



SELF FLOW CASTABLES

PRODUCT DATA

SUREFLOW 50ALR

SUREFLOW 50ALR IS A SELF-FLOWING CASTABLE WHICH IS NON-WETTING TO ALUMINIUM AT ALL TEMPERATURES. TYPICAL APPLICATIONS WILL INCLUDE ALUMINIUM LAUNDERS, FILTER BOXES, UPPER SIDE WALLS IN FURNACES AND ANY AREA WHERE ADHERANCE OF ALUMINIUM AND CORUNDUM GROWTH IS A PROBLEM. LOWER THERMAL VALUES MAKE SUREFLOW 50ALR A IDEAL CHOICE FOR SINGLE WALL LININGS.

THE DATA SHOWN IS BASED ON MATERIAL PREPARED TO A CONVENTIONAL "FOLD" CONSISTANCY AND ALLOWED TO SELF-FLOW INTO FORMWORK WITHOUT VIBRATION OR TAMPING.

MAXIMUM SERVICE TEMPERATURE (M.S.T.) 1400°C

<u>ALUMINIUM CUP TESTS</u>			<u>PURE Al</u>	<u>7075 ALLOY</u>	
100 HRS @ 815°C			NO REACTION	NO REACTION	
100 HRS @ 1100°C			NO REACTION	NOT APPLICABLE	
					TYPICAL (METRIC)
<u>BULK DENSITY</u>					
@ 110°C	148 - 152	LBS/FT ³	2370 - 2435	KG/M ³	(2400)
@ 815°C	142 - 146	LBS/FT ³	2275 - 2340	KG/M ³	(2310)

COLD CRUSHING STRENGTH

@ 815°C	9000 - 14000	P.S.I.	620 - 965	KG/CM ²	(800)
@ 1100°C	8000 - 13000	P.S.I.	550 - 897	KG/CM ²	(750)

MODULUS OF RUPTURE

@ 815°C	1500 - 2000	P.S.I.	103 - 138	KG/CM ²	(120)
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PERMANENT LINEAR CHANGE

@ 815°C	- 0.00 TO - 0.30 %				(-0.18)
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MAXIMUM GRAIN SIZE 5.00 MM

TYPICAL CONDUCTIVITY OR "K" FACTOR

<u>MEAN TEMP</u>	<u>BTU/FT²/Hr/°F/in</u>	<u>W/mK</u>
@ 540°C (1000°F)	9.0	1.30
@ 815°C (1500°F)	10.0	1.44
@ 1095°C (2000°F)	10.0	1.44
<u>EROSION LOSS (ASTM C-704) @815°C</u>	10 CC MAX	(8 CC TYPICAL)

CHEMICAL ANALYSIS (%)

Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	CaO	ZrO ₂	TiO ₂	AlK
51.6	24.7	0.6	9.7	4.5	0.7	0.5

The properties shown on this data sheet represent typical average results generated using standard ASTM test methods (unless otherwise noted) conducted under controlled conditions and should not be considered to be guaranteed specifications. Properties are subject to normal manufacturing statistical standard deviation ranges, and Resco Products, Inc. reserves the right to modify the properties and specifications at any time without prior notice.

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