



## BT — BROWN ALUMINUM OXIDE

### BROWN FUSED ALUMINA (AL<sub>2</sub>O<sub>3</sub>) FOR BONDED ABRASIVES

#### ABOUT:

BT is a brown fused aluminum oxide obtained by a reduction fusion of high quality bauxites in electric arc furnaces. Due to its high toughness, BT is recommended for high performance grinding wheels.

TYPICAL CHEMICAL ANALYSIS	
Al <sub>2</sub> O <sub>3</sub>	95.69%
TiO <sub>2</sub>	2.66
SiO <sub>2</sub>	0.83
Fe <sub>2</sub> O <sub>3</sub>	0.28
MgO	0.29

TYPICAL PHYSICAL PROPERTIES	
Specific Gravity:	3.96 g/cc
Knoop 100 Hardness:	1850 kg/cm <sup>2</sup>
Toughness:	48% (ANSI-B74.8 R2007)

TYPES OF TREATMENT			
Treatment	SHAPE		
	Sharp	Blocky	Super Blocky
Not Treated	BTL D R	BT R	BTH D R
Red Coated (RC)*	BTL D RC R	BTRC R	BTH D RC R
Silane Treated (ST)*	BTL DST R	BTST R	BTH DST R

BULK DENSITY (g/cc)							
Grit	LD	R	HD	Grit	LD	R	HD
10	1.78 - 1.88	1.88 - 1.98	1.98 - 2.08	54	1.67 - 1.77	1.78 - 1.88	1.88 - 1.98
12	1.78 - 1.88	1.88 - 1.98	1.98 - 2.08	60	1.66 - 1.76	1.75 - 1.85	1.85 - 1.95
14	1.78 - 1.88	1.88 - 1.98	1.98 - 2.08	70	1.64 - 1.74	1.73 - 1.83	1.78 - 1.88
16	1.76 - 1.86	1.86 - 1.96	1.96 - 2.06	80	1.60 - 1.70	1.68 - 1.78	1.78 - 1.88
20	1.76 - 1.86	1.86 - 1.96	1.95 - 2.05	90	1.60 - 1.70	1.68 - 1.78	1.78 - 1.88
24	1.76 - 1.86	1.86 - 1.96	1.95 - 2.05	100	1.55 - 1.70	1.64 - 1.74	1.74 - 1.84
30	1.76 - 1.86	1.86 - 1.96	1.94 - 2.04	120	1.54 - 1.64	1.62 - 1.72	1.72 - 1.82
36	1.75 - 1.85	1.86 - 1.96	1.94 - 2.04	150	1.53 - 1.63	1.61 - 1.71	1.71 - 1.81
40	1.72 - 1.82	1.80 - 1.90	1.90 - 2.00	180	1.51 - 1.61	1.58 - 1.68	1.68 - 1.78
46	1.72 - 1.82	1.80 - 1.90	1.90 - 2.00	220	1.50 - 1.60	1.56 - 1.66	1.66 - 1.76

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\*Treatment (RC or ST) can affect bulk density by ± 0.05 g/cm<sup>3</sup>

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# USEM

U.S. ELECTROFUSED MINERALS, INC.

600 Steel Street, Aliquippa, PA 15001

Phone: 800-927-8823

email: [info@usminerals.com](mailto:info@usminerals.com)

[www.usminerals.com](http://www.usminerals.com)



**ELECTRO**  
ABRASIVES

701 Willet Road, Buffalo, NY 14218

Phone: 716-822-2500

Email: [info@electroabrasives.com](mailto:info@electroabrasives.com)

[www.electroabrasives.com](http://www.electroabrasives.com)



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Updated: 04/13



## BT — BROWN ALUMINUM OXIDE

### BROWN FUSED ALUMINA (AL<sub>2</sub>O<sub>3</sub>) MICROGRITS FOR BONDED ABRASIVES

#### ABOUT:

BT is a brown fused aluminum oxide obtained by a reduction fusion of high quality bauxites in electric arc furnaces. Due to its high toughness, BT is recommended for high performance grinding wheels.

#### TYPICAL CHEMICAL ANALYSIS

Al <sub>2</sub> O <sub>3</sub>	94.76%
TiO <sub>2</sub>	3.10
SiO <sub>2</sub>	1.12
Fe <sub>2</sub> O <sub>3</sub>	0.35
MgO	0.37

#### TYPICAL PHYSICAL PROPERTIES

Specific Gravity:	3.96 g/cc
Knoop 100 Hardness:	1850 kg/cm <sup>2</sup>

#### GRIT SIZE SPECIFICATIONS

Grit	Ds 3 Maximum	Ds 50		Ds 94 Minimum
		Minimum	Maximum	
F230	82.0	50.0	56.0	34.0
F240	70.0	42.5	46.5	28.0
F280	59.0	35.0	38.0	22.0
F320	49.0	27.7	30.7	16.5
F360	40.0	21.3	24.3	12.0
F400	32.0	16.30	18.30	8.0
F500	25.0	11.8	13.8	5.0
F600	19.0	8.3	10.3	3.0
F800	14.0	5.5	7.5	2.0
F1000	10.0	3.7	5.3	1.0
F1200	7.0	2.5	3.5	1.0

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\*Other grit sizes available upon request

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600 Steel Street, Aliquippa, PA 15001

Phone: 800-927-8823

email: [info@usminerals.com](mailto:info@usminerals.com)

[www.usminerals.com](http://www.usminerals.com)



701 Willet Road, Buffalo, NY 14218

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[www.electroabrasives.com](http://www.electroabrasives.com)



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