

PRODUCTION IDENTIFICATION

- **PRODUCT NAME:** Complete PbO-Free Thick Film Chip Resistor - RL20
 - **MANUFACTURE NAME:** Cal-Chip Electronics Inc.
 - **ADDRESS:** 59 Steamwhistle Drive Ivyland, PA 18974
 - **RESPONSIBLE PERSON NAME:** Frank Salamone
 - **TELEPHONE:** 215.942.8900

GENERAL COMPOSITION

PART NAME	SUBSTANCE	SUBSTANCE PERCENT (%)	CAS NO.
		RL20/23.9577mg	
Alumina Substrate	Al ₂ O ₃	88.2299	1344-28-1
	SiO ₂	1.6339	14808-60-7
	MgO	0.7262	1309-48-4
	CaO	0.1815	1305-78-8
Protective Coating (G1)	Bi ₂ O ₃	0.8239	1304-76-3
	SiO ₂	0.4120	14808-60-7
	Cr ₂ O ₃	0.0618	1308-38-9
Protective Coating (G2)	Epoxy Resin	0.8492	25068-38-6
	Silica	1.0187	60676-86-0
	Talcum	0.3395	14807-96-6
Resistive Element	Phosphate Ester	0.0415	68511-37-5
	Terpineol	0.2322	8000-41-7
	Bisphenol A-Epichlorohydrin Resin	0.0415	25068-38-6
	RuO ₂	0.2322	12036-10-1
	Glass	0.2820	65997-18-4
Termination (inner) C1	Ag	0.8981	7440-22-4
	Pd	0.0064	7440-05-3
	Glass	0.0320	65997-18-4
Termination (inner) C2	Ag	0.2561	7440-22-4
	Glass	0.0383	65997-18-4
Termination (inner) C3	Ni	0.3399	7440-02-0
	Cr	0.0850	7440-47-3
Termination (between) Ni Plating	Ni	1.4971	7440-02-0
Termination (outer) Sn Plating	Sn	1.4735	7440-31-5
M/K	Epoxy Resin	0.1338	25068-38-6
	TiO ₂	0.0803	13463-67-7
	BaSo ₄	0.0535	7727-43-7
TOTAL		100	