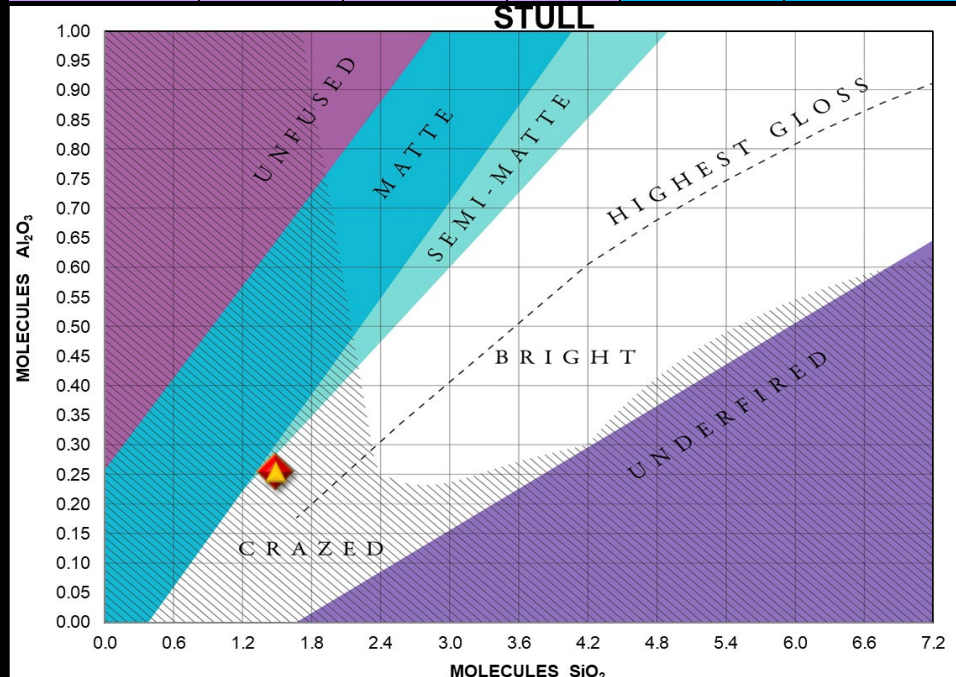
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Red Iron Oxide

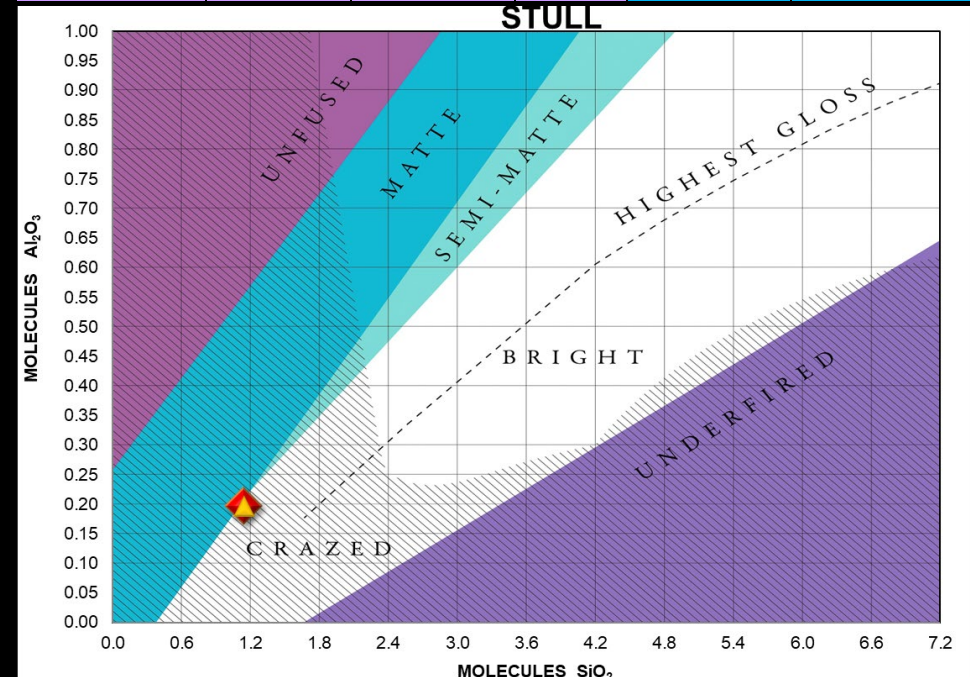
3%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.26		Alkaline Earths 0.74	
SiO ₂ 1.48	Collective "Al ₂ O ₃ " 0.26	Na ₂ O 0.15	K ₂ O 0.04	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.25	Li ₂ O	CuO 0.06	SrO	BaO 0.58
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.15
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 1.14	Collective "Al ₂ O ₃ " 0.20	Na ₂ O 0.12	K ₂ O 0.03	MgO 0.00	CaO 0.00
B ₂ O ₃	Al ₂ O ₃ 0.20	Li ₂ O	CuO 0.05	SrO	BaO 0.45
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



Black Iron Oxide

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



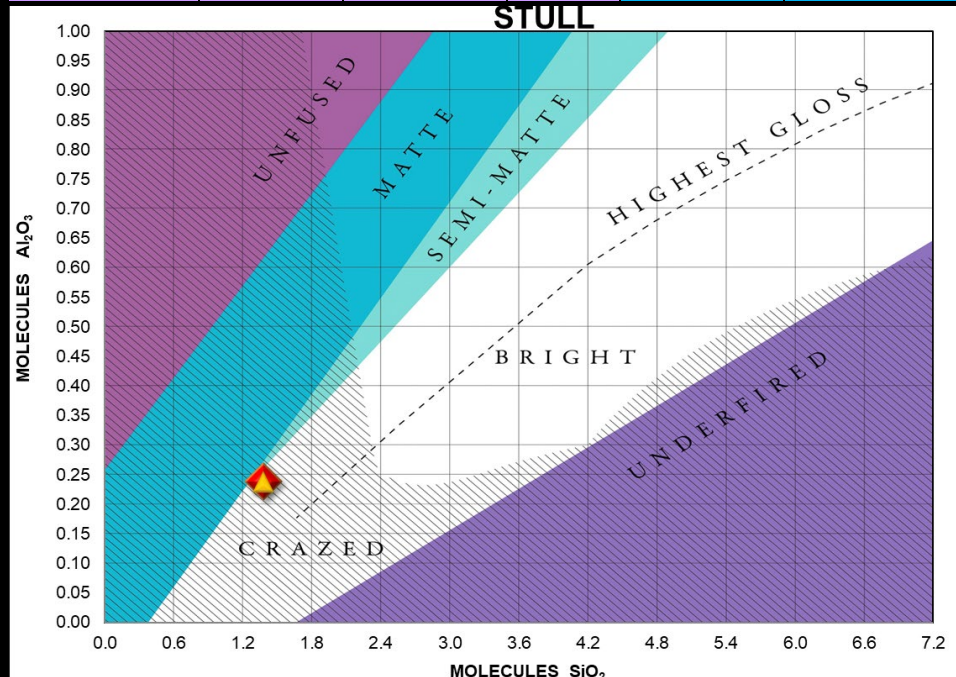
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Black Iron Oxide

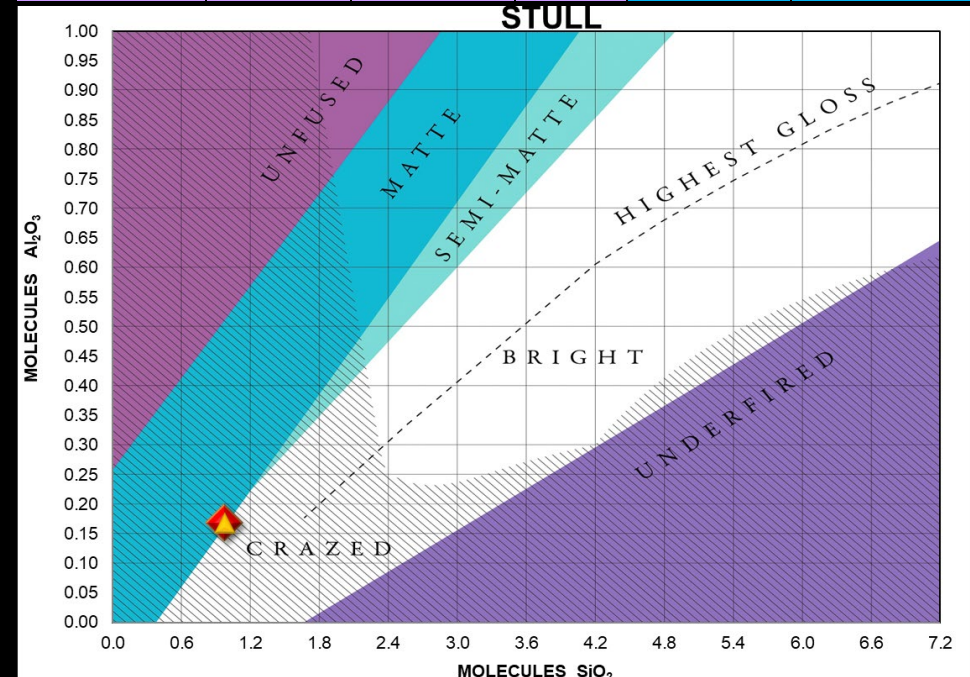
3%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.24		Alkaline Earths 0.76	
SiO ₂ 1.38	Collective "Al ₂ O ₃ " 0.24	Na ₂ O 0.14	K ₂ O 0.04	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.24	Li ₂ O	CuO 0.06	SrO	BaO 0.54
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.21
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.17		Alkaline Earths 0.83	
SiO ₂ 0.98	Collective "Al ₂ O ₃ " 0.17	Na ₂ O 0.10	K ₂ O 0.03	MgO 0.00	CaO 0.00
B ₂ O ₃	Al ₂ O ₃ 0.17	Li ₂ O	CuO 0.04	SrO	BaO 0.38
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.44
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

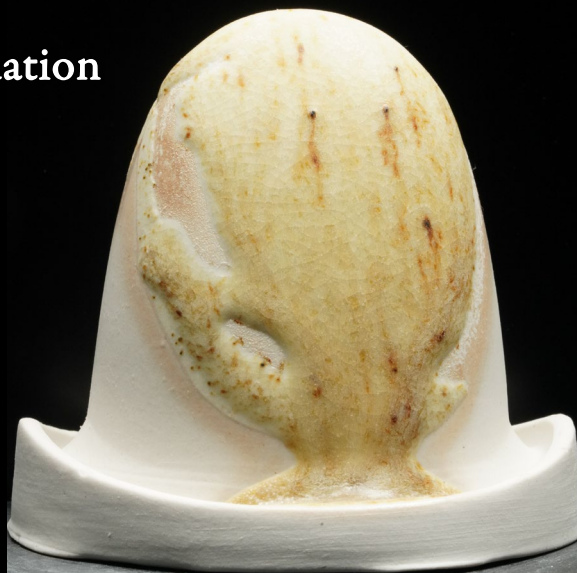


Yellow Iron Oxide

Oxidation

Reduction

3%



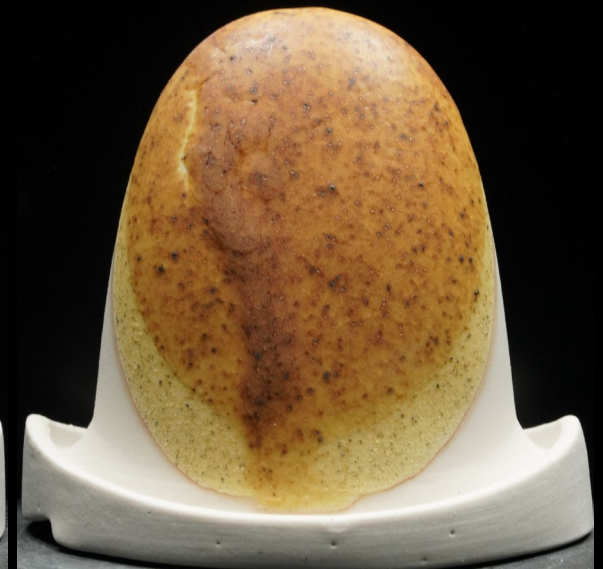
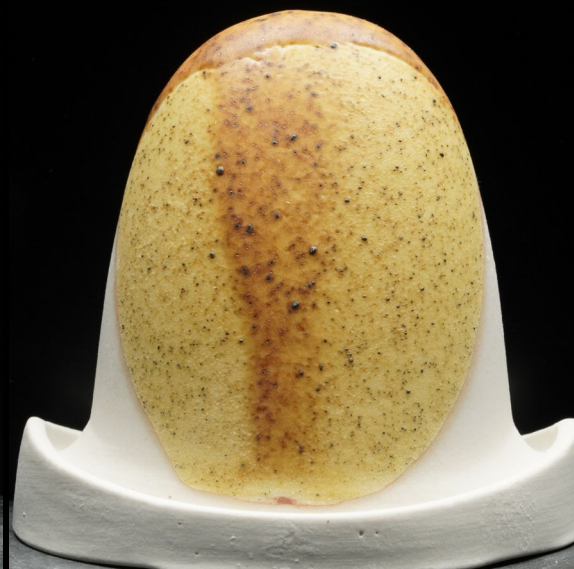
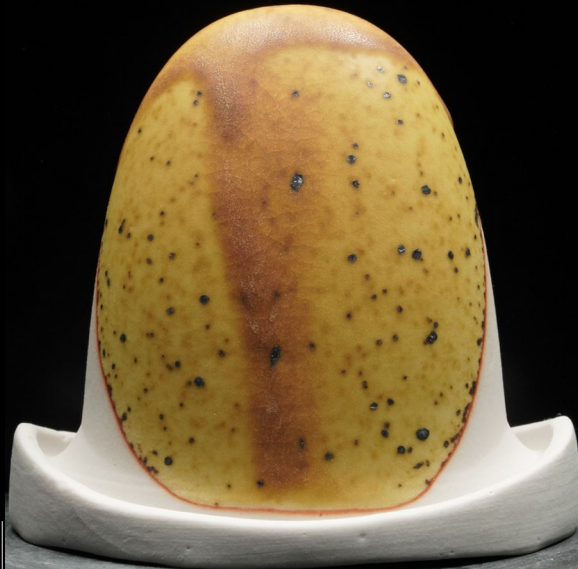
1-3 Second Dip

2-3 Second Dips

1-3 Second Dip

2-3 Second Dips

9%



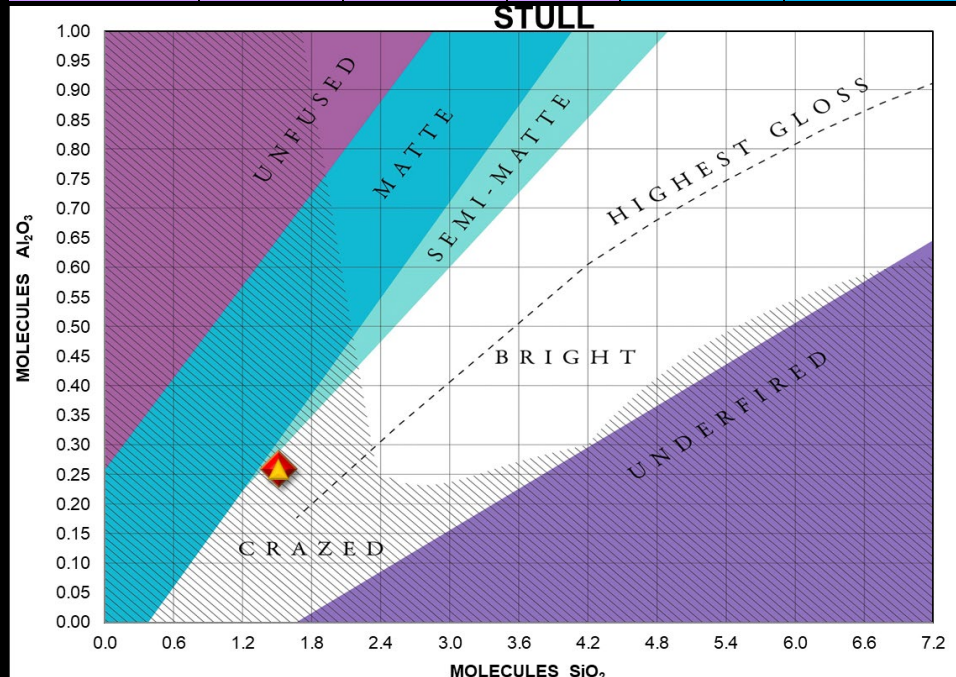
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Yellow Iron Oxide

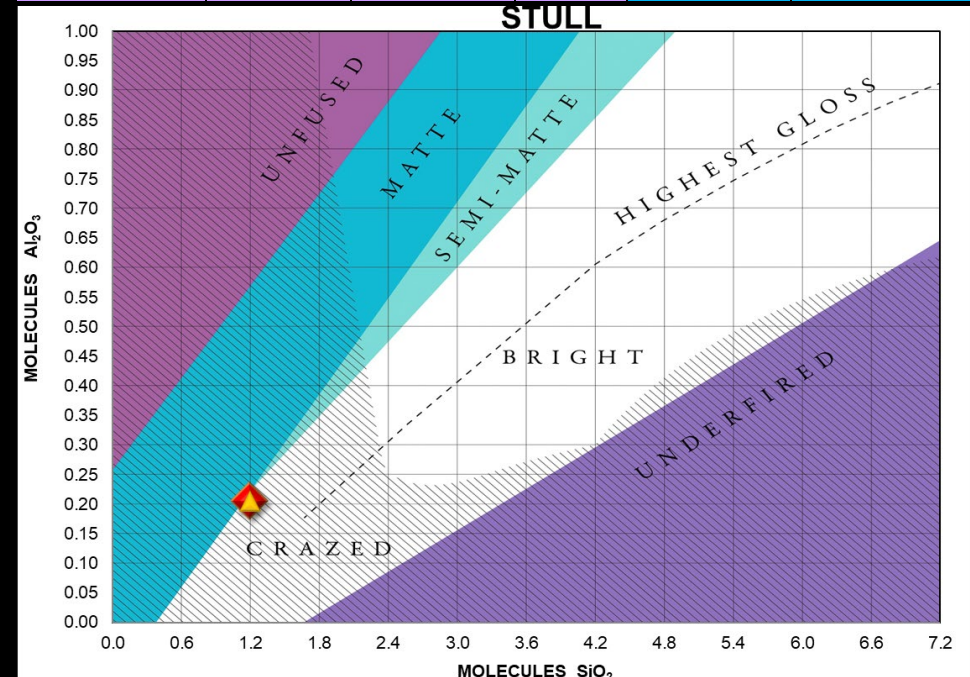
3%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.26		Alkaline Earths 0.74	
SiO ₂ 1.51	Collective "Al ₂ O ₃ " 0.26	Na ₂ O 0.15	K ₂ O 0.04	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.26	Li ₂ O	CuO 0.06	SrO	BaO 0.60
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.14
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.21		Alkaline Earths 0.79	
SiO ₂ 1.19	Collective "Al ₂ O ₃ " 0.21	Na ₂ O 0.12	K ₂ O 0.03	MgO 0.00	CaO 0.00
B ₂ O ₃	Al ₂ O ₃ 0.20	Li ₂ O	CuO 0.05	SrO	BaO 0.47
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.32
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Manganese Dioxide

Oxidation

Reduction

1%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

4%



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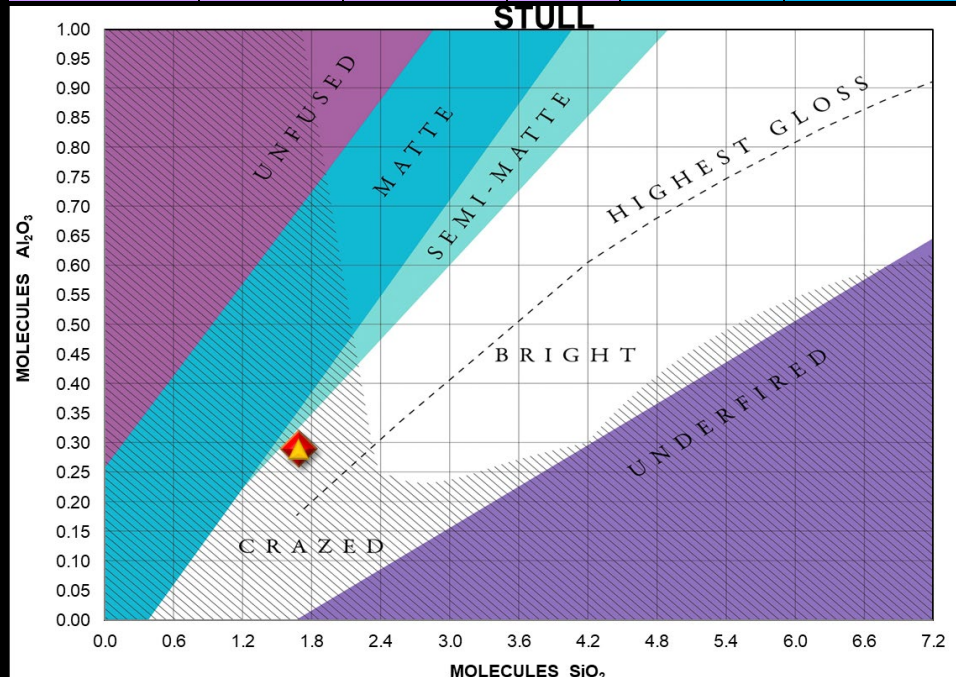
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Manganese Dioxide

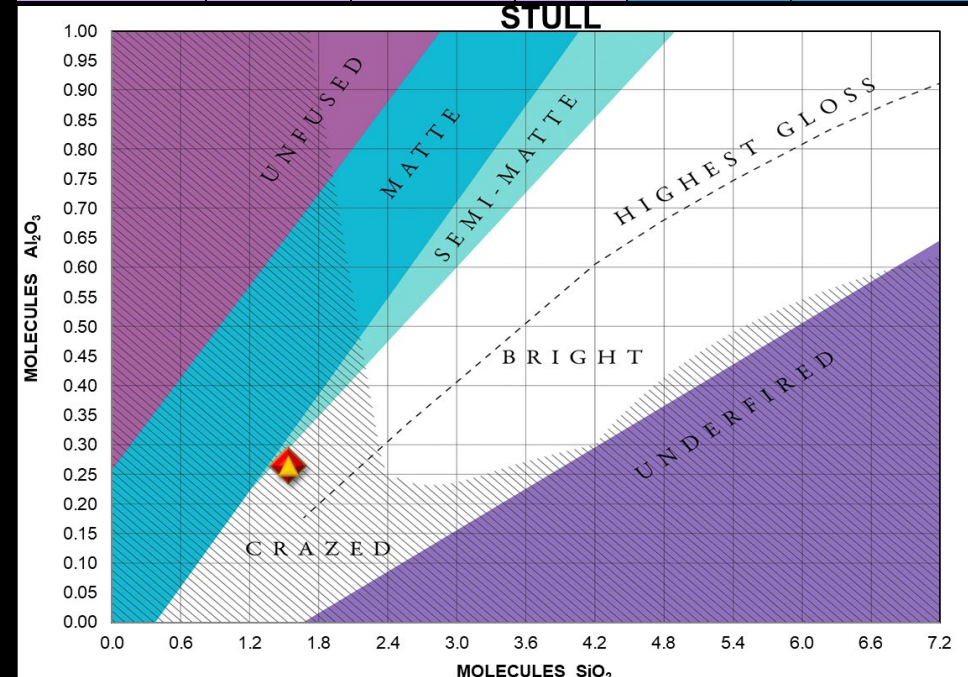
1%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 1.69	Collective "Al ₂ O ₃ " 0.29	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.29	Li ₂ O	CuO	SrO	BaO 0.66
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂ 0.03	CoO



4%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.26		Alkaline Earths 0.74	
SiO ₂ 1.54	Collective "Al ₂ O ₃ " 0.26	Na ₂ O 0.16	K ₂ O 0.04	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.26	Li ₂ O	CuO	SrO	BaO 0.61
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂ 0.12	CoO



Vanadium Pentoxide

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



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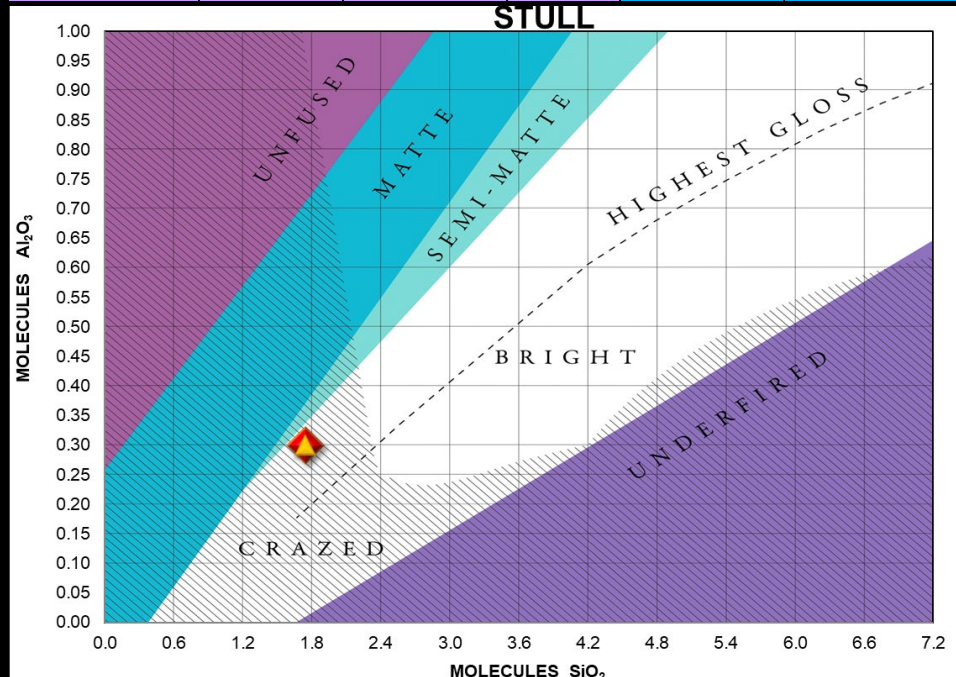
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Vanadium Pentoxide

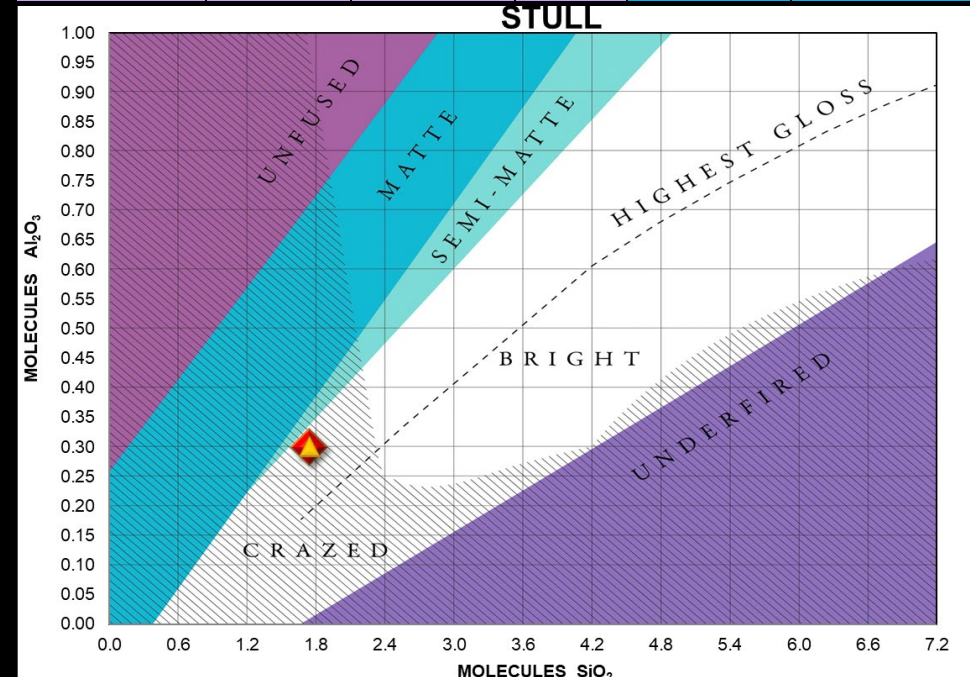
3%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.74	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.74	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Dark Rutile

Oxidation

Reduction

3%



1-3 Second Dip

2-3 Second Dips

1-3 Second Dip

2-3 Second Dips

9%



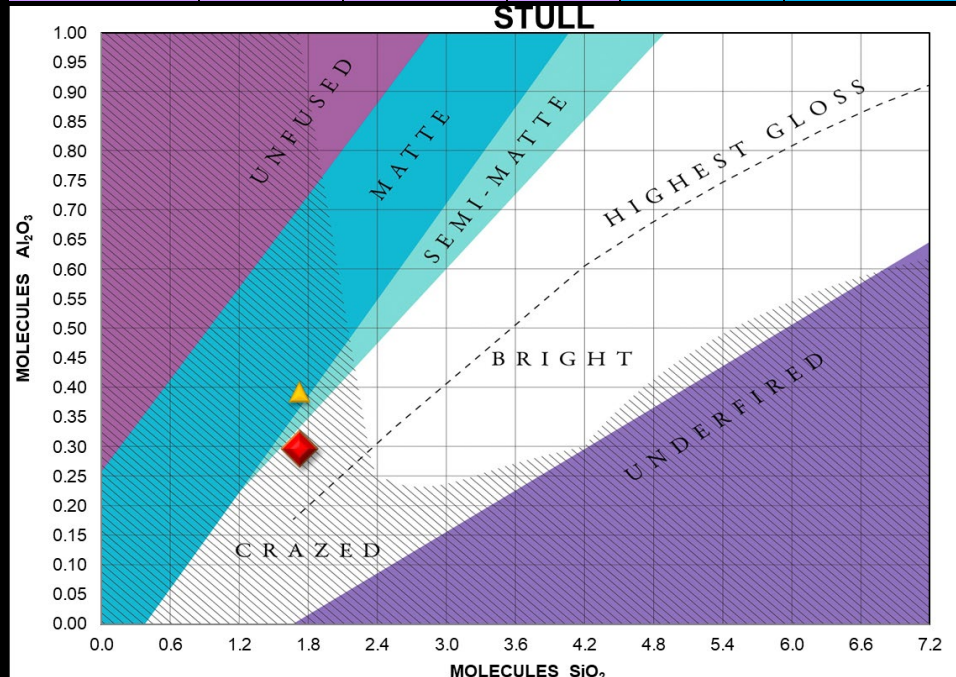
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Dark Rutile

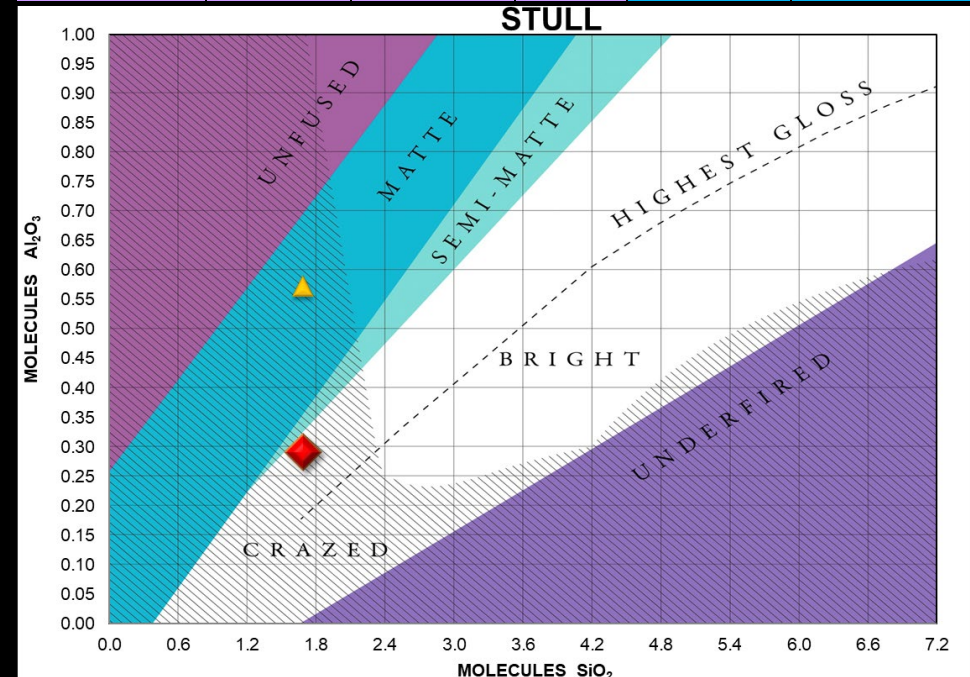
3%

SiO ₂ :Al ₂ O ₃ Ratio 4.39 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.73	Collective "Al ₂ O ₃ " 0.39	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.68
TiO ₂ 0.10	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%

SiO ₂ :Al ₂ O ₃ Ratio 2.95 :1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 1.69	Collective "Al ₂ O ₃ " 0.57	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.29	Li ₂ O	CuO 0.07	SrO	BaO 0.67
TiO ₂ 0.28	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.04
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Light Rutile

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



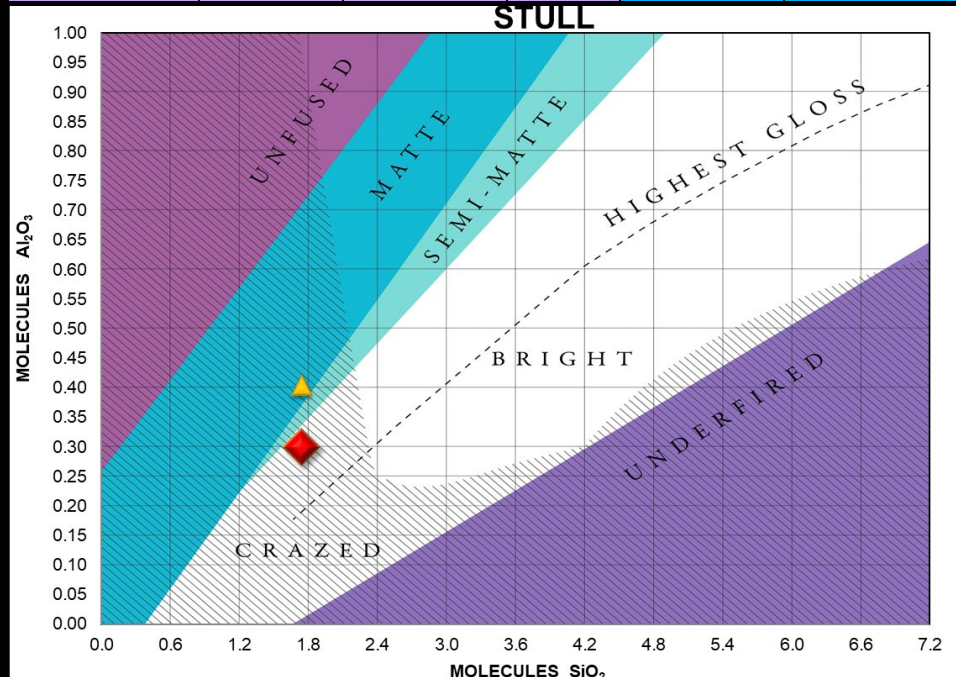
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Light Rutile

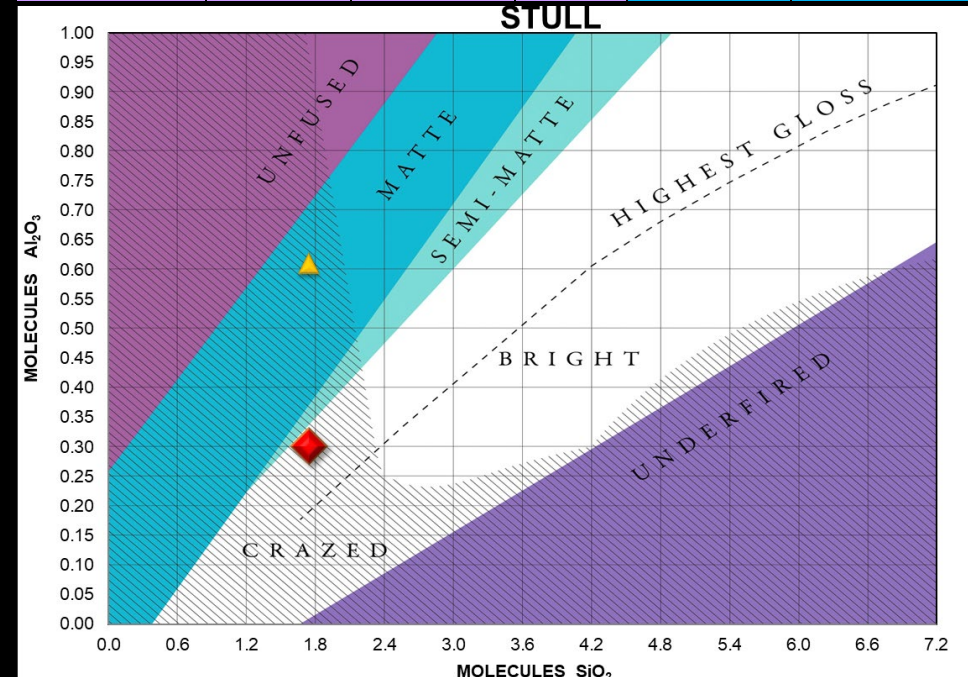
3%

SiO ₂ :Al ₂ O ₃ Ratio 4.31 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.74	Collective "Al ₂ O ₃ " 0.40	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.10	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%

SiO ₂ :Al ₂ O ₃ Ratio 2.85 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.74	Collective "Al ₂ O ₃ " 0.61	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.31	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Titanium Dioxide

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



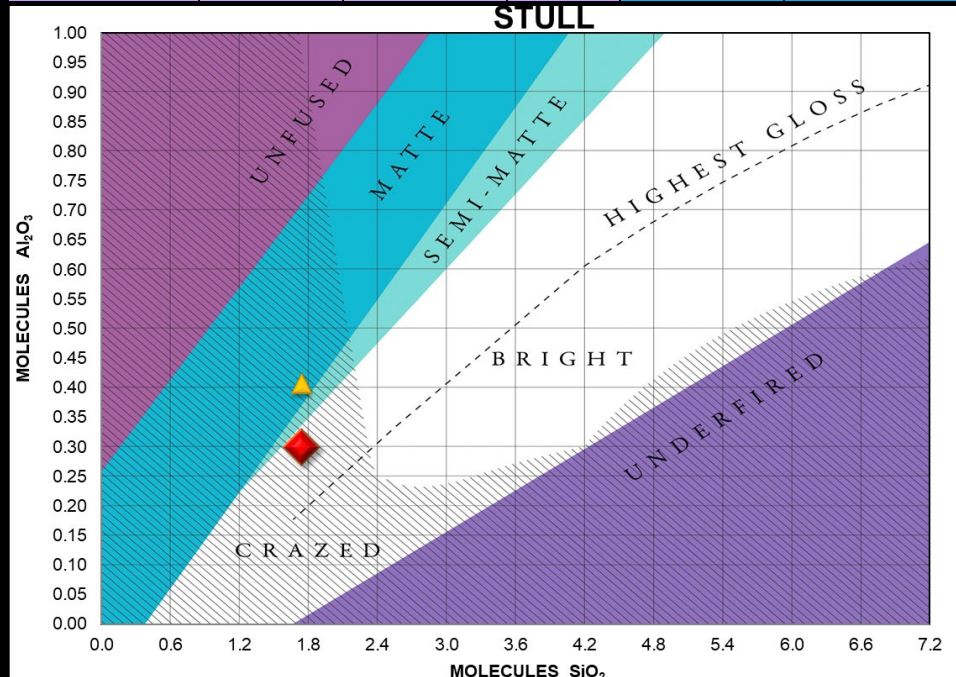
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Titanium Dioxide

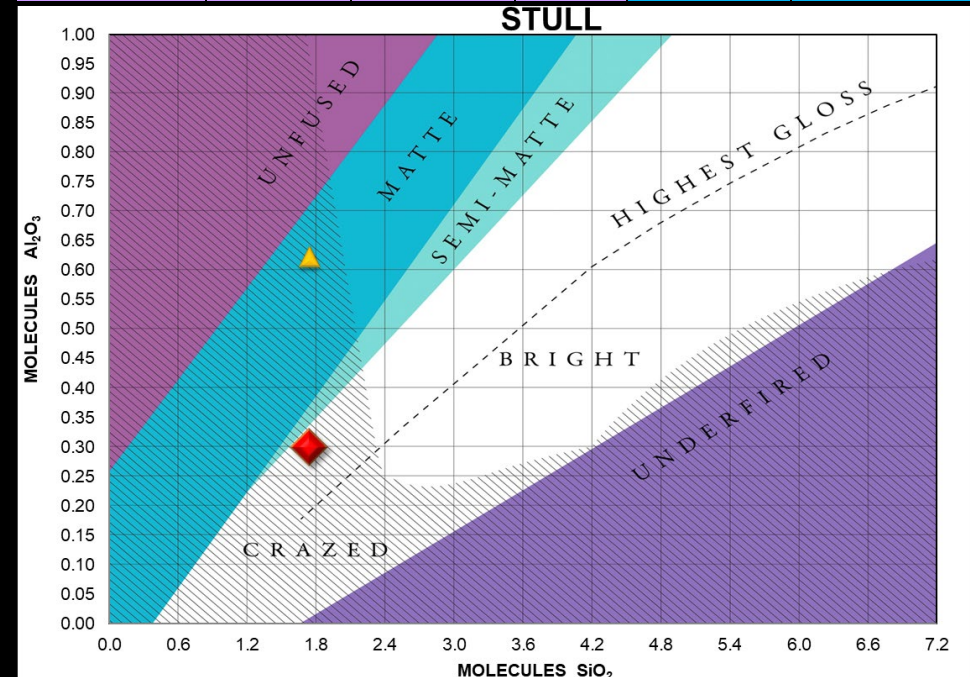
3%

SiO ₂ :Al ₂ O ₃ Ratio 4.27 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.74	Collective "Al ₂ O ₃ " 0.41	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.11	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%

SiO ₂ :Al ₂ O ₃ Ratio 2.79 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.74	Collective "Al ₂ O ₃ " 0.62	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.32	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Nickel Carbonate

Oxidation

Reduction

2%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

6%



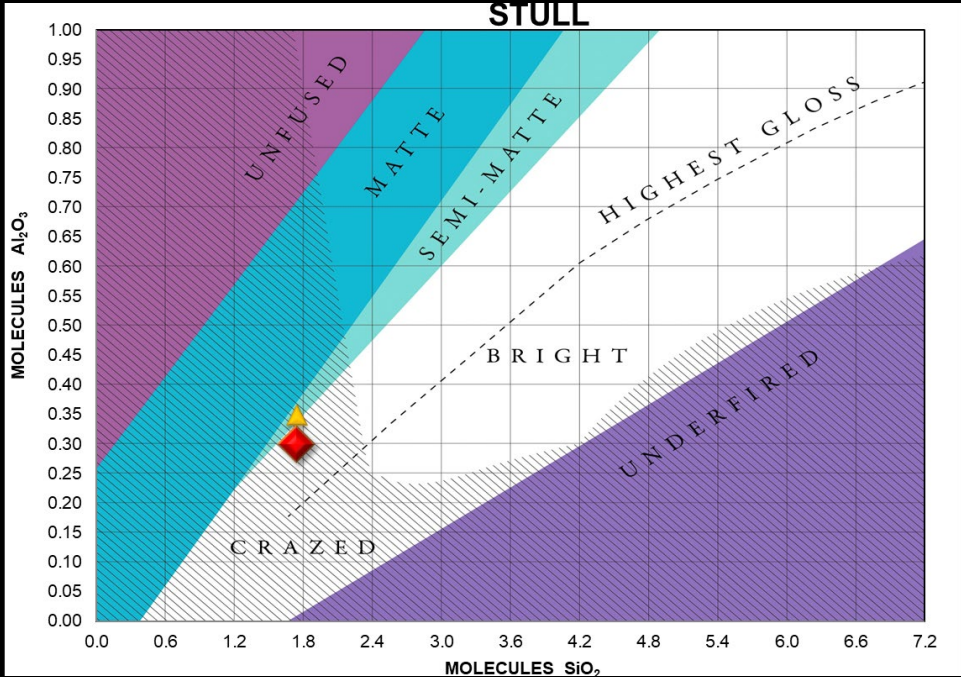
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Nickel Carbonate

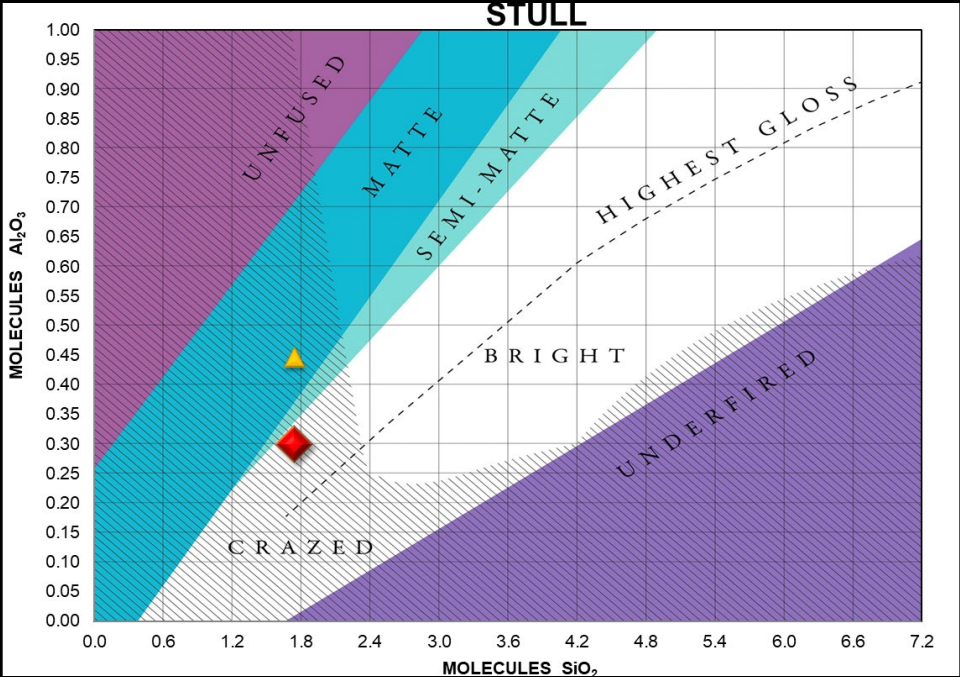
2%

SiO ₂ :Al ₂ O ₃ Ratio 4.99 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.74	Collective "Al ₂ O ₃ " 0.35	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.00	NiO 0.05	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



6%

SiO ₂ :Al ₂ O ₃ Ratio 3.90 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.74	Collective "Al ₂ O ₃ " 0.45	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.00	NiO 0.15	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Nickel Oxide-Black

Oxidation

Reduction

2%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

6%



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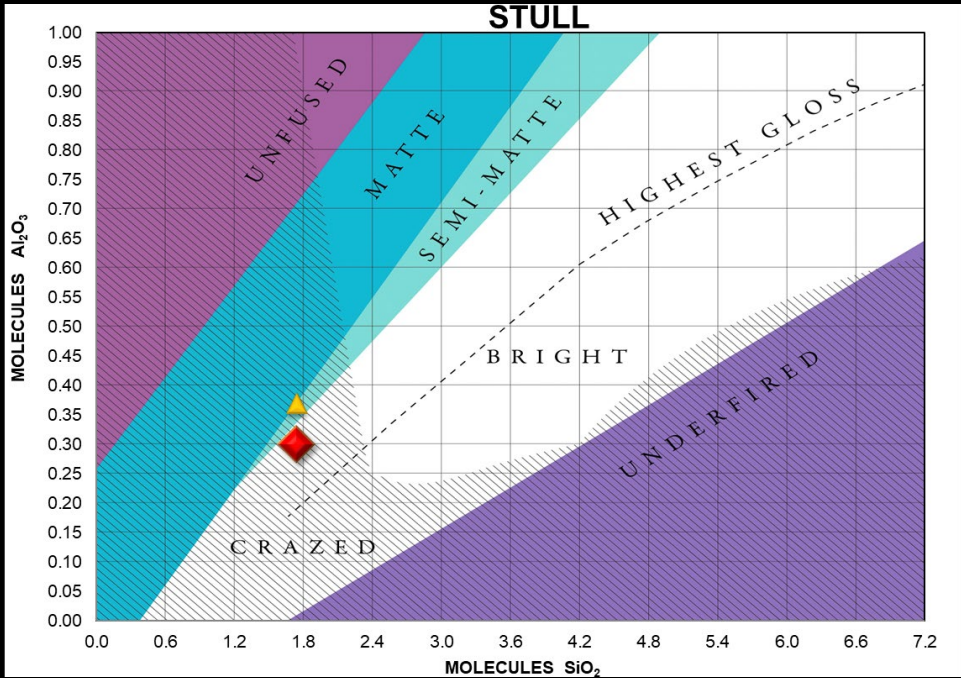
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Nickel Oxide-Black

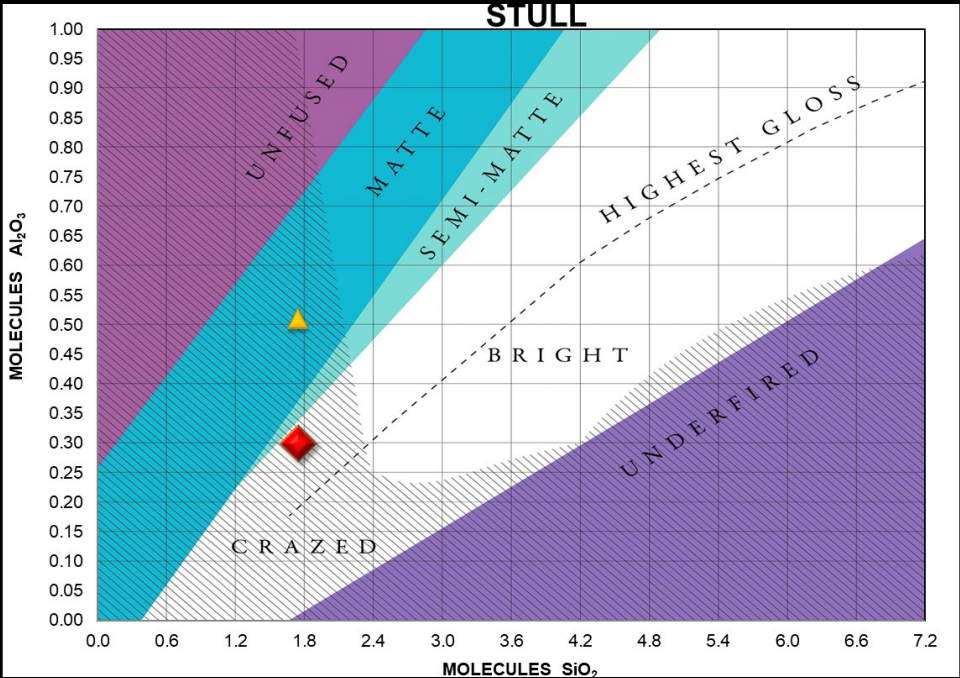
2%

SiO ₂ :Al ₂ O ₃ Ratio 4.71 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.74	Collective "Al ₂ O ₃ " 0.37	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.00	NiO 0.07	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



6%

SiO ₂ :Al ₂ O ₃ Ratio 3.41 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.74	Collective "Al ₂ O ₃ " 0.51	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.00	NiO 0.21	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Tin Oxide

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

6%



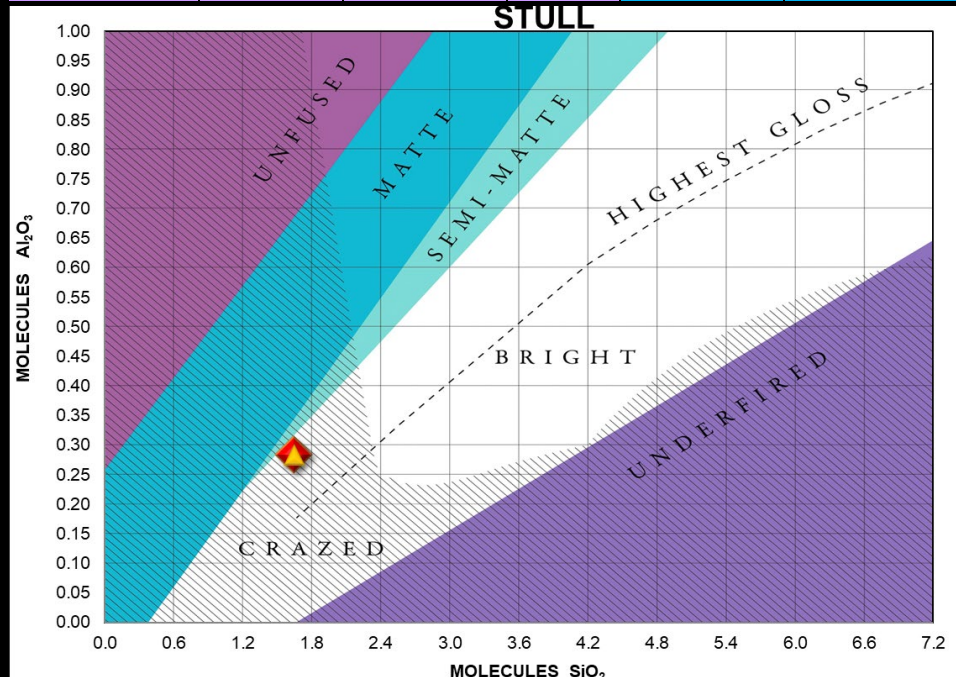
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Tin Oxide

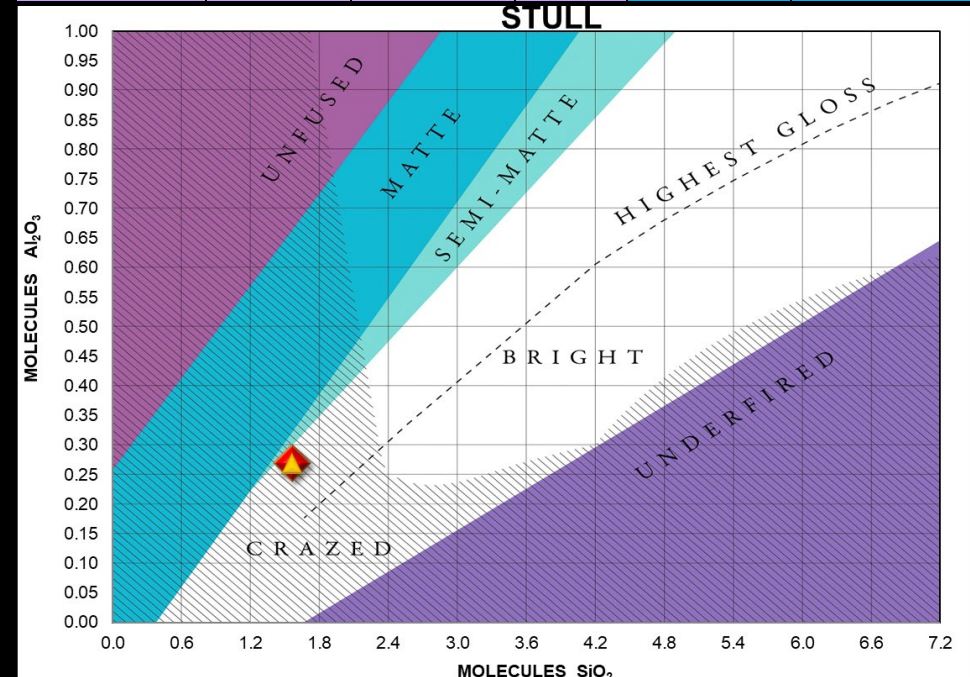
3%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.34		Alkaline Earths 0.66	
SiO ₂ 1.65	Collective "Al ₂ O ₃ " 0.28	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.28	Li ₂ O	CuO	SrO	BaO 0.65
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂ 0.05	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



6%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.37		Alkaline Earths 0.63	
SiO ₂ 1.56	Collective "Al ₂ O ₃ " 0.27	Na ₂ O 0.16	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.27	Li ₂ O	CuO	SrO	BaO 0.62
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂ 0.10	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Zirconium Silicate

Oxidation

Reduction

5%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

10%



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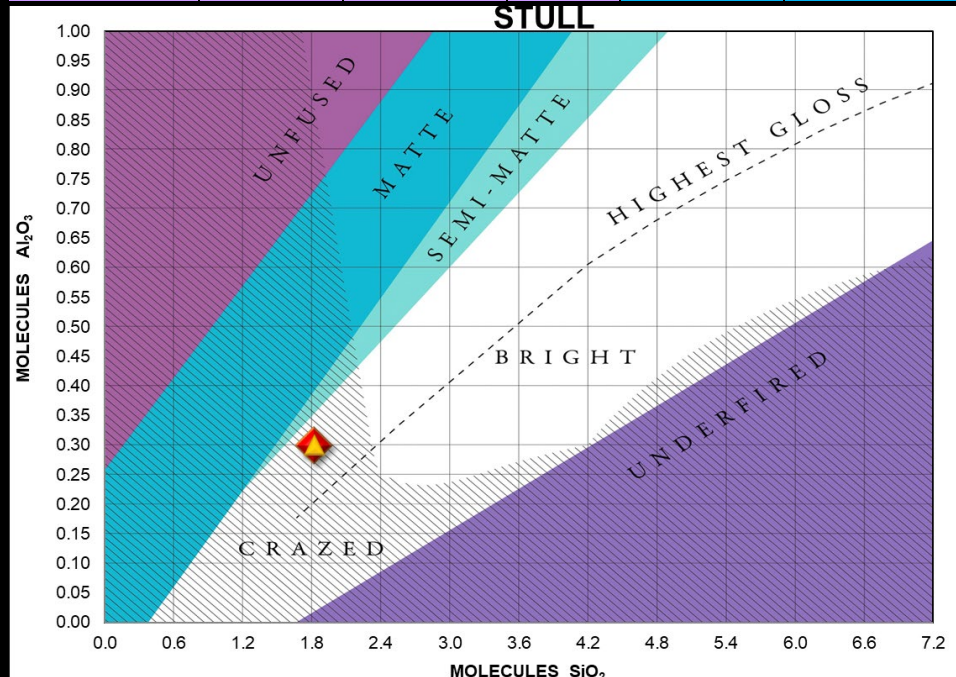
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Zirconium Silicate

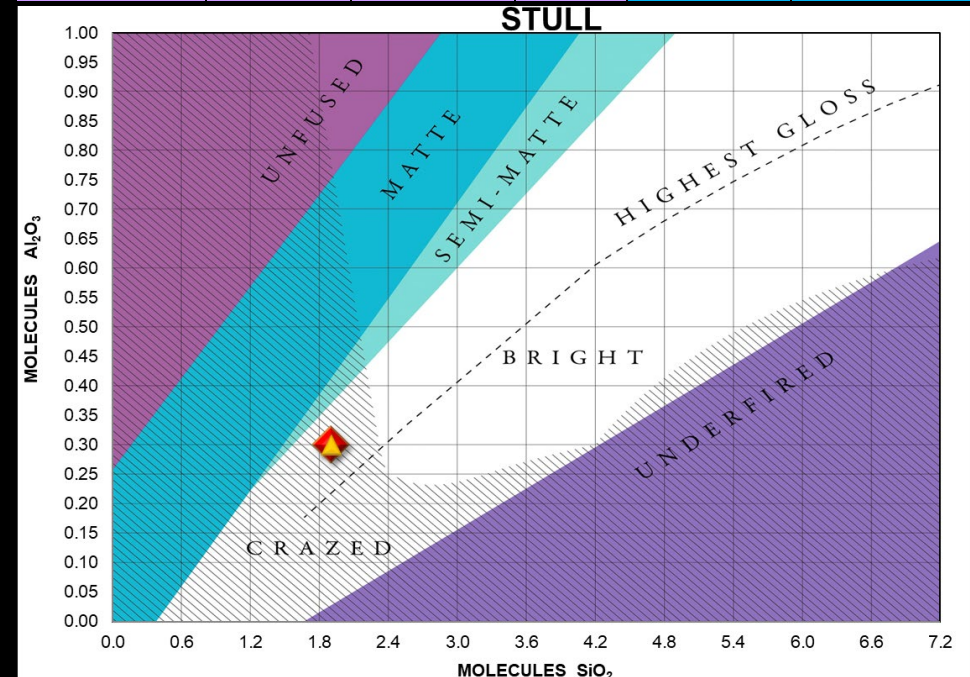
5%

SiO ₂ :Al ₂ O ₃ Ratio 6.07 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.82	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



10%

SiO ₂ :Al ₂ O ₃ Ratio 6.33 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.90	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Stain Dark Red 6021

Oxidation

Reduction

5%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

10%



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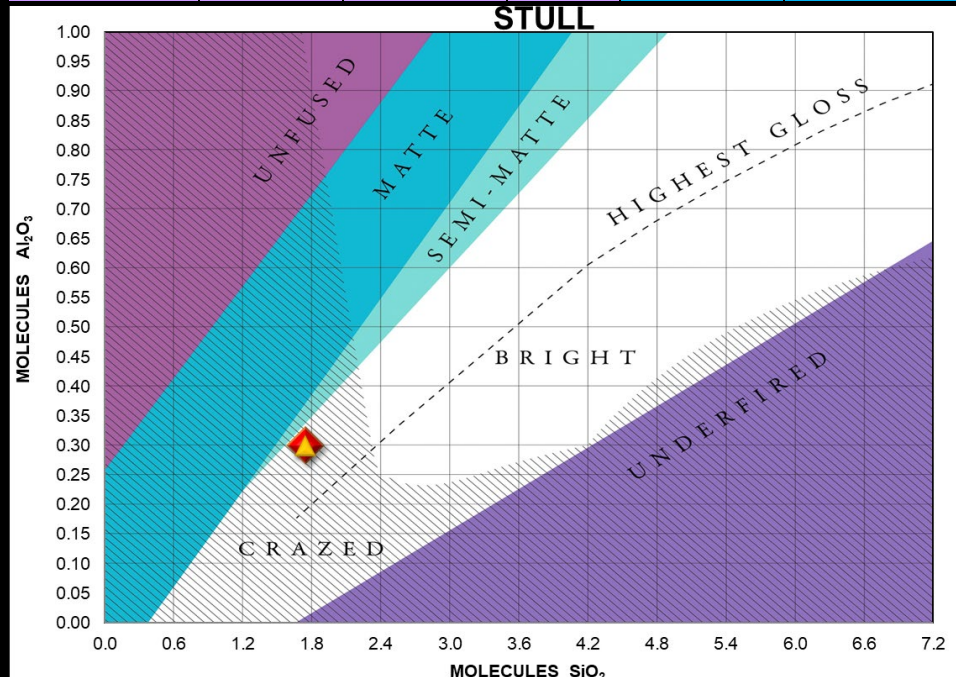
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Stain Dark Red 6021

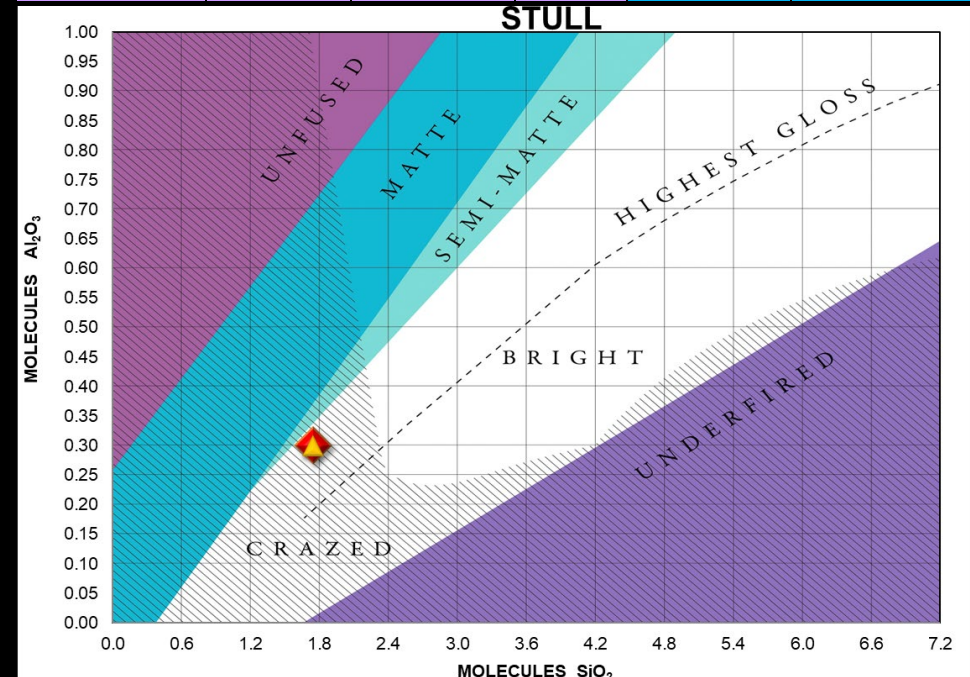
5%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.74	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



10%

SiO ₂ :Al ₂ O ₃ Ratio 5.80 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.74	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Silicon Carbide-30 Mesh

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



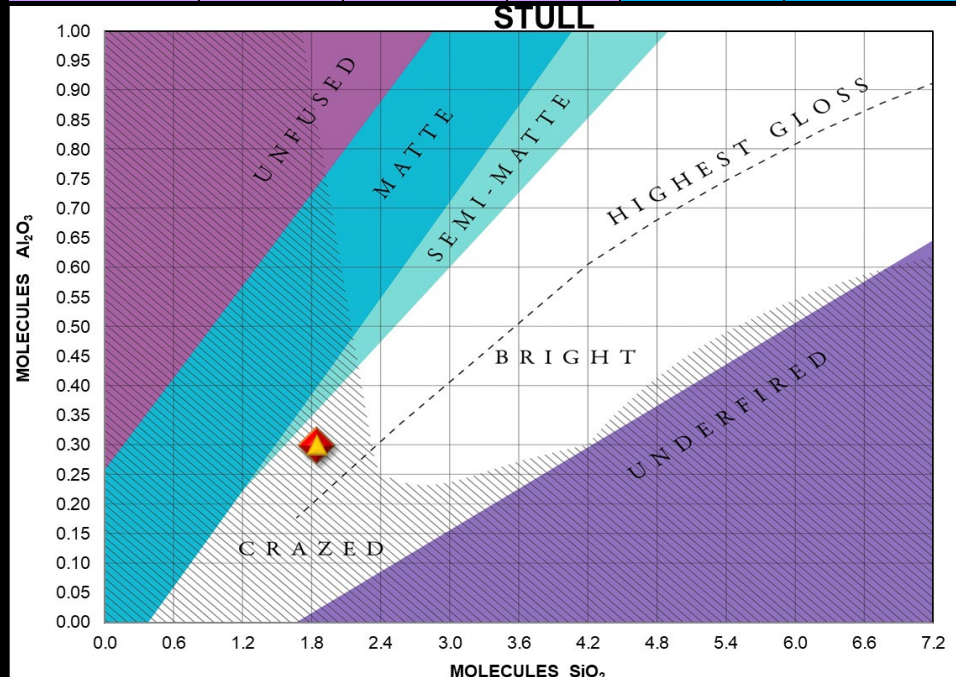
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Silicon Carbide-30 Mesh

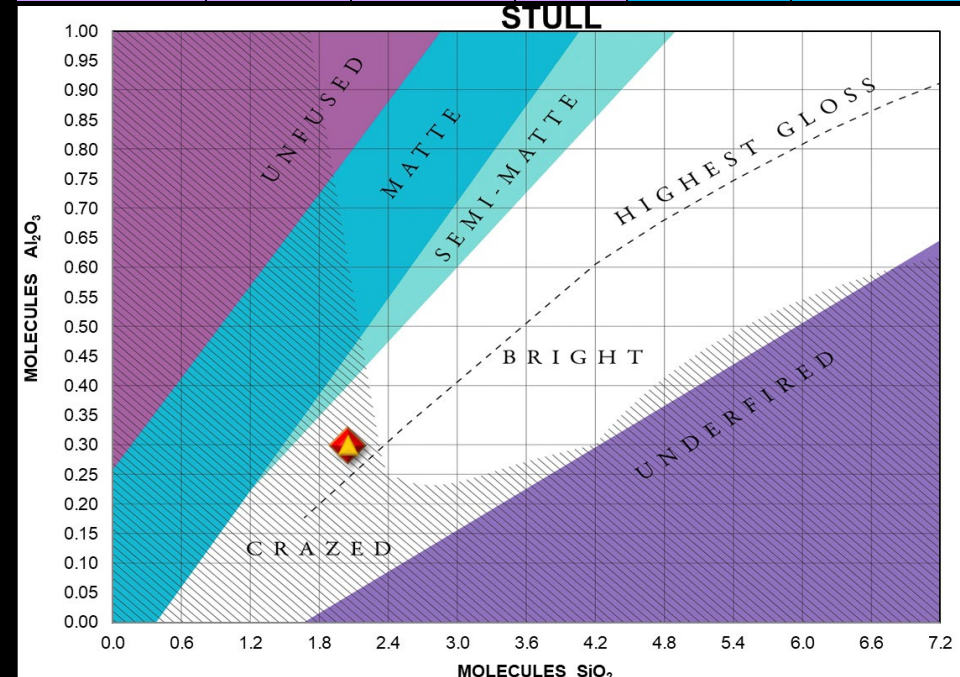
3%

SiO ₂ :Al ₂ O ₃ Ratio 6.14 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.85	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO	SrO	BaO 0.69
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%

SiO ₂ :Al ₂ O ₃ Ratio 6.82 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 2.05	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO	SrO	BaO 0.69
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Silicon Carbide-800 Mesh

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



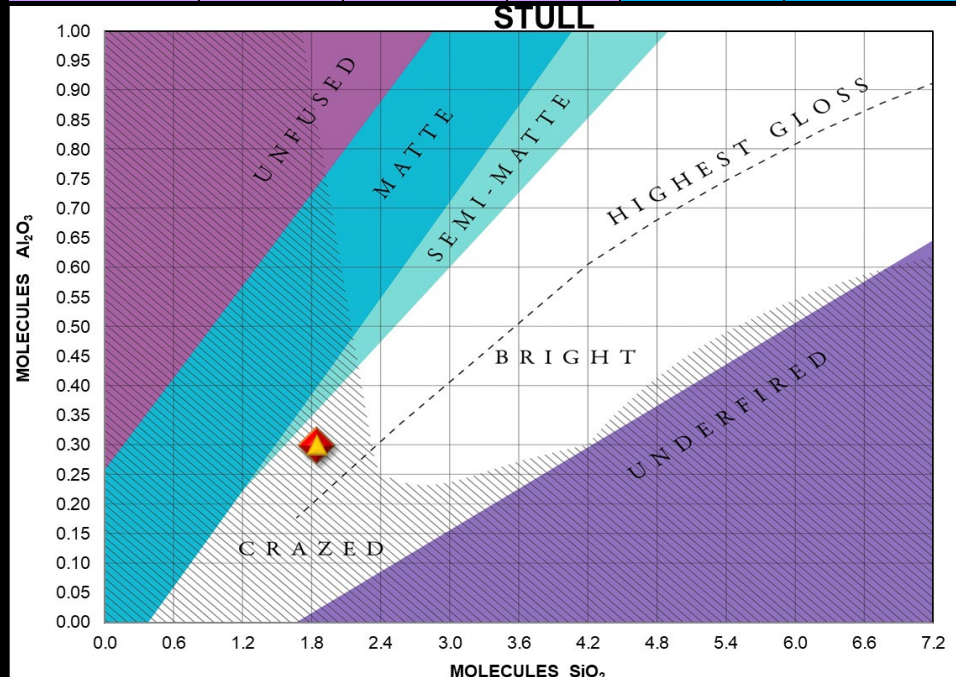
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Silicon Carbide-800 Mesh

3%

SiO ₂ :Al ₂ O ₃ Ratio 6.14 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.85	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%

SiO ₂ :Al ₂ O ₃ Ratio 6.82 :1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 2.05	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.18	K ₂ O 0.05	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO 0.07	SrO	BaO 0.69
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

