

Tangerine- Δ 6

Lab 5a-Color Wheel

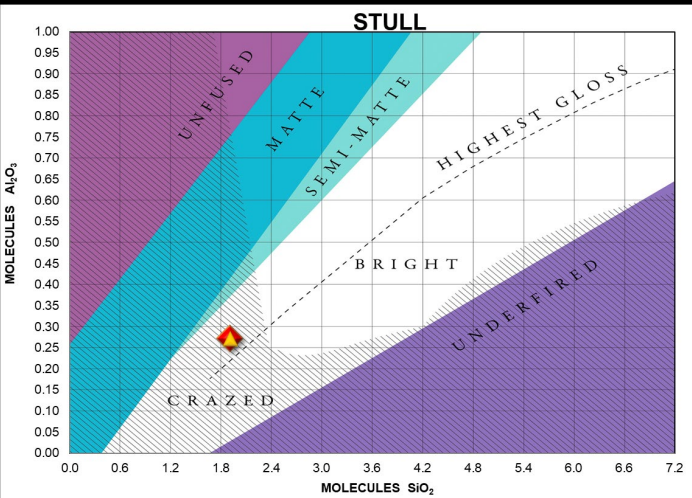


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UMF

SiO ₂ :Al ₂ O ₃ Ratio 7.03 : 1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.09	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
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 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 7.03 : 1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 1.91	Collective "Al ₂ O ₃ " 0.27	Na ₂ O 0.16	K ₂ O 0.05	MgO 0.00	CaO 0.39
B ₂ O ₃	Al ₂ O ₃ 0.27	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.32	FeO 0.09
Cr ₂ O ₃ 0.00	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

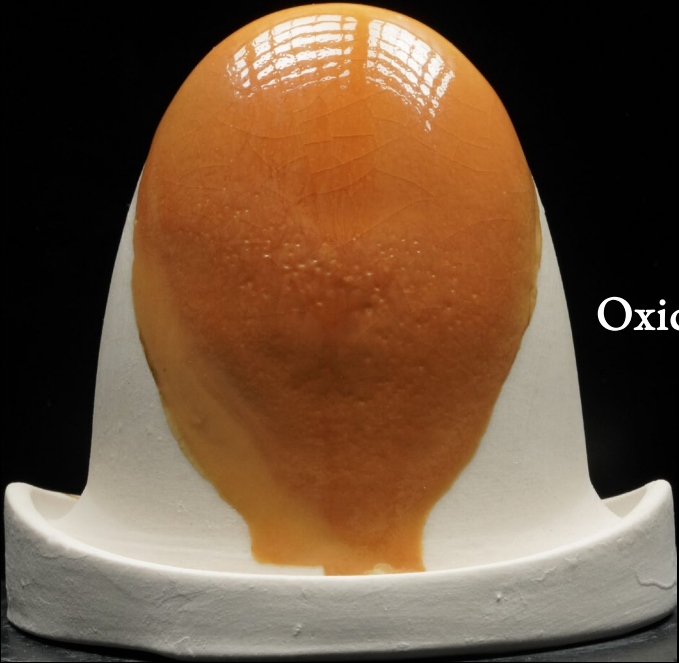


Tangerine

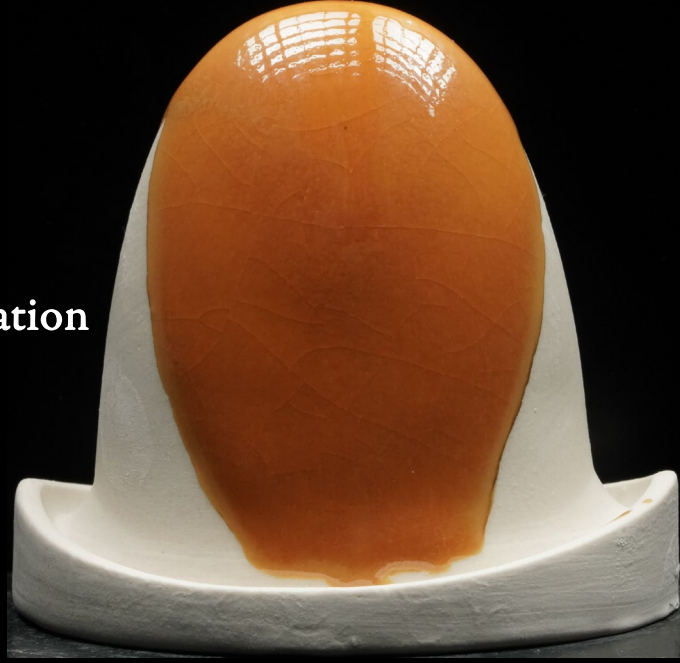
Original

071122-1

Neph Sy	42.25
Whiting	17.13
Zinc Oxide	11.42
EPK	7.99
Flint	21.20
Chrome Oxide	0.20
Red Iron Oxide	1.84
Water	60



1-3 Second Dip



2-3 Second Dips

Oxidation



Reduction



Chrome Oxide

0.5%

Oxidation

Reduction

1-3 Second Dip

2-3 Second Dips

1-3 Second Dip

2-3 Second Dips

2%



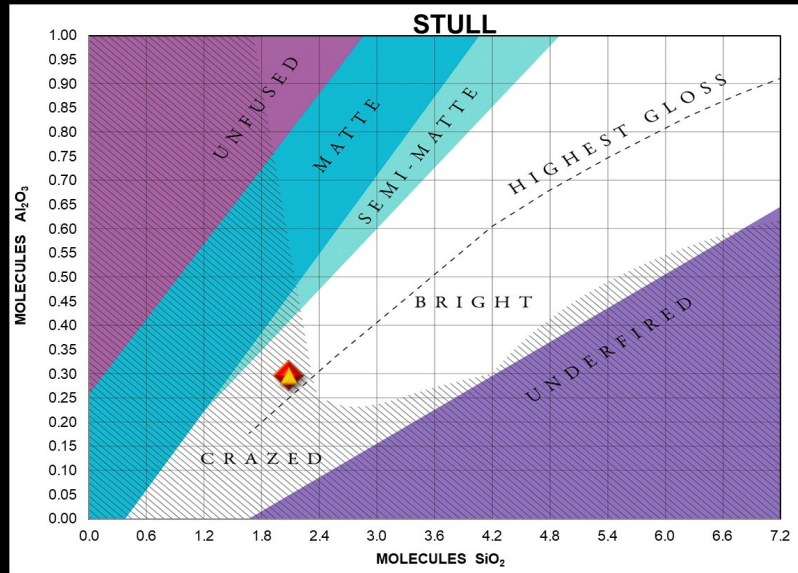
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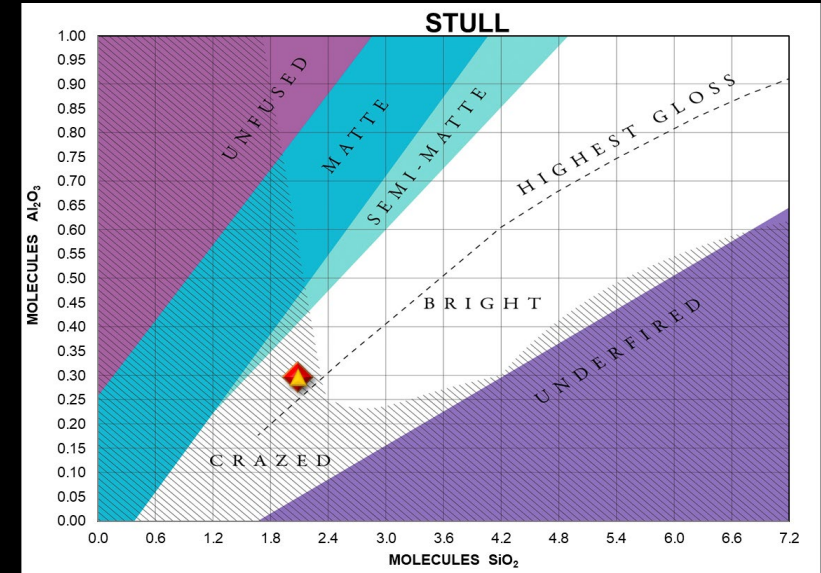
Chrome Oxide

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.09	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
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 0.34	FeO 0.00
Cr ₂ O ₃ 0.01	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

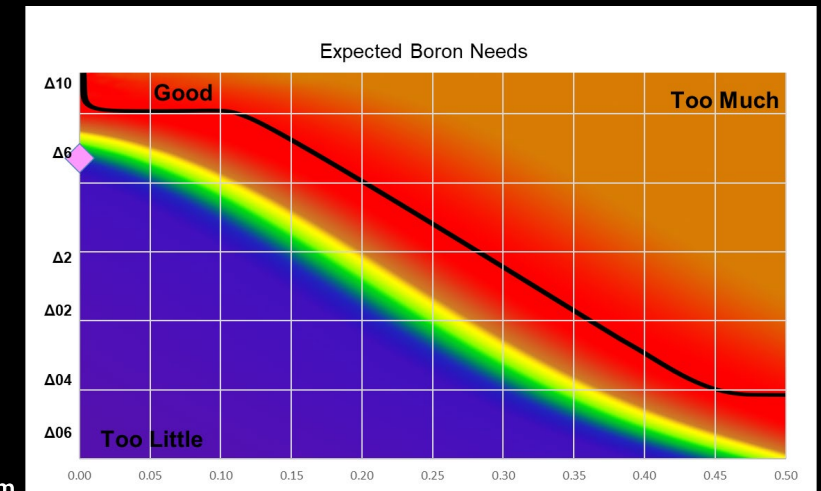


0.5%

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.09	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
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 0.34	FeO 0.00
Cr ₂ O ₃ 0.03	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



2%



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Cobalt Carbonate

0.5%

Oxidation

Reduction

1-3 Second Dip

2-3 Second Dips

1-3 Second Dip

2-3 Second Dips

2%



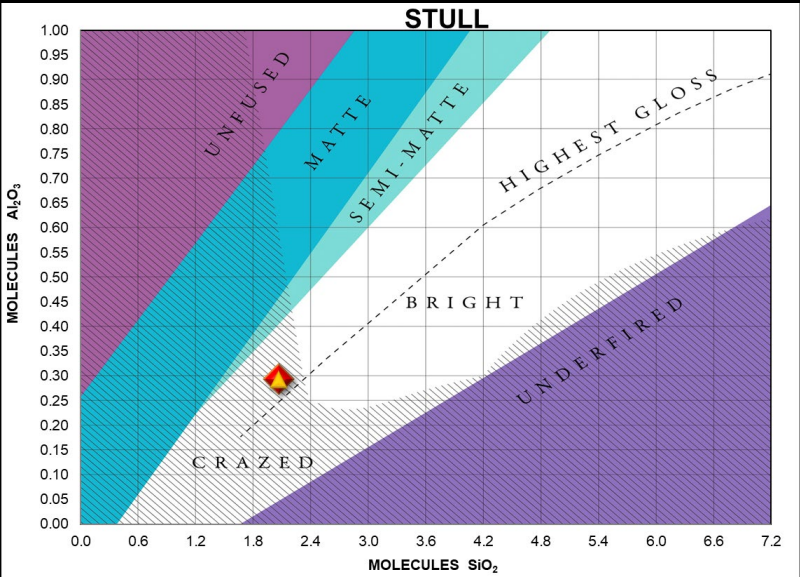
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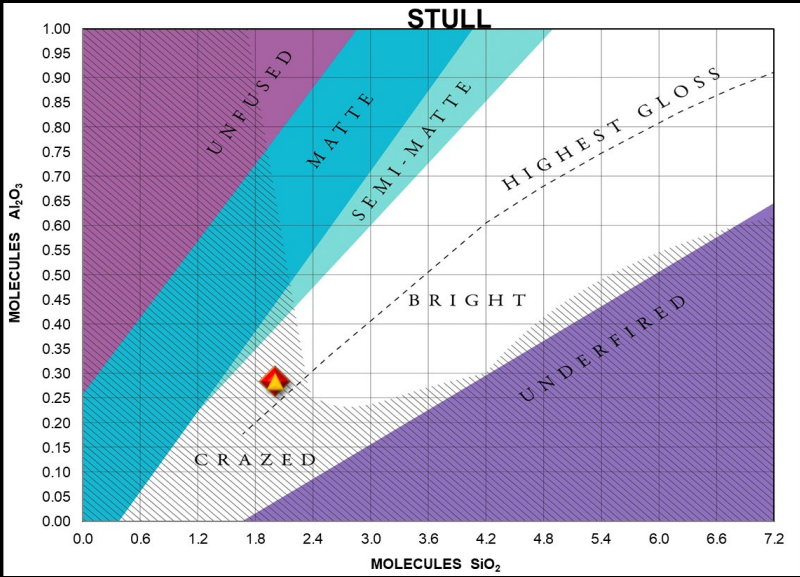
Cobalt Carbonate

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.06	Collective "Al ₂ O ₃ " 0.29	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.42
B ₂ O ₃	Al ₂ O ₃ 0.29	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.01

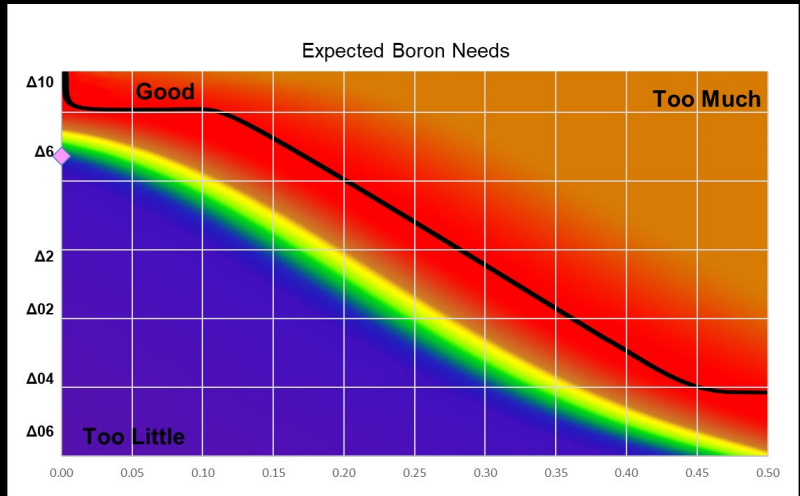
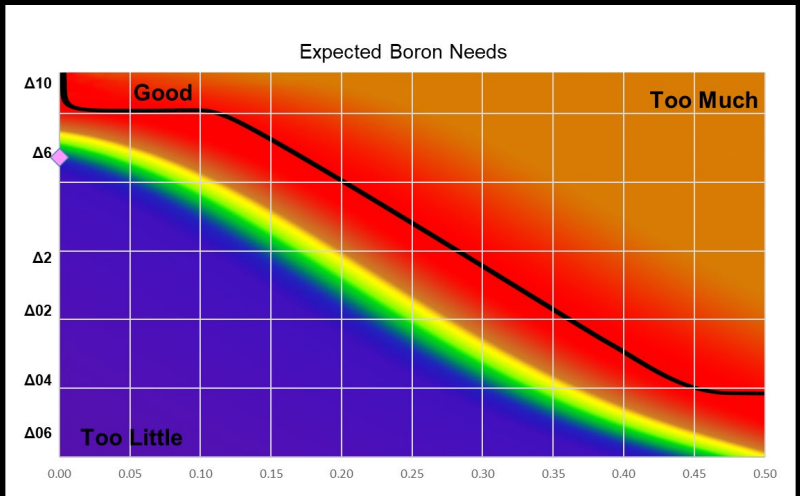


0.5%

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.21		Alkaline Earths 0.79	
SiO ₂ 2.00	Collective "Al ₂ O ₃ " 0.29	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.41
B ₂ O ₃	Al ₂ O ₃ 0.28	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.33	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04



2%



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Cobalt Oxide

0.5%

Oxidation

Reduction

1-3 Second Dip

2-3 Second Dips

1-3 Second Dip

2-3 Second Dips

2%



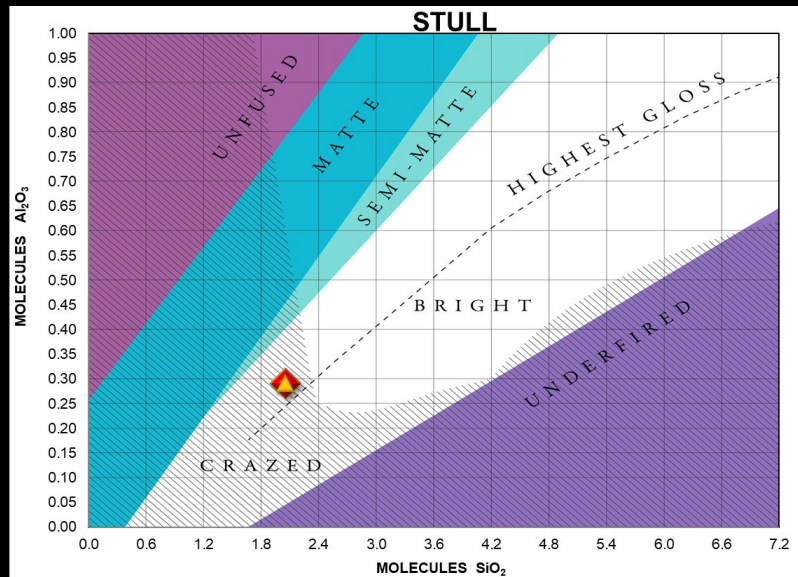
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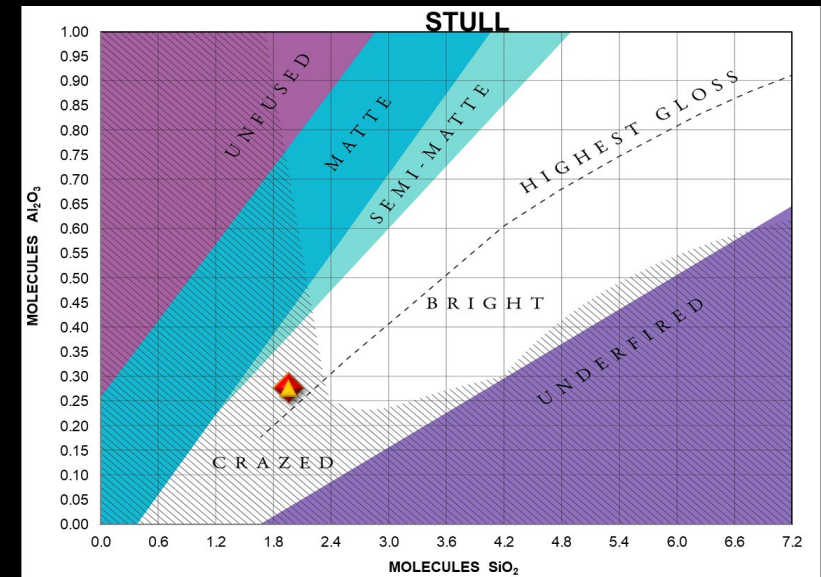
Cobalt Oxide

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.05	Collective "Al ₂ O ₃ " 0.29	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.42
B ₂ O ₃	Al ₂ O ₃ 0.29	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.02

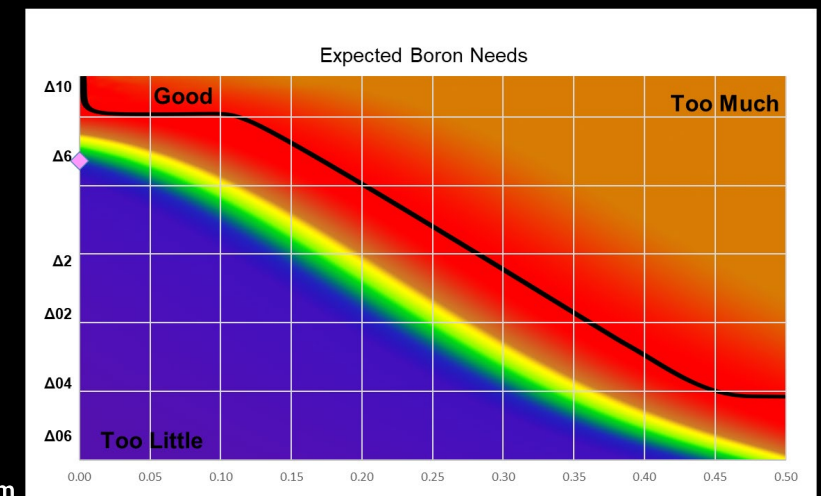


0.5%

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.21		Alkaline Earths 0.79	
SiO ₂ 1.96	Collective "Al ₂ O ₃ " 0.28	Na ₂ O 0.16	K ₂ O 0.05	MgO 0.00	CaO 0.40
B ₂ O ₃	Al ₂ O ₃ 0.28	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.32	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.06



2%



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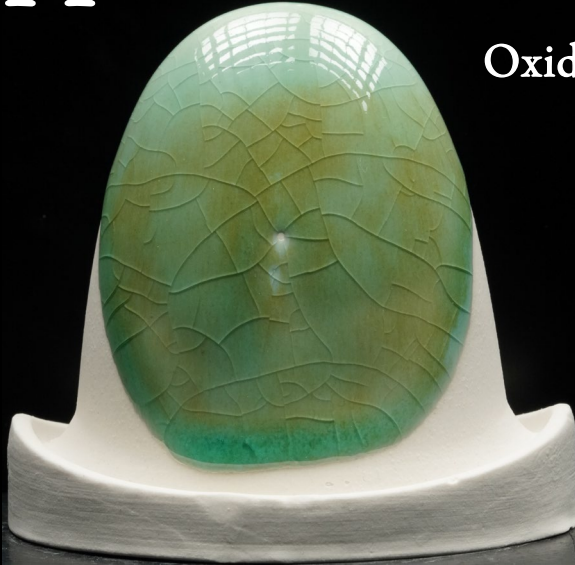
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Copper Carbonate

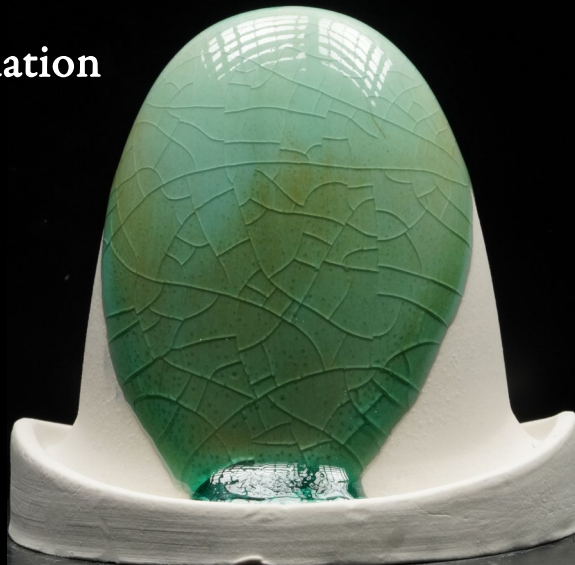
Oxidation

Reduction

1%



1-3 Second Dip



2-3 Second Dips

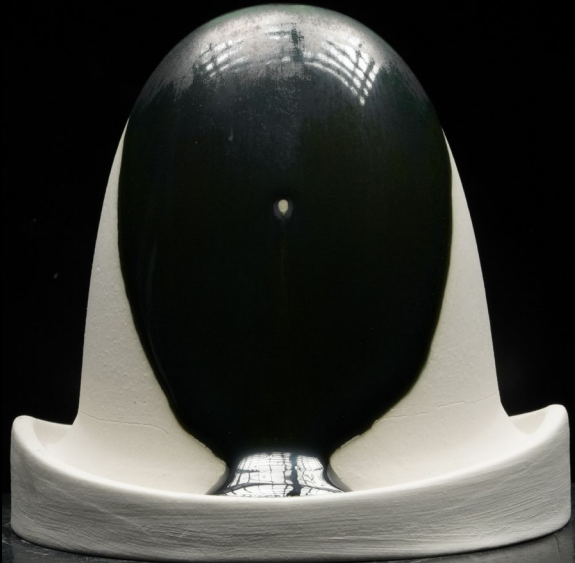


1-3 Second Dip



2-3 Second Dips

4%



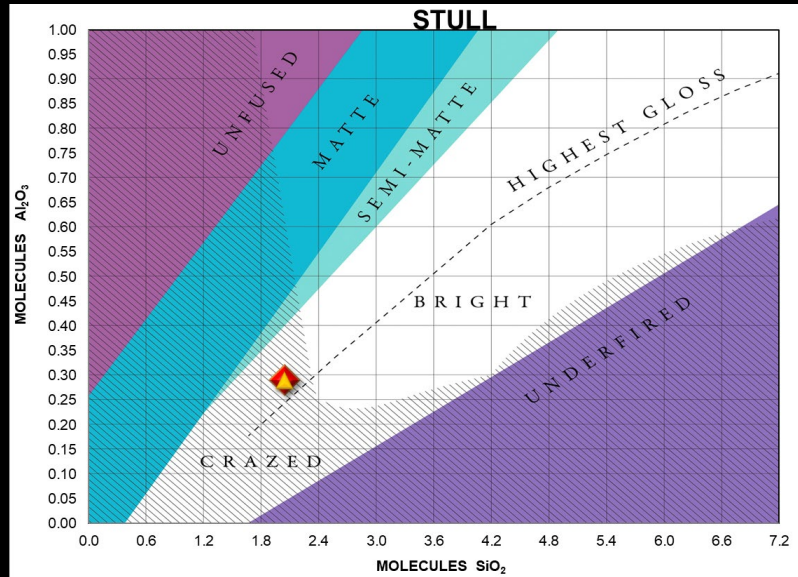
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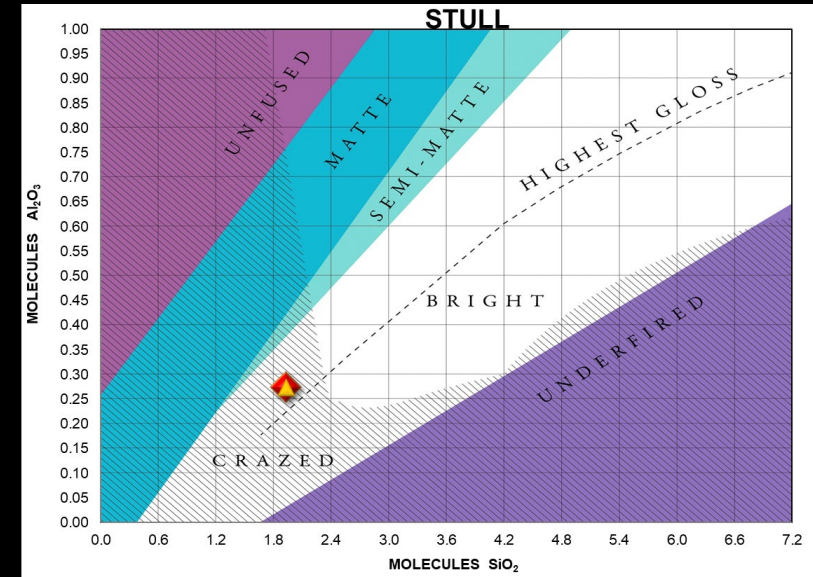
Copper Carbonate

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.24		Alkaline Earths 0.76	
SiO ₂ 2.05	Collective "Al ₂ O ₃ " 0.29	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.42
B ₂ O ₃	Al ₂ O ₃ 0.29	Li ₂ O	CuO 0.02	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

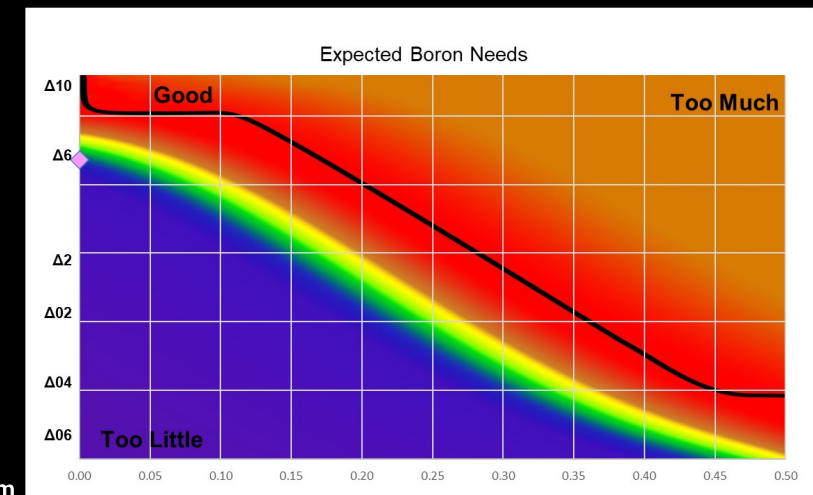
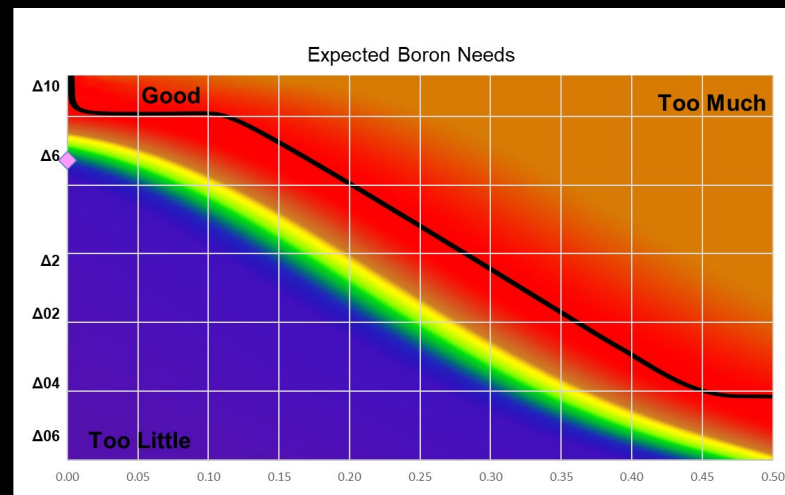


1%

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.28		Alkaline Earths 0.72	
SiO ₂ 1.93	Collective "Al ₂ O ₃ " 0.27	Na ₂ O 0.16	K ₂ O 0.05	MgO 0.00	CaO 0.40
B ₂ O ₃	Al ₂ O ₃ 0.27	Li ₂ O	CuO 0.07	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.32	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



4%



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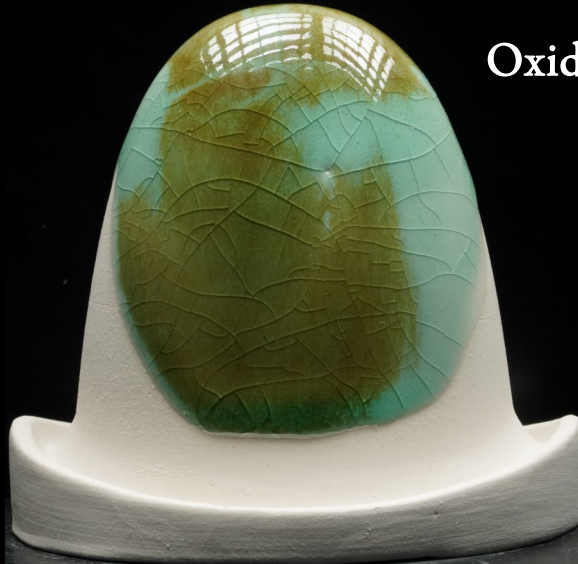
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Copper Oxide-Black

Oxidation

Reduction

1%



1-3 Second Dip

2-3 Second Dips

1-3 Second Dip

2-3 Second Dips

4%



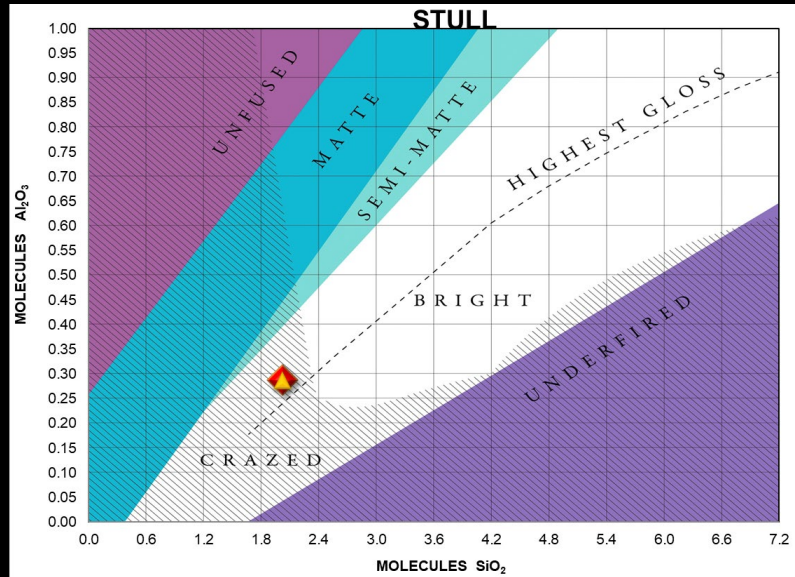
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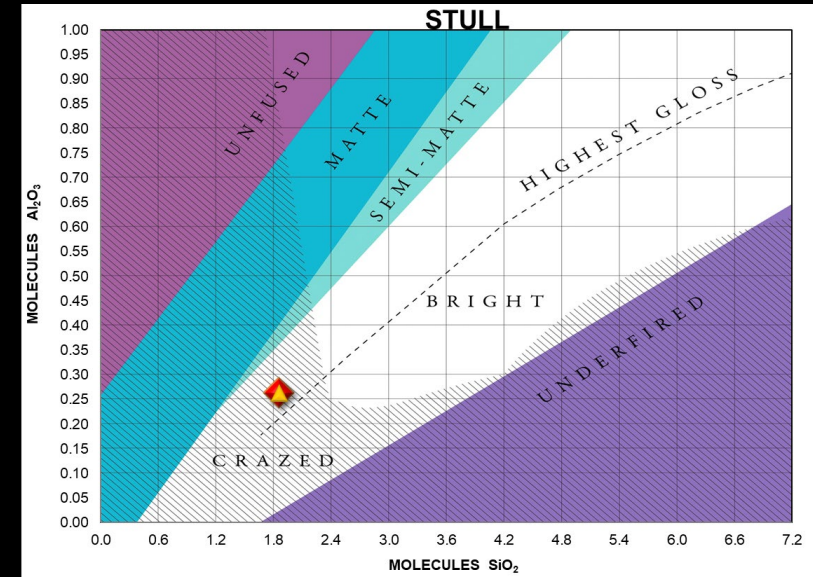
Copper Oxide-Black

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.25		Alkaline Earths 0.75	
SiO ₂ 2.02	Collective "Al ₂ O ₃ " 0.29	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.41
B ₂ O ₃	Al ₂ O ₃ 0.29	Li ₂ O	CuO 0.03	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.33	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

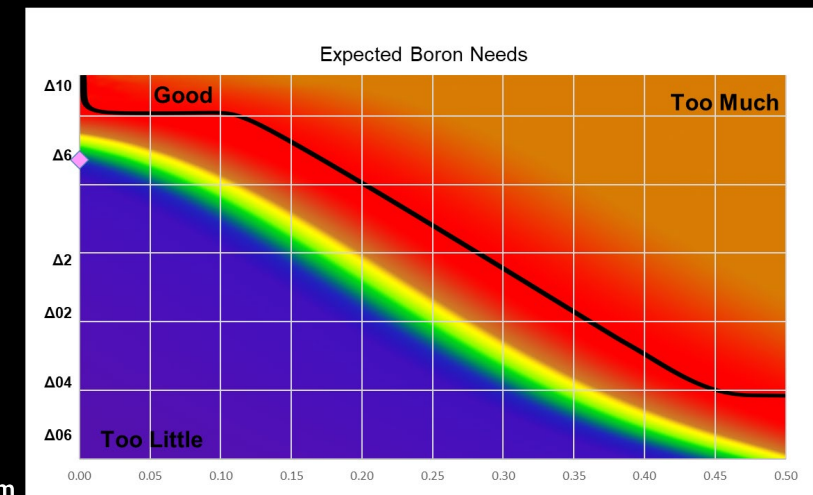


1%

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.31		Alkaline Earths 0.69	
SiO ₂ 1.86	Collective "Al ₂ O ₃ " 0.26	Na ₂ O 0.15	K ₂ O 0.04	MgO 0.00	CaO 0.38
B ₂ O ₃	Al ₂ O ₃ 0.26	Li ₂ O	CuO 0.11	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



4%



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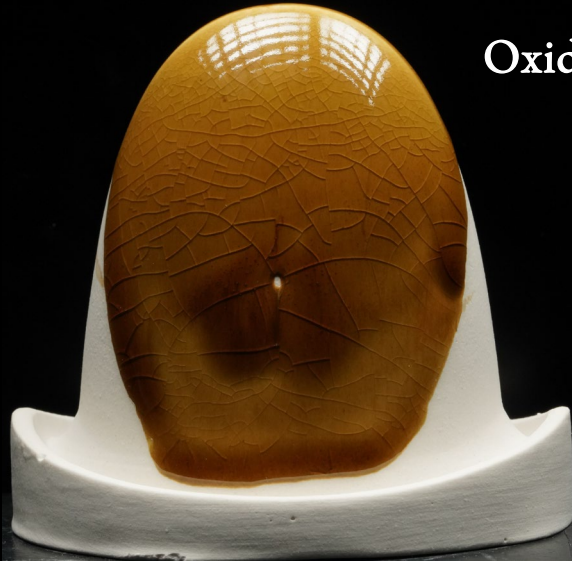
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Red Iron Oxide

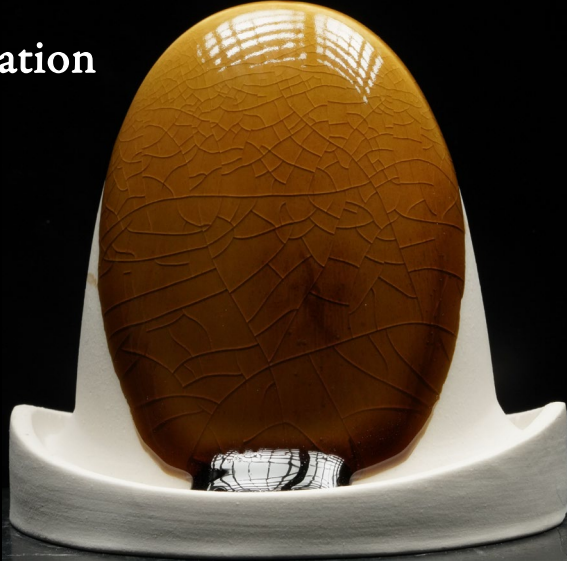
Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



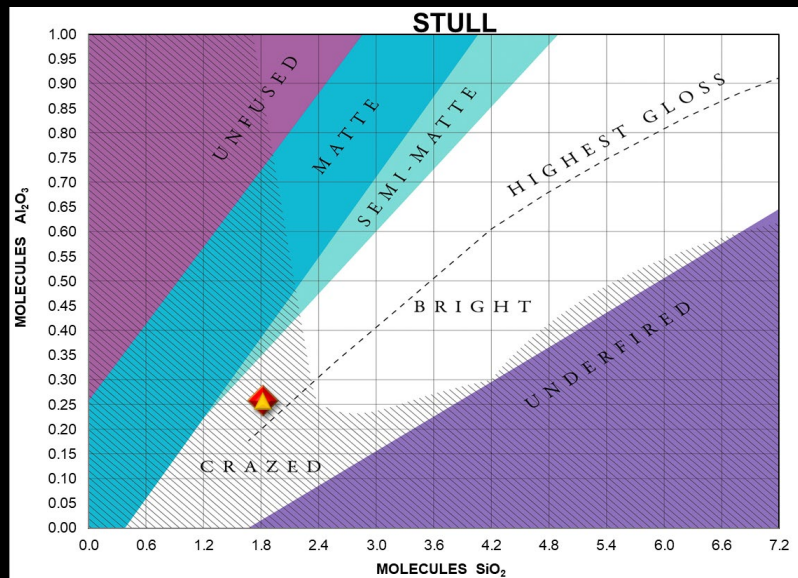
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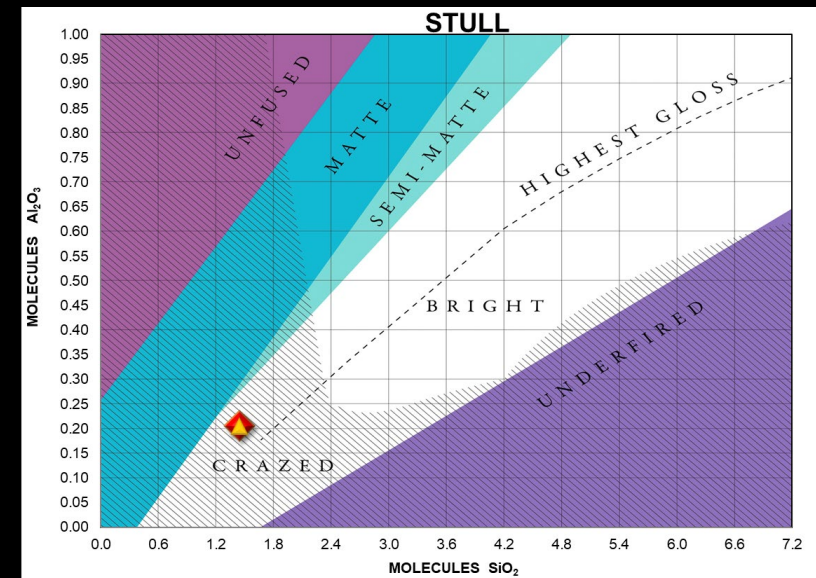
Red Iron Oxide

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.19		Alkaline Earths 0.81	
SiO ₂ 1.82	Collective "Al ₂ O ₃ " 0.26	Na ₂ O 0.15	K ₂ O 0.04	MgO 0.00	CaO 0.37
B ₂ O ₃	Al ₂ O ₃ 0.26	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.30	FeO 0.13
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

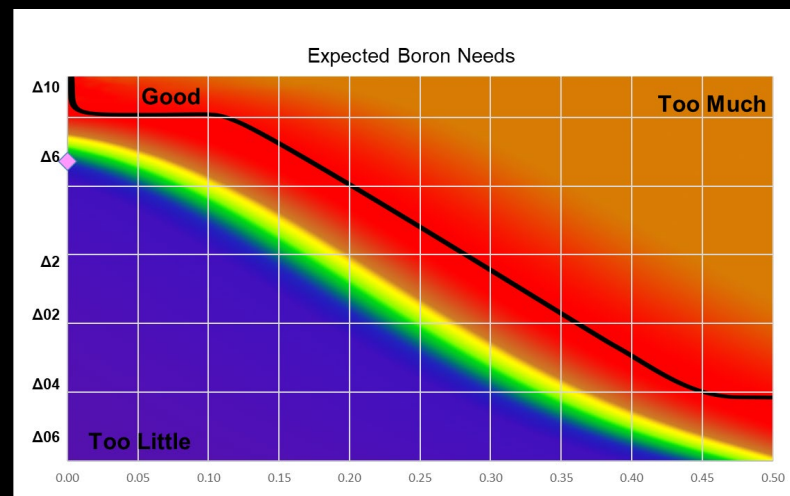


3%

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.15		Alkaline Earths 0.85	
SiO ₂ 1.45	Collective "Al ₂ O ₃ " 0.21	Na ₂ O 0.12	K ₂ O 0.03	MgO 0.00	CaO 0.30
B ₂ O ₃	Al ₂ O ₃ 0.20	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.24	FeO 0.31
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%



Black Iron Oxide

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



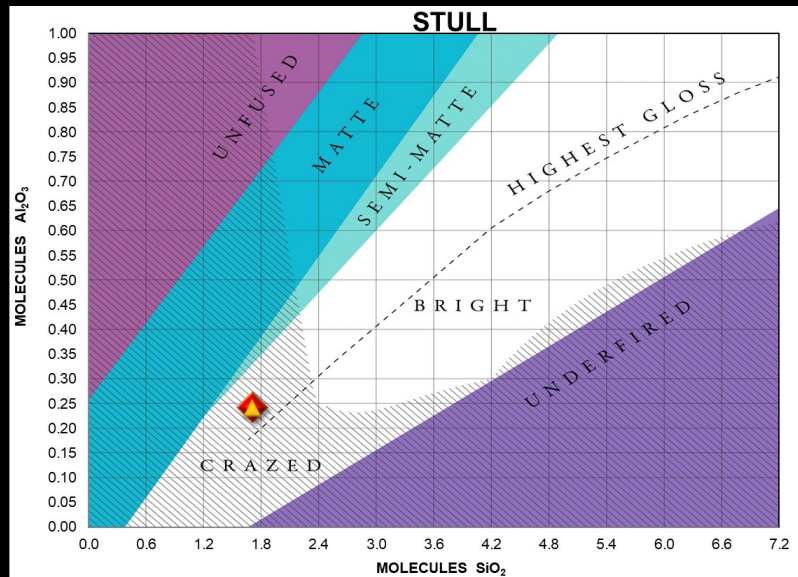
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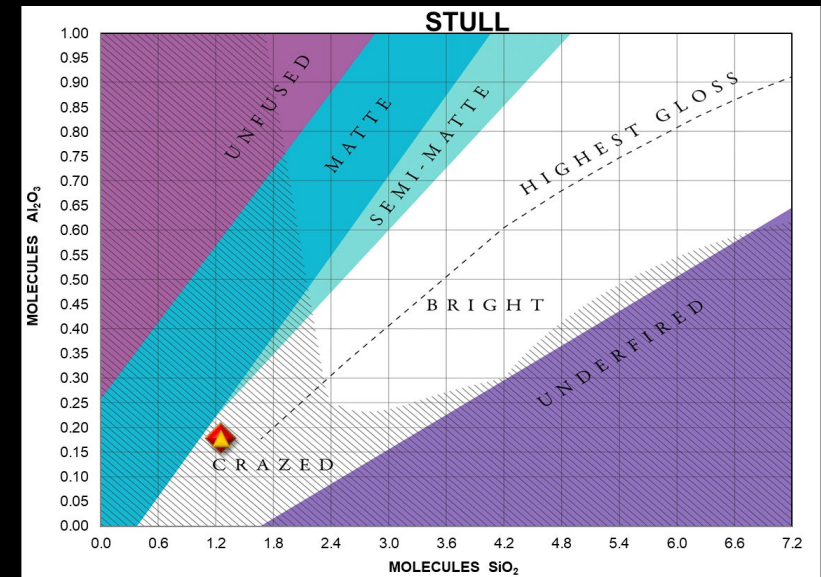
Black Iron Oxide

SiO ₂ :Al ₂ O ₃ Ratio 7.03 : 1		Alkali Metals 0.18		Alkaline Earths 0.82	
SiO ₂ 1.71	Collective "Al ₂ O ₃ " 0.24	Na ₂ O 0.14	K ₂ O 0.04	MgO 0.00	CaO 0.35
B ₂ O ₃	Al ₂ O ₃ 0.24	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.28	FeO 0.18
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

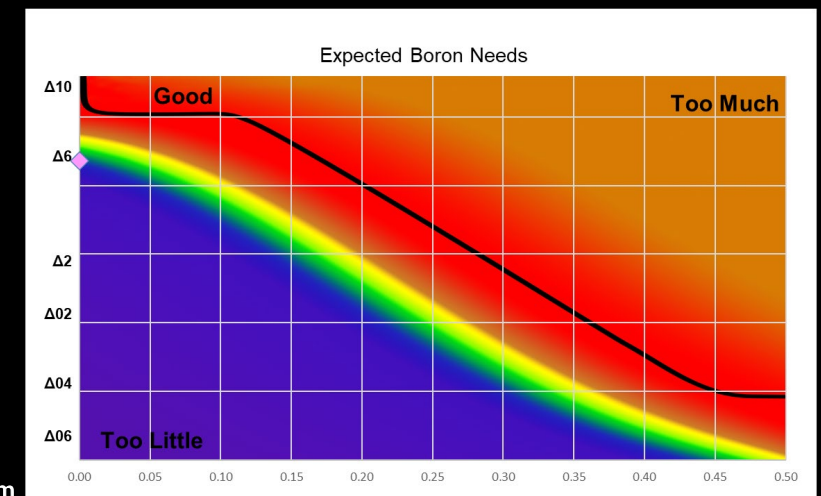
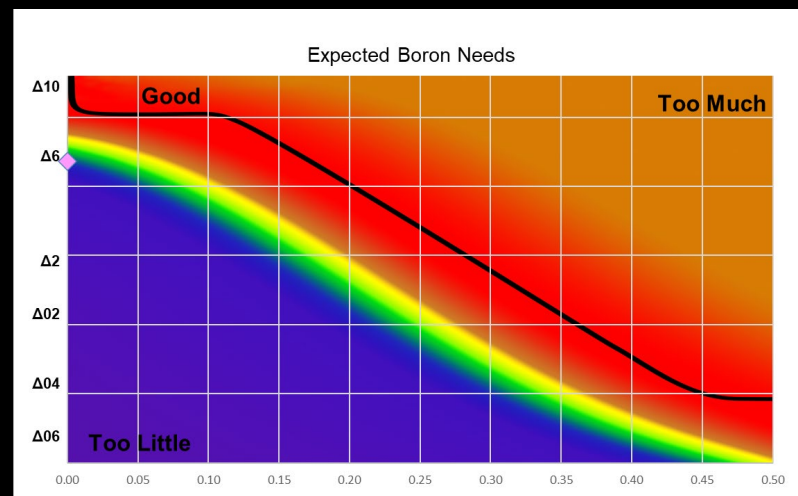


3%

SiO ₂ :Al ₂ O ₃ Ratio 7.03 : 1		Alkali Metals 0.13		Alkaline Earths 0.87	
SiO ₂ 1.25	Collective "Al ₂ O ₃ " 0.18	Na ₂ O 0.10	K ₂ O 0.03	MgO 0.00	CaO 0.26
B ₂ O ₃	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.21	FeO 0.40
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%



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Yellow Iron Oxide

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



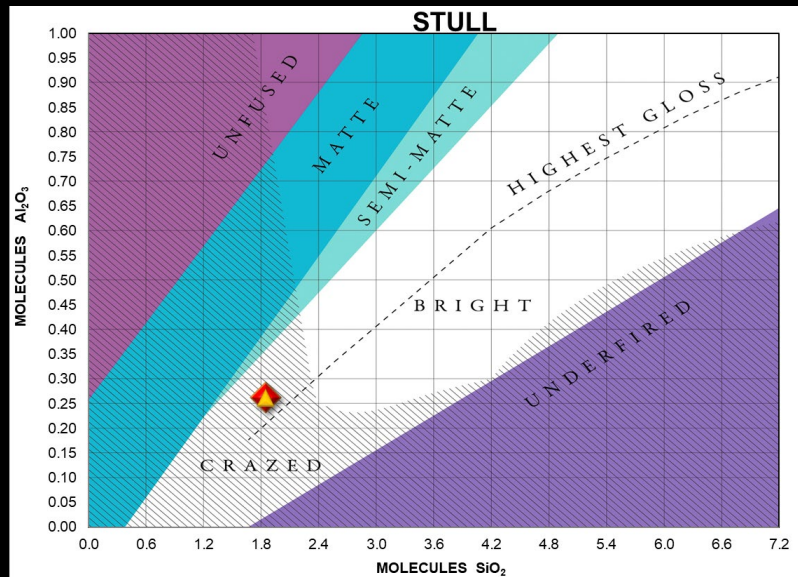
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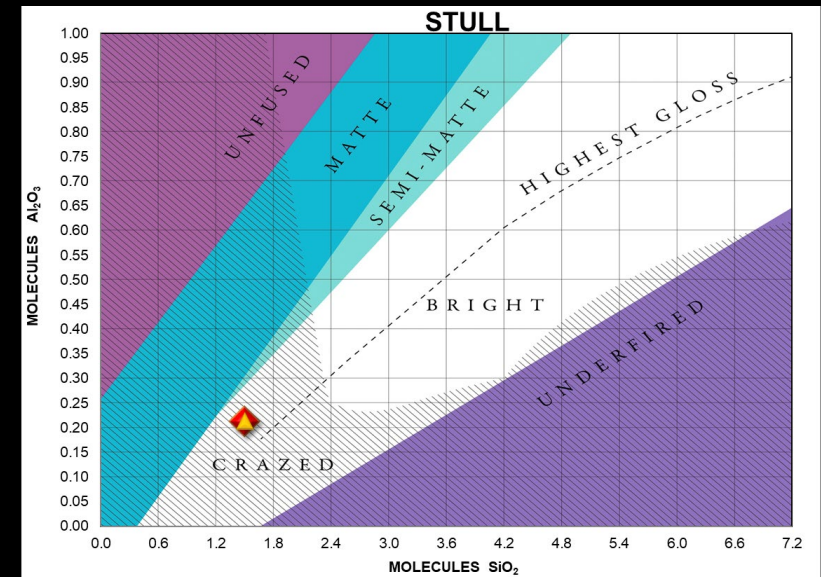
Yellow Iron Oxide

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 1.85	Collective "Al ₂ O ₃ " 0.26	Na ₂ O 0.15	K ₂ O 0.04	MgO 0.00	CaO 0.38
B ₂ O ₃	Al ₂ O ₃ 0.26	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.31	FeO 0.12
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

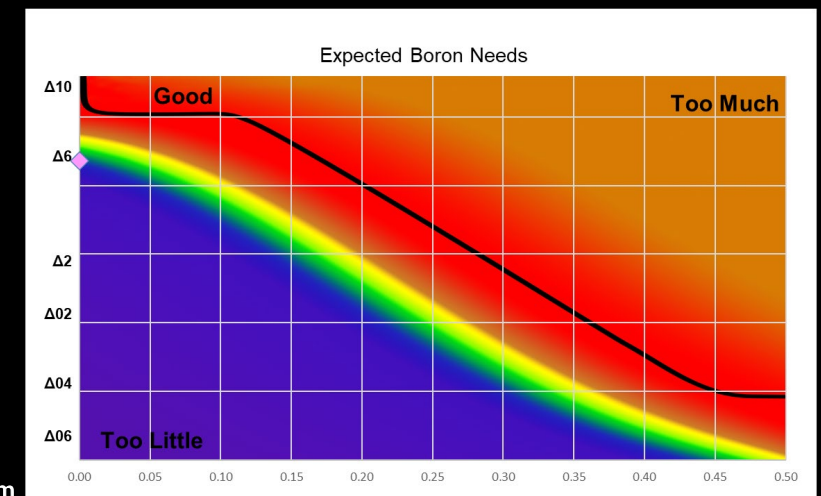
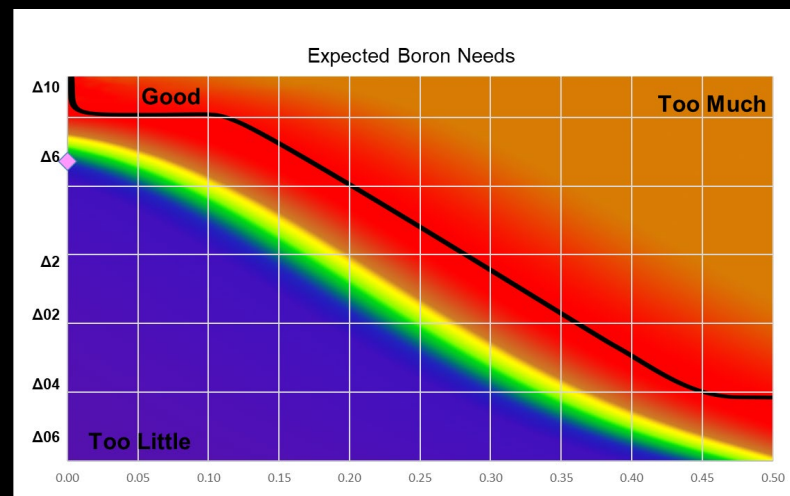


3%

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.16		Alkaline Earths 0.84	
SiO ₂ 1.50	Collective "Al ₂ O ₃ " 0.21	Na ₂ O 0.12	K ₂ O 0.04	MgO 0.00	CaO 0.31
B ₂ O ₃	Al ₂ O ₃ 0.21	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.25	FeO 0.28
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%



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Manganese Dioxide

Oxidation

Reduction

1%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

4%



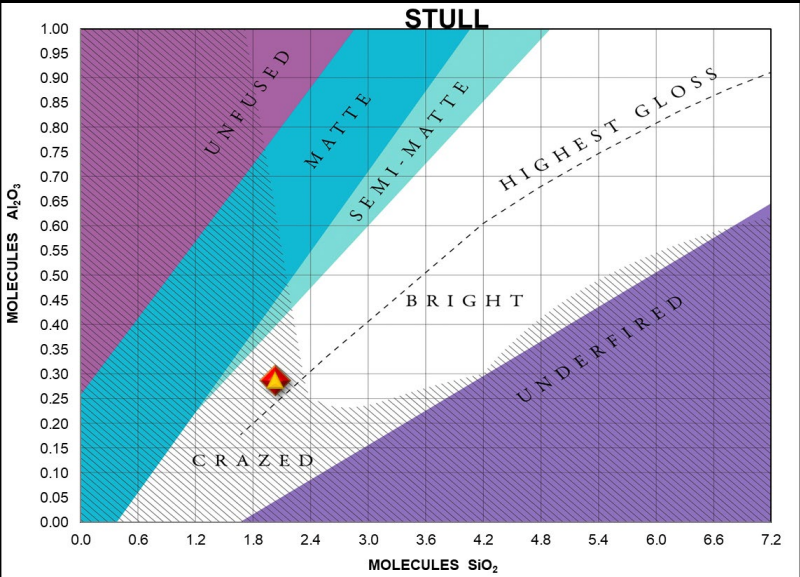
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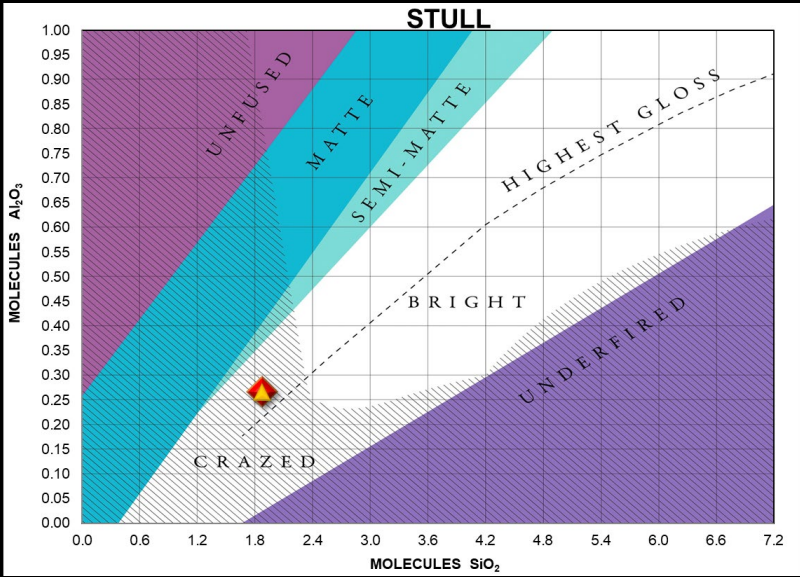
Manganese Dioxide

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.03	Collective "Al ₂ O ₃ " 0.29	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.42
B ₂ O ₃	Al ₂ O ₃ 0.29	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂ 0.03	CoO

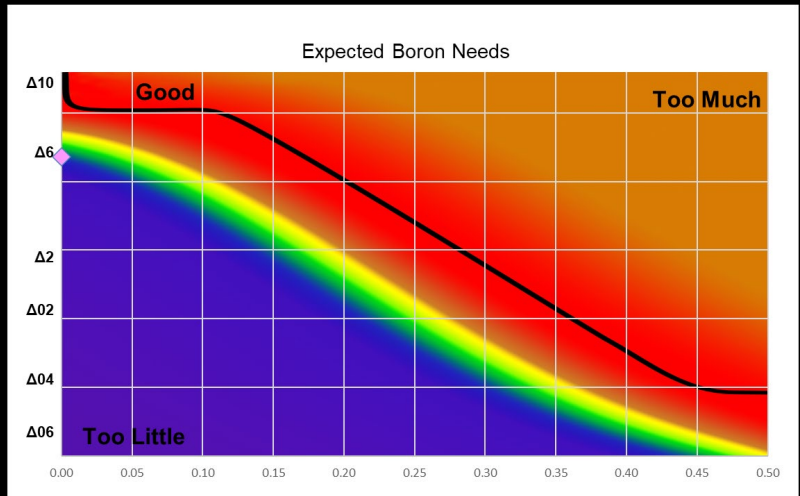
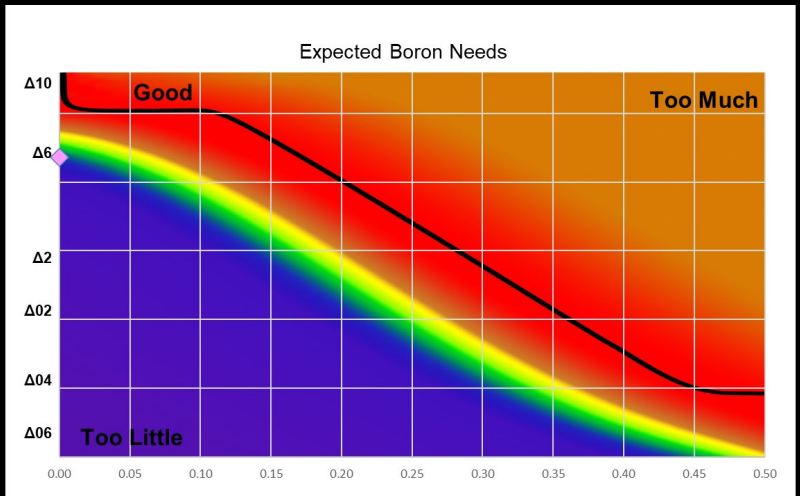


1%

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 1.87	Collective "Al ₂ O ₃ " 0.27	Na ₂ O 0.15	K ₂ O 0.04	MgO 0.00	CaO 0.38
B ₂ O ₃	Al ₂ O ₃ 0.27	Li ₂ O	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 0.10	CoO



4%



Vanadium Pentoxide

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



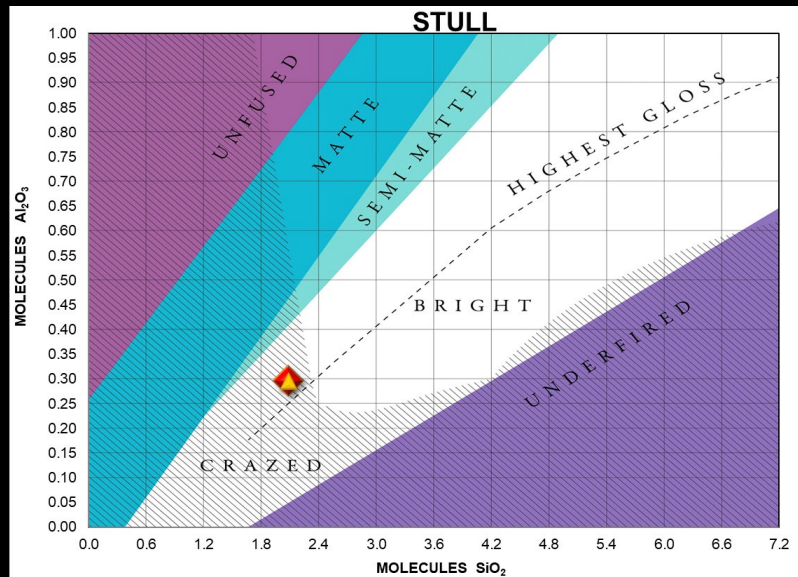
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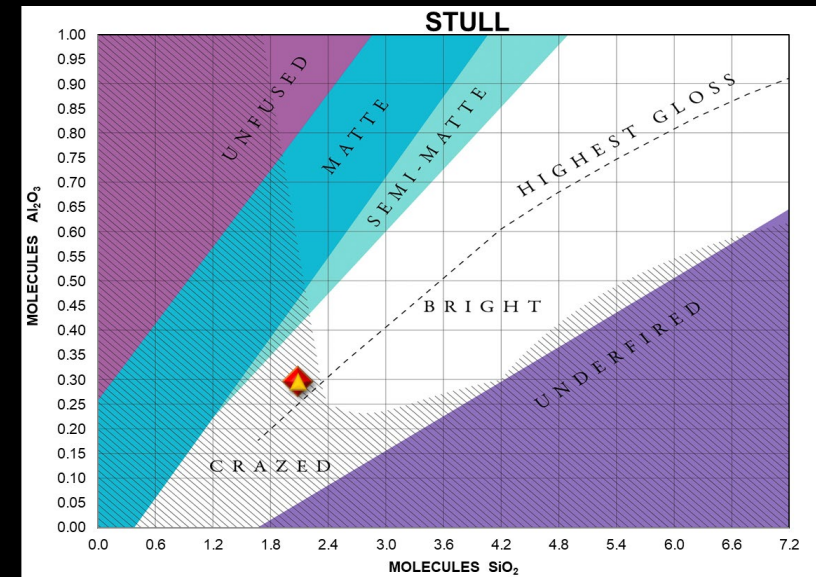
Vanadium Pentoxide

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.09	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
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 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

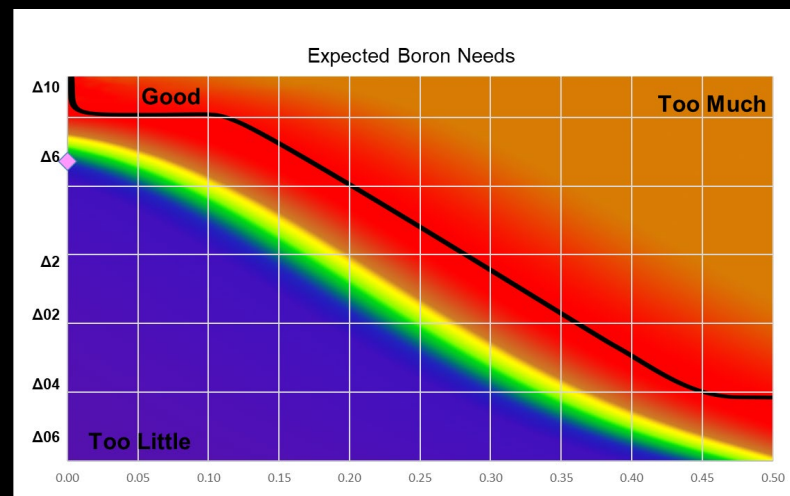


3%

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.09	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
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 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%



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Dark Rutile

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



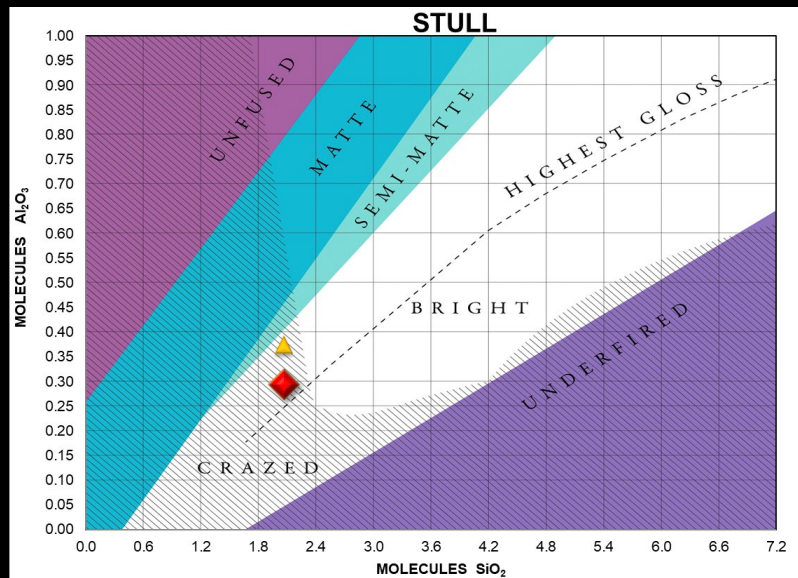
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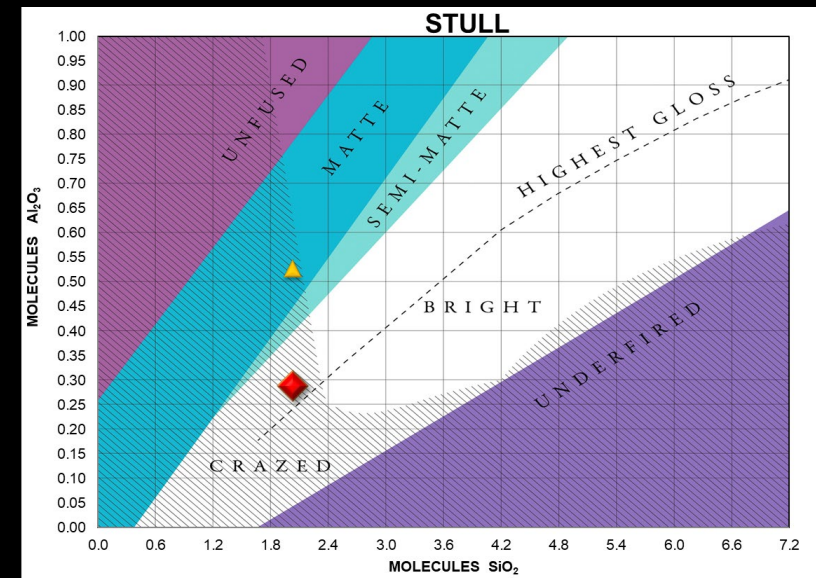
Dark Rutile

SiO ₂ :Al ₂ O ₃ Ratio 5.51 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.07	Collective "Al ₂ O ₃ " 0.38	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.42
B ₂ O ₃	Al ₂ O ₃ 0.29	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.08	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.34	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

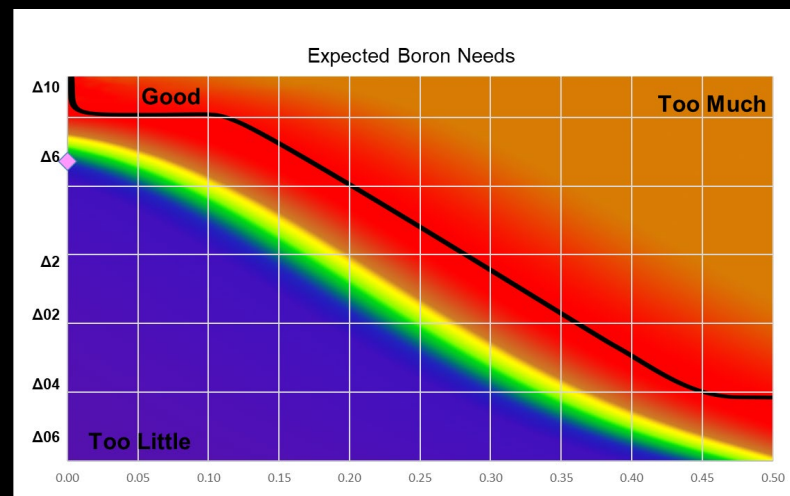


3%

SiO ₂ :Al ₂ O ₃ Ratio 3.84 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.03	Collective "Al ₂ O ₃ " 0.53	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.42
B ₂ O ₃	Al ₂ O ₃ 0.29	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.24	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.34	FeO 0.03
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%



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Light Rutile

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips

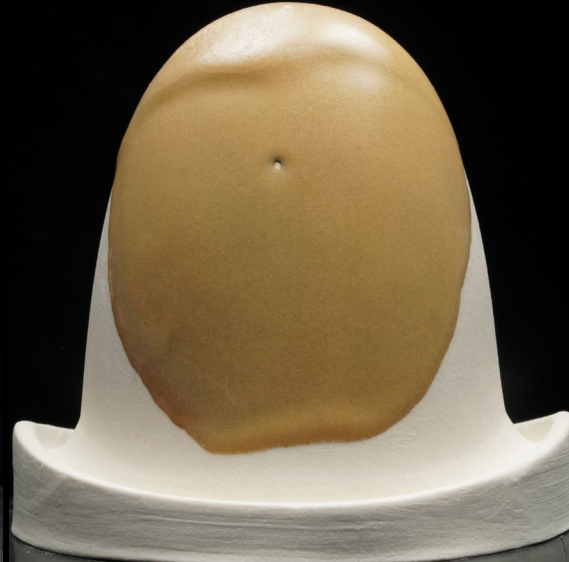


1-3 Second Dip



2-3 Second Dips

9%



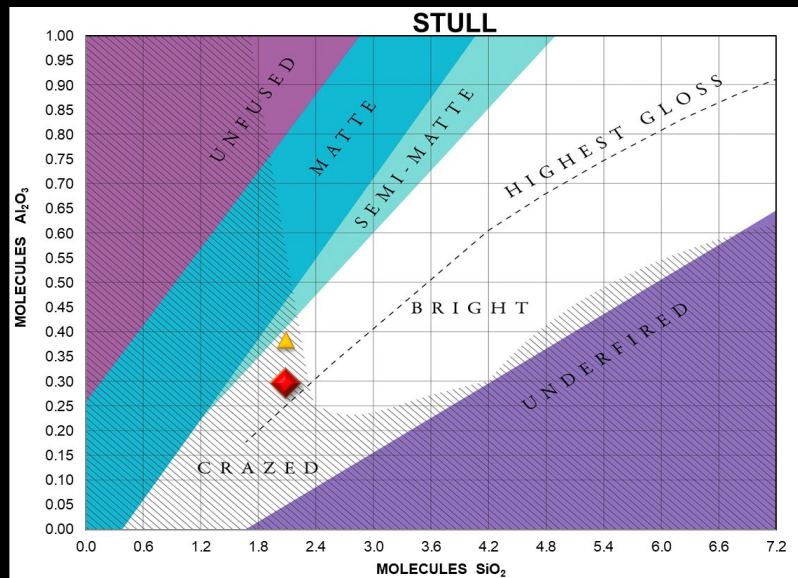
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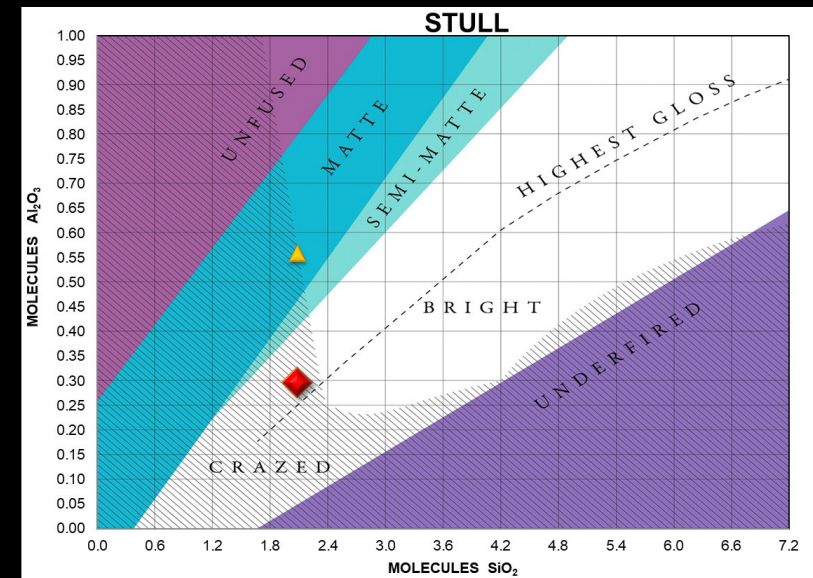
Light Rutile

SiO ₂ :Al ₂ O ₃ Ratio 5.42 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.09	Collective "Al ₂ O ₃ " 0.38	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.09	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

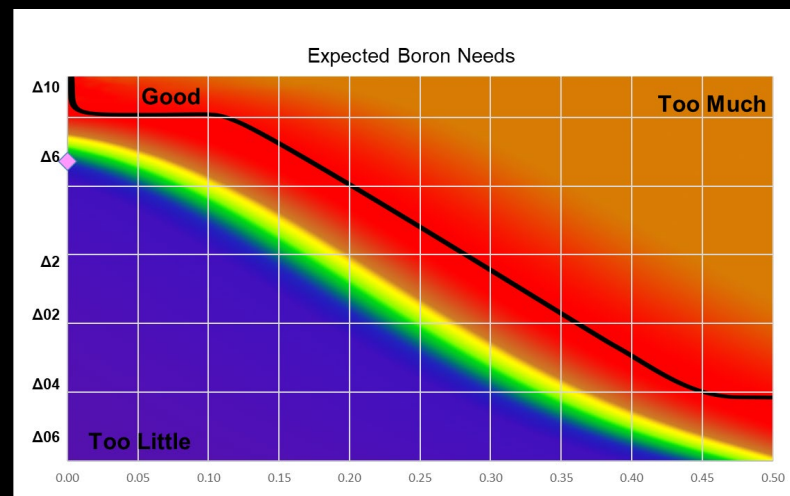


3%

SiO ₂ :Al ₂ O ₃ Ratio 3.73 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.09	Collective "Al ₂ O ₃ " 0.56	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.26	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.34	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%



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Titanium Dioxide

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



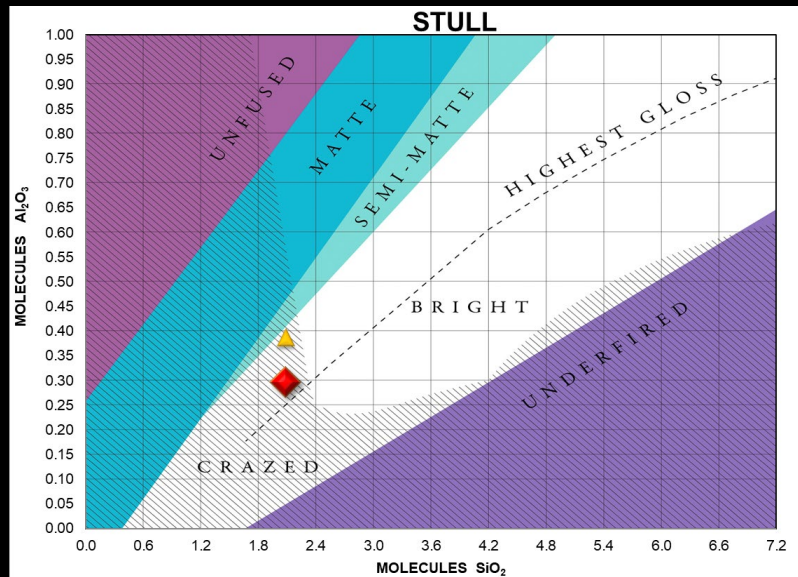
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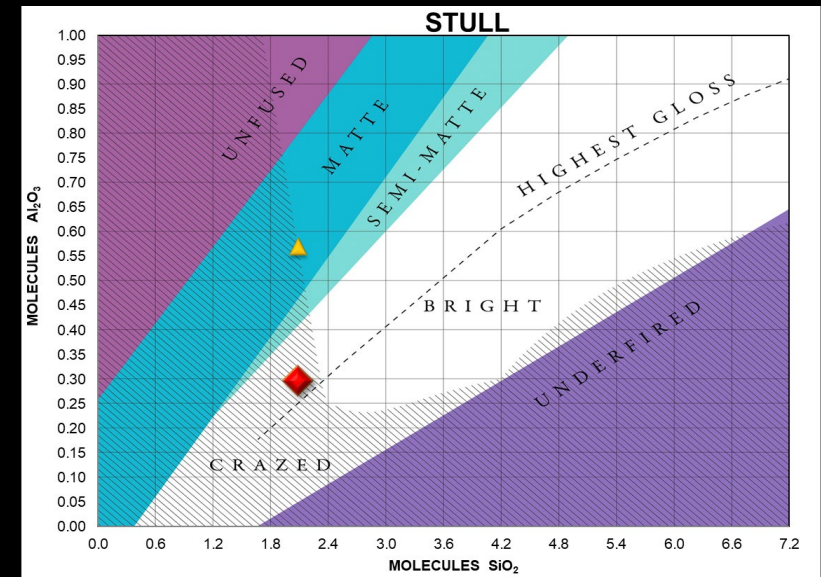
Titanium Dioxide

SiO ₂ :Al ₂ O ₃ Ratio 5.38 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.09	Collective "Al ₂ O ₃ " 0.39	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.09	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

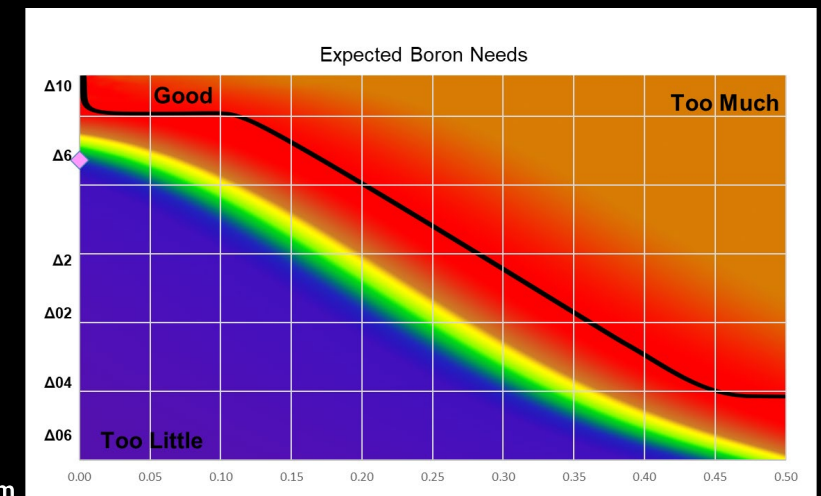
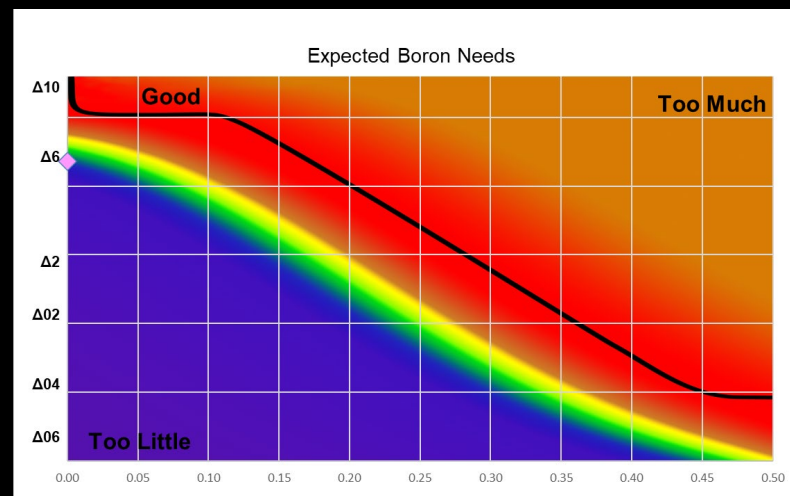


3%

SiO ₂ :Al ₂ O ₃ Ratio 3.66 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.09	Collective "Al ₂ O ₃ " 0.57	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.27	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%



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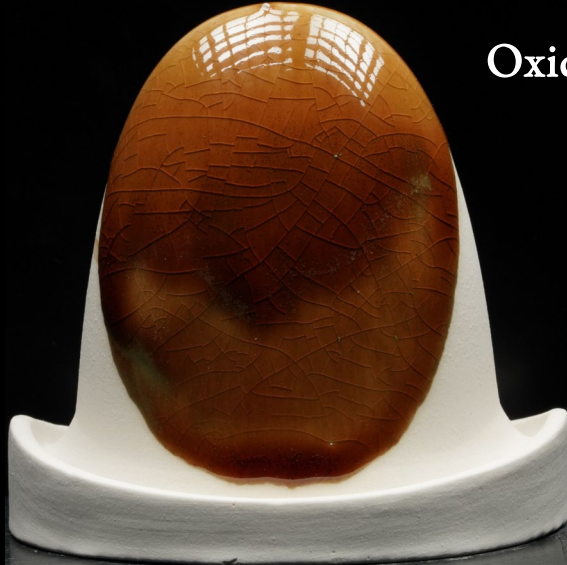
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Nickel Carbonate

Oxidation

Reduction

2%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

6%



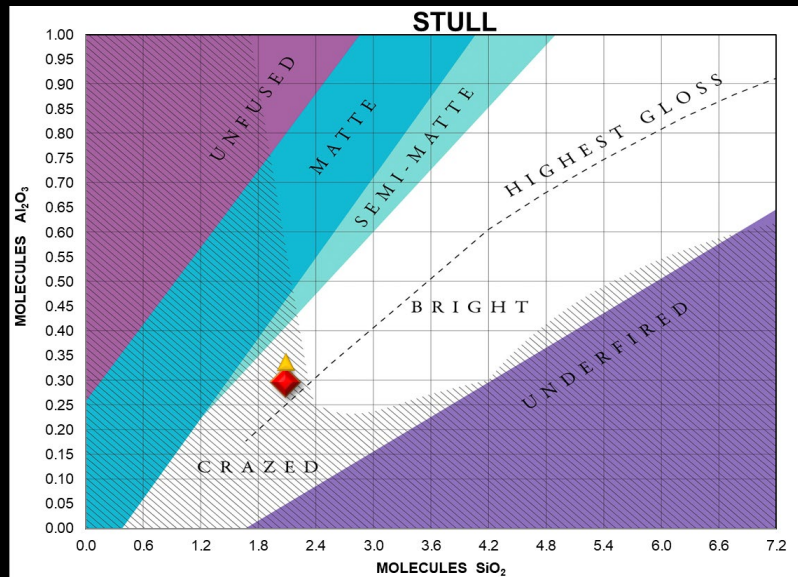
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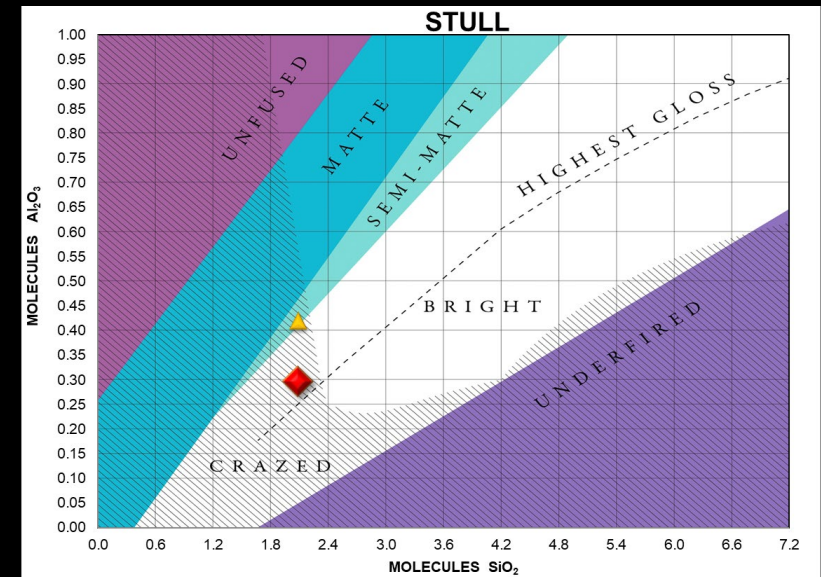
Nickel Carbonate

SiO ₂ :Al ₂ O ₃ Ratio 6.17 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.09	Collective "Al ₂ O ₃ " 0.34	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO 0.04	Bi ₂ O ₃	SnO ₂	ZnO 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



2%

SiO ₂ :Al ₂ O ₃ Ratio 4.95 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.09	Collective "Al ₂ O ₃ " 0.42	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO 0.12	Bi ₂ O ₃	SnO ₂	ZnO 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



6%



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Nickel Oxide-Black

Oxidation

Reduction

2%



1-3 Second Dip

2-3 Second Dips

1-3 Second Dip

2-3 Second Dips

6%



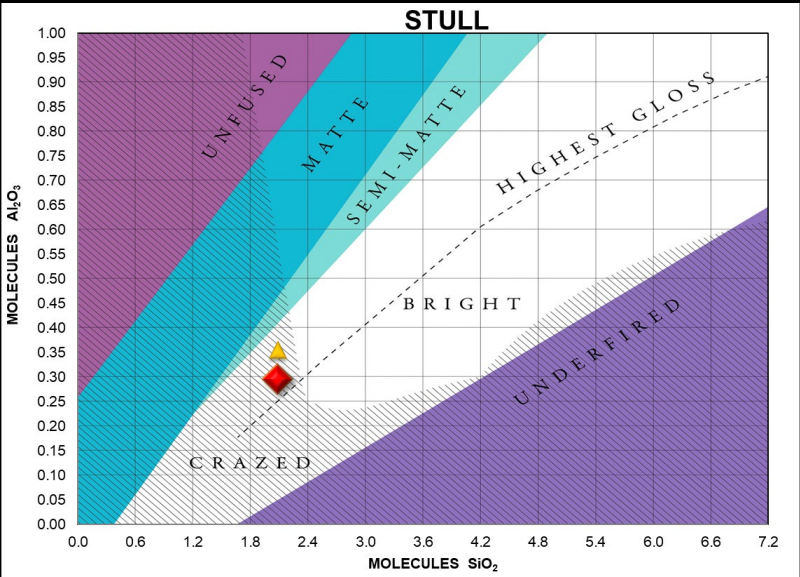
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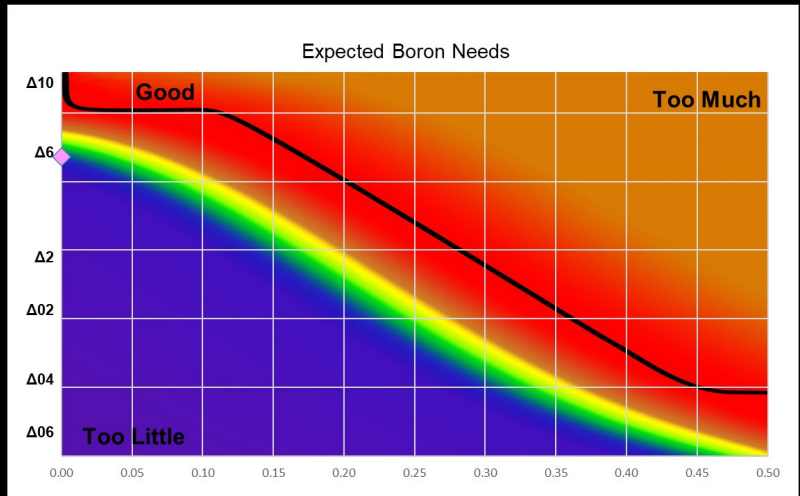
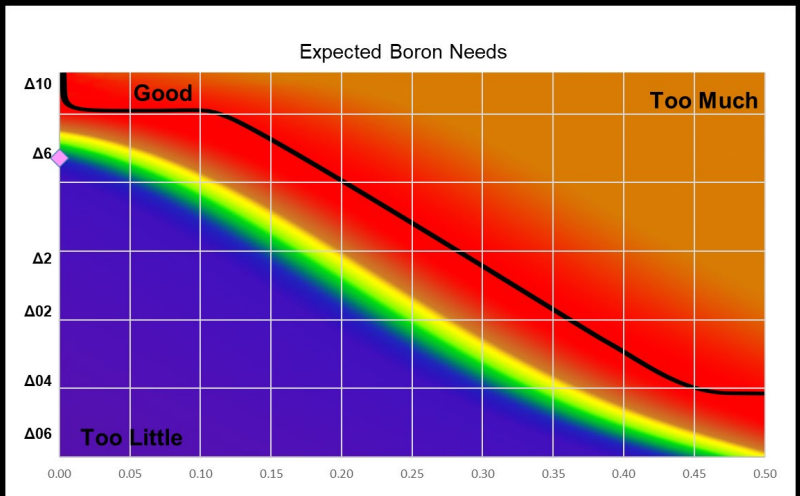
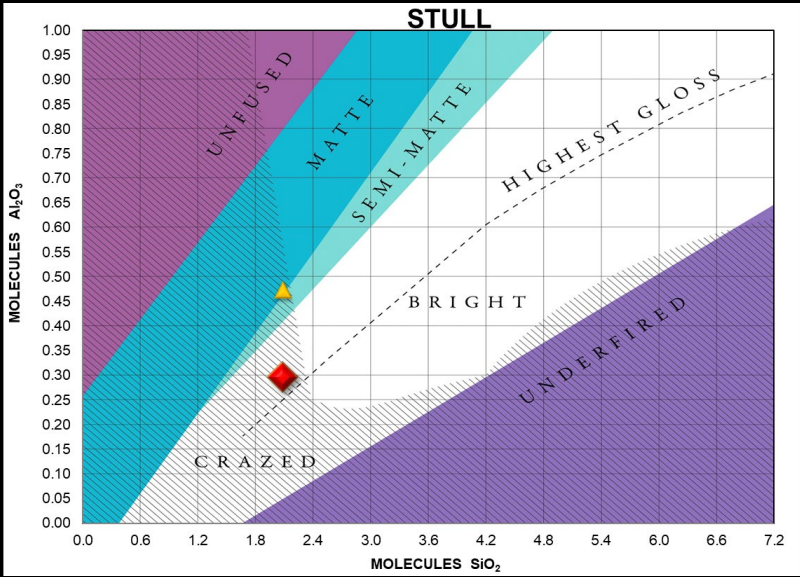
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Nickel Oxide-Black

SiO ₂ :Al ₂ O ₃ Ratio 5.86 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.09	Collective "Al ₂ O ₃ " 0.36	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO 0.06	Bi ₂ O ₃	SnO ₂	ZnO 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



SiO ₂ :Al ₂ O ₃ Ratio 4.40 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.09	Collective "Al ₂ O ₃ " 0.47	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
B ₂ O ₃	Al ₂ O ₃ 0.30	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO 0.18	Bi ₂ O ₃	SnO ₂	ZnO 0.34	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%



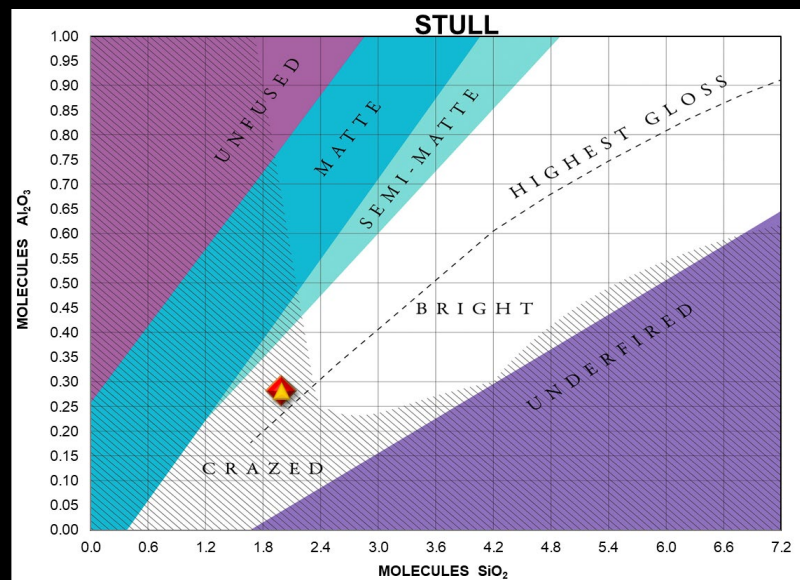
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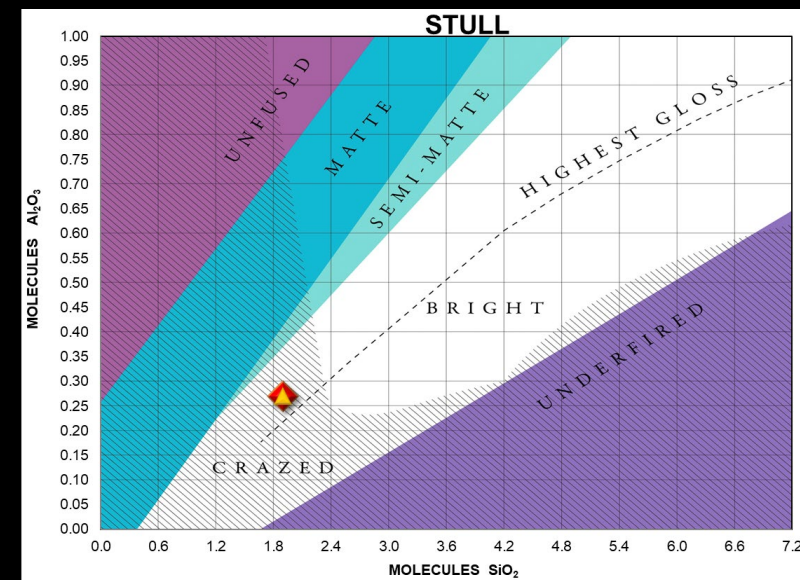
Tin Oxide

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.26		Alkaline Earths 0.74	
SiO ₂ 1.99	Collective "Al ₂ O ₃ " 0.28	Na ₂ O 0.16	K ₂ O 0.05	MgO 0.00	CaO 0.41
B ₂ O ₃	Al ₂ O ₃ 0.28	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂ 0.05	ZnO 0.33	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

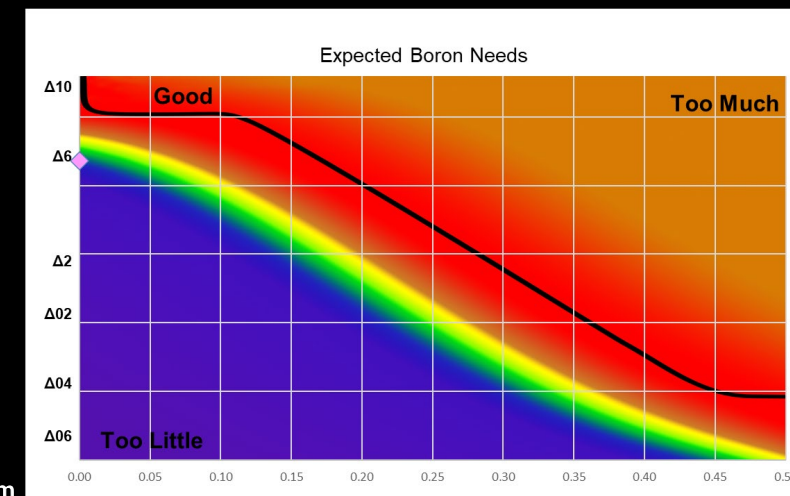
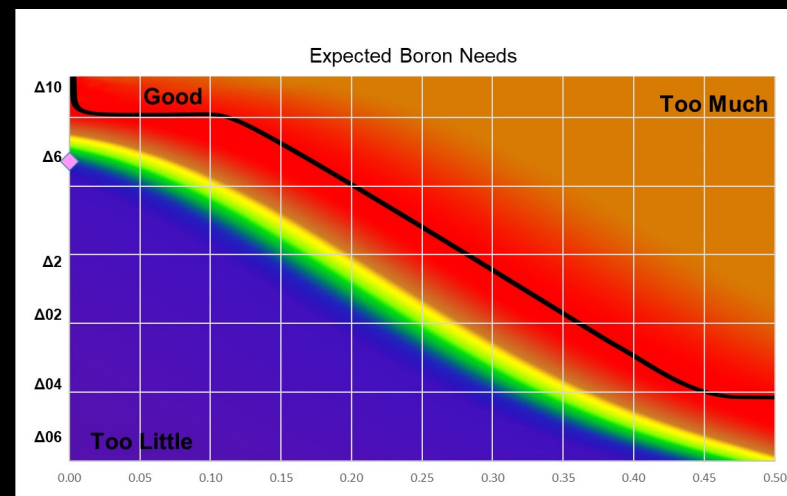


3%

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 1.90	Collective "Al ₂ O ₃ " 0.27	Na ₂ O 0.16	K ₂ O 0.04	MgO 0.00	CaO 0.39
B ₂ O ₃	Al ₂ O ₃ 0.27	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂ 0.09	ZnO 0.31	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



6%



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Zirconium Silicate

Oxidation

Reduction

5%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

10%



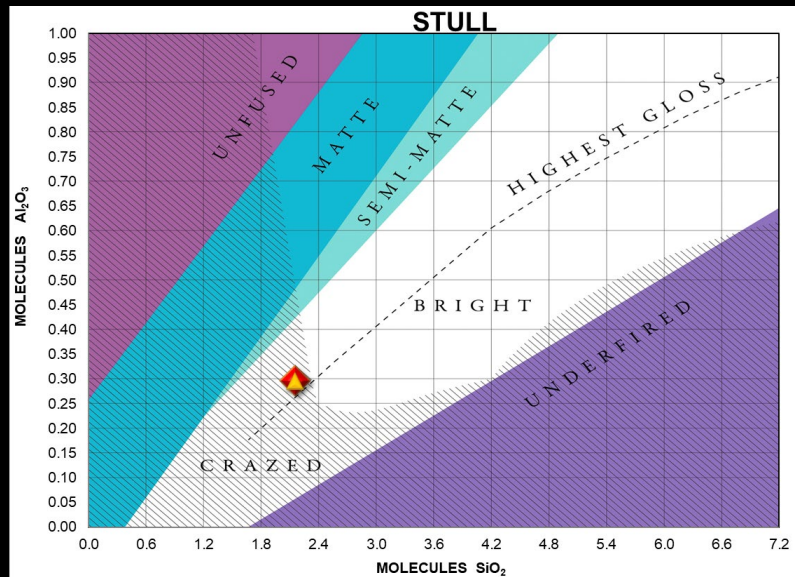
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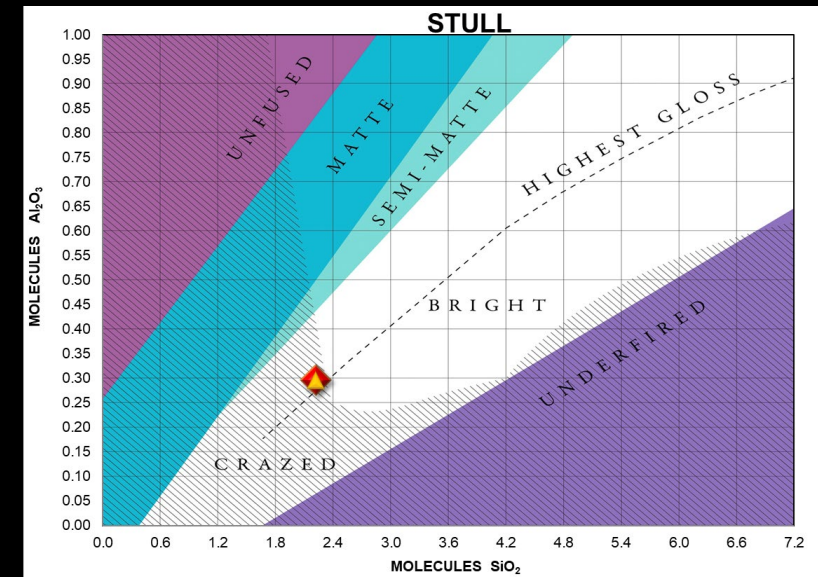
Zirconium Silicate

SiO ₂ :Al ₂ O ₃ Ratio 7.25 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.15	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
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 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

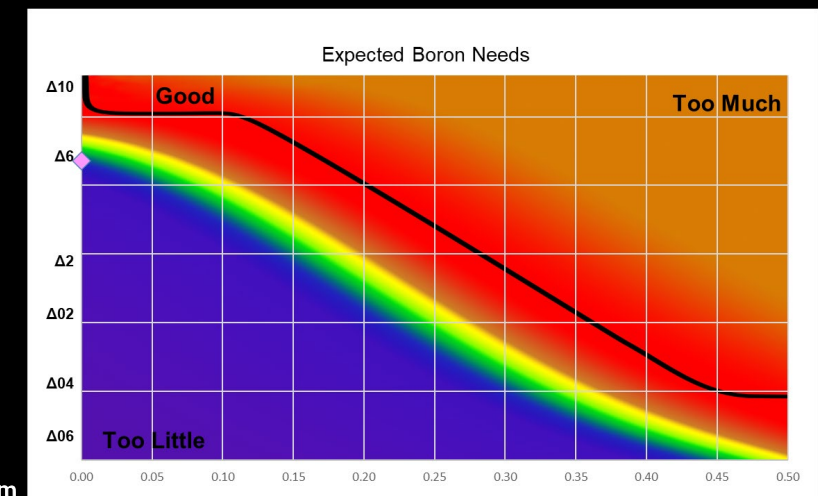


5%

SiO ₂ :Al ₂ O ₃ Ratio 7.48 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.22	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
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 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



10%



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Stain Dark Red 6021

Oxidation

Reduction

5%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

10%



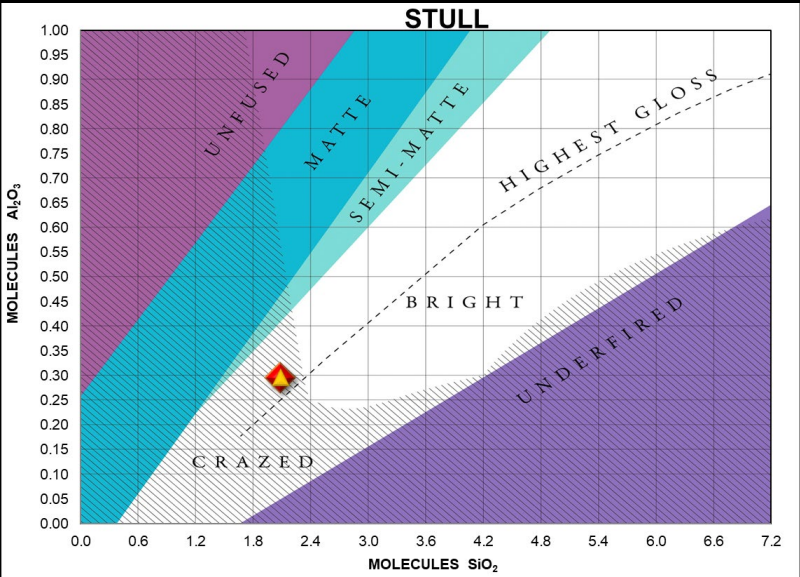
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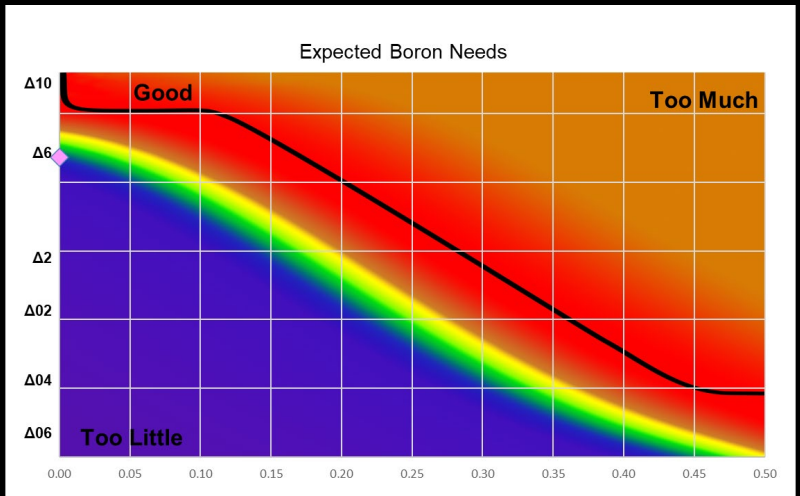
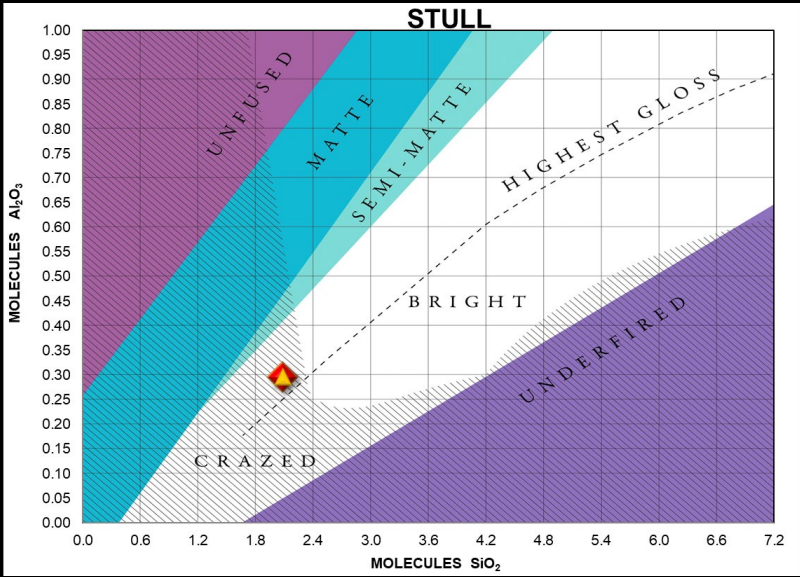
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Stain Dark Red 6021

SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.09	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
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 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



SiO ₂ :Al ₂ O ₃ Ratio 7.03 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.09	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
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 0.34	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%



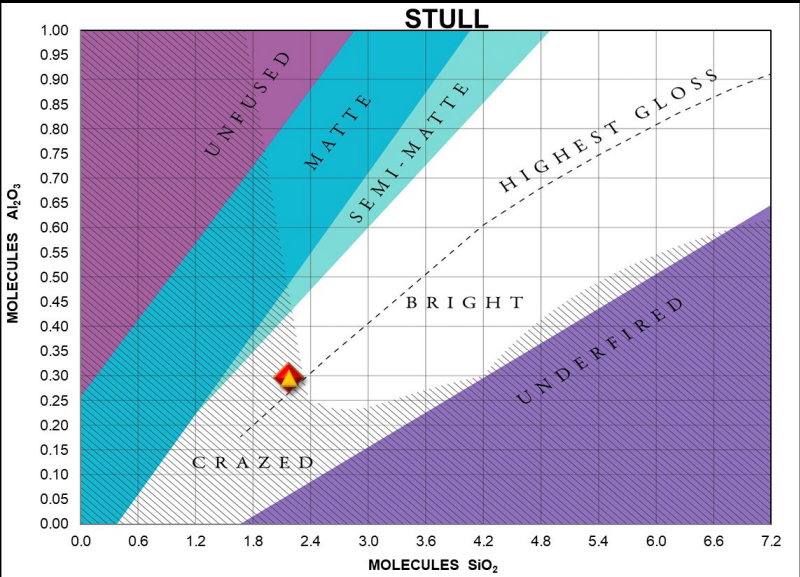
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Tangerine – 071122

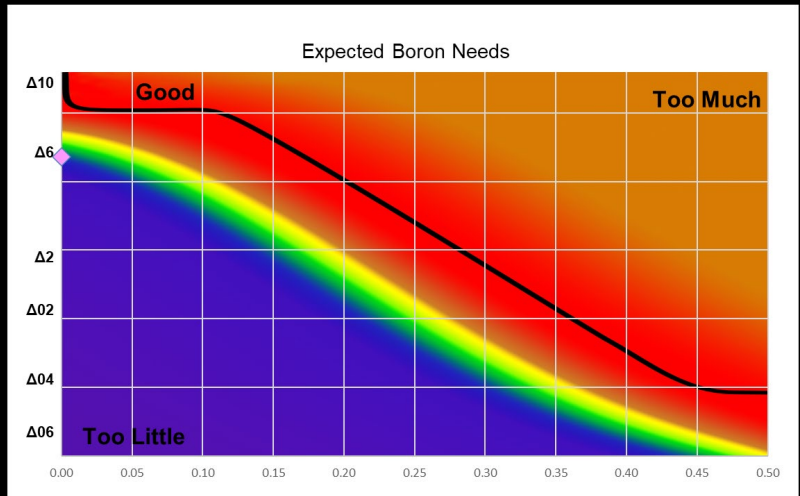
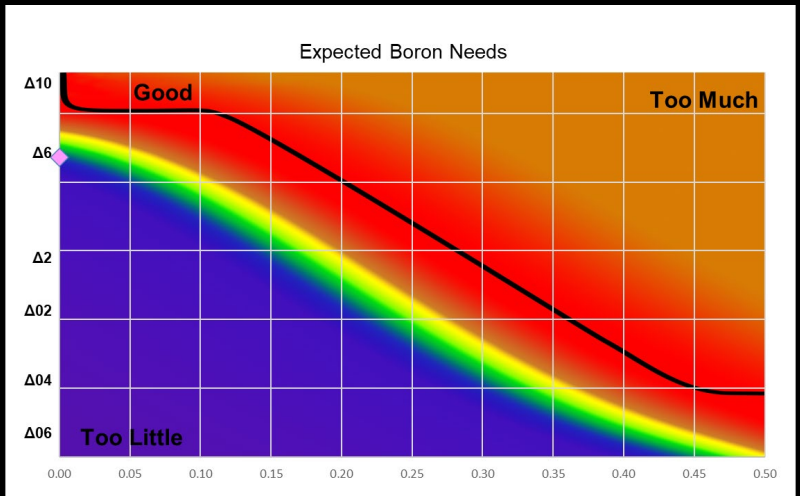
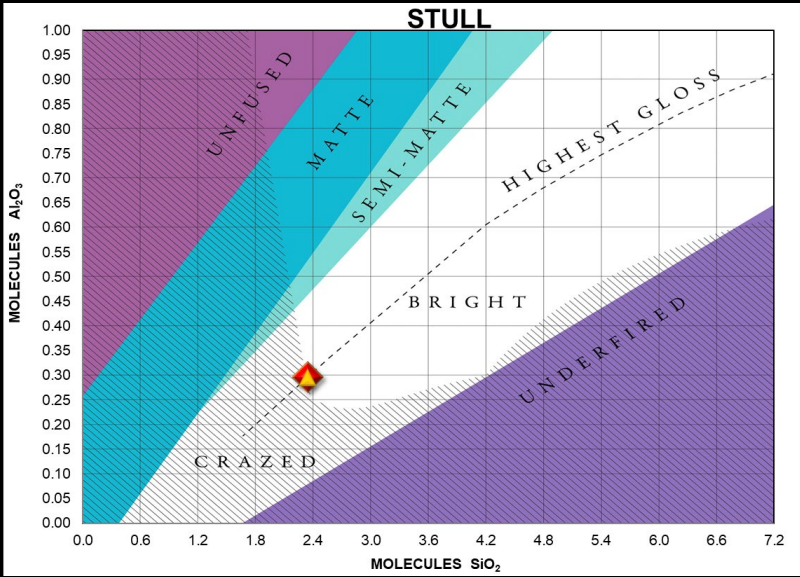
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Silicon Carbide-30 Mesh

SiO ₂ :Al ₂ O ₃ Ratio 7.32 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.17	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
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 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



SiO ₂ :Al ₂ O ₃ Ratio 7.90 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.34	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
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 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Silicon Carbide-800 Mesh

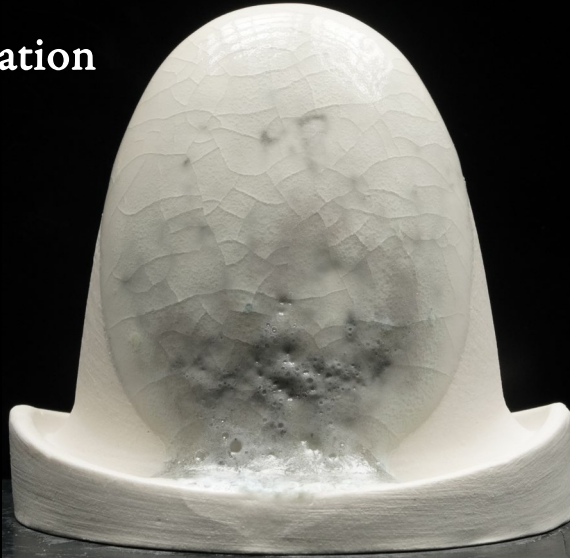
Oxidation

Reduction

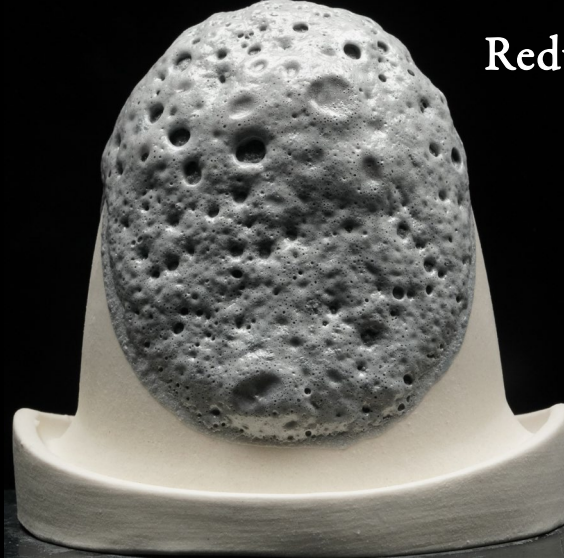
3%



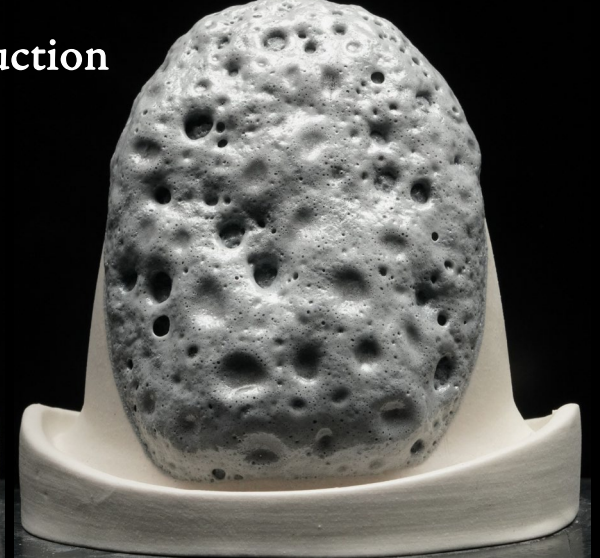
1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



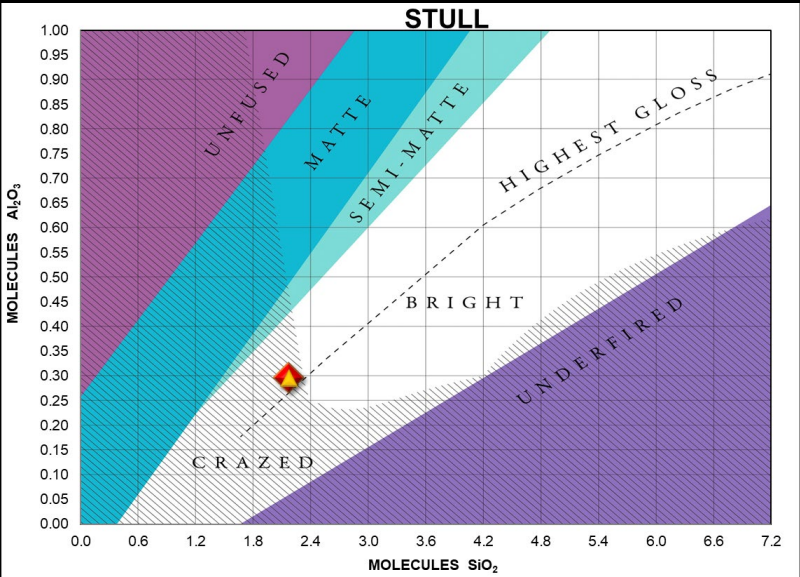
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Tangerine – 071122

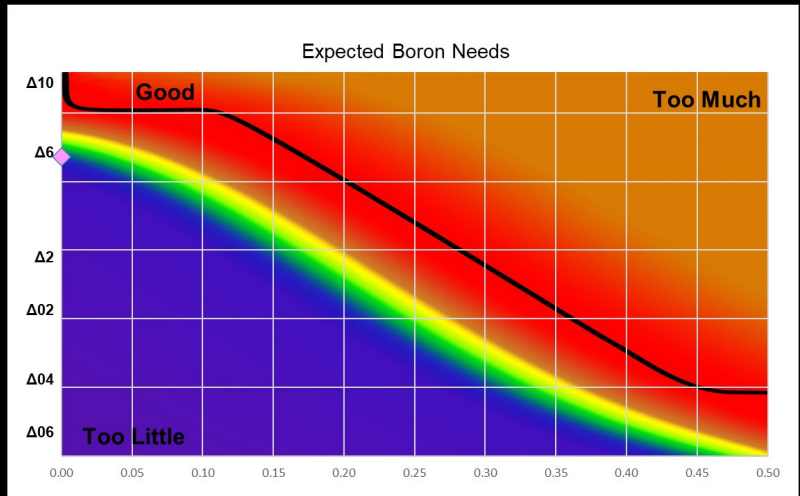
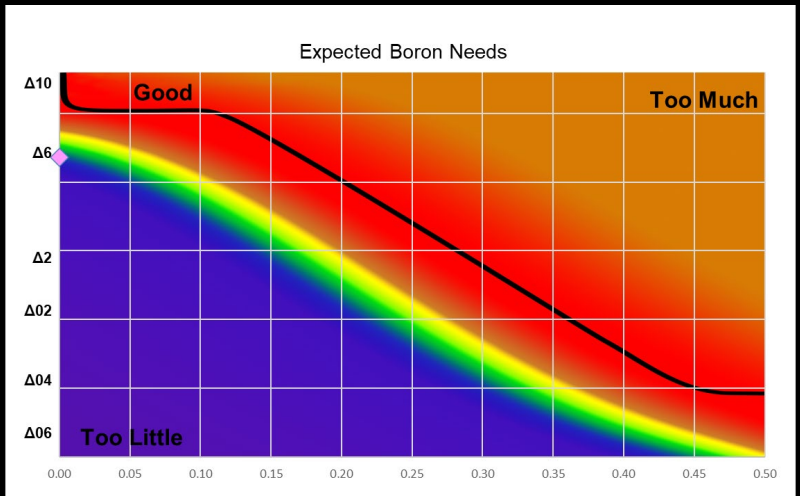
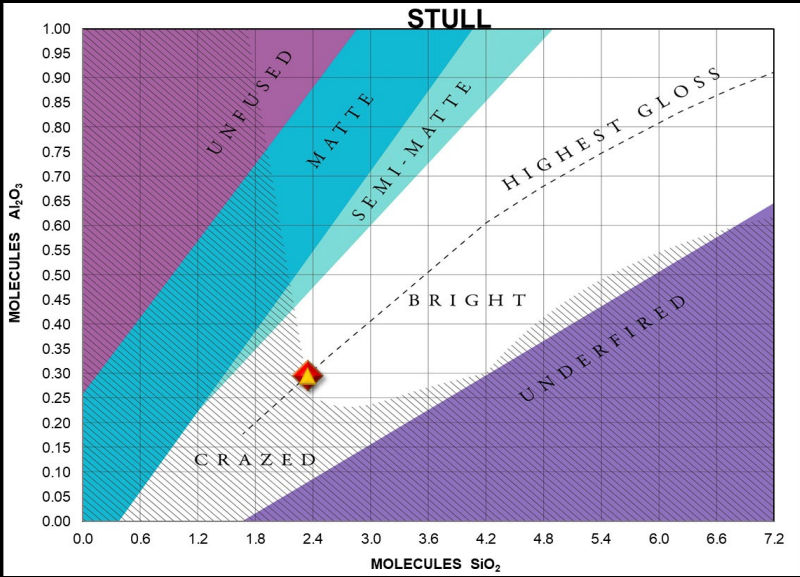
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Silicon Carbide-800 Mesh

SiO ₂ :Al ₂ O ₃ Ratio 7.32 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.17	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
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 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



SiO ₂ :Al ₂ O ₃ Ratio 7.90 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.34	Collective "Al ₂ O ₃ " 0.30	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.43
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 0.34	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



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