

Device Material Content

5555 NE Moore Ct. Hillsboro OR 97124 custreq@lsc.com December, 2017		Package: 176 TQFP (1.4mm) Total Device Weight 1.900 Grams			Package Code: TN176 Products: LC4kV/ZC	Assembly: ASEM Size (mm): 24 x 24 x 1.4 Lead pitch (mm): 0.5 MSL: 3 Reflow max (°C): 260		
	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	% of Subst.	Notes / Assumptions:
Die	0.89%	0.0169			Silicon chip	7440-21-3	100.00%	Die size: 4.00 x 5.05 mm
Mold Compound	78.30%	1.4876	4.70% 3.92% 0.16% 66.71% 2.82%	0.0893 0.0744 0.0030 1.2675 0.0536	Epoxy Resins Phenol Resin Carbon Black Silica Other (trade secret)	- - 1333-86-4 60676-86-0 -	6.00% 5.00% 0.20% 85.20% 3.60%	Mold Compound: Hitachi CEL9220HF
D/A Epoxy	0.11%	0.0021	0.09% 0.02%	0.00164 0.00041	Silver (Ag) other	7440-22-4 -	80.00% 20.00%	Die attach epoxy: Henkel (Ablebond) 3230
Wire	0.27%	0.0052	0.27%	0.0052	Gold (Au)	7440-57-5	100.00%	0.8 mil wire diameter; 1 wire for each package lead
Plating	1.10%	0.0208	1.10%	0.0208	Tin (Sn)	7440-31-5	100.00%	Plating is 100% Matte Sn; thickness is >10.2µm
Leadframe	19.33%	0.3674	18.69% 0.58% 0.03% 0.01% 0.02%	0.3552 0.0111 0.0006 0.0001 0.0003	Copper (Cu) Nickel (Ni) Silicon (Si) Magnesium (Mg) Silver (Ag)	7440-50-8 7440-02-0 7440-21-3 7439-95-4 7440-22-4	96.70% 3.01% 0.17% 0.03% 0.09%	C7025

Notes:
 The values listed above are nominal values based on studies of representatives of this particular package type, and are believed to be as accurate as possible.
 Constituent substances and proportions in epoxy materials are before curing.
 The information provided above is representative of the package as of the date listed, and is subject to change at any time.
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