

**ON Semiconductor** 10/15/2019

<b>Base Part</b>		<b>HCPL2531</b>		<b>Pb-free</b>
<b>Orderable Part</b>		<b>HCPL2531S</b>	<b>Total weight (mg)</b>	<b>542.964</b>
Homogenous Material	Weight (mg)	Substance in Mat.	CAS #	% Avg. Weight
<b>Coupling Gel</b>	<b>64</b>	3-Methacryloxypropyltrimethoxysilane (C10H20O5Si)	2530-85-0	100
<b>Die</b>	<b>0.099</b>	Gallium Arsenide (AsGa)	1303-00-0	33.33333333
		Silicon (Si)	7440-21-3	66.66666667
<b>Die Attach</b>	<b>0.25</b>	Silver (Ag)	7440-22-4	83
		Ortho Cresol Novolac Resin	29690-82-2	17
<b>Lead Frame</b>	<b>115</b>	Zinc (Zn)	7440-66-6	0.12
		Iron (Fe)	7439-89-6	2.35869565
		Copper (Cu)	7440-50-8	97.5
		Phosphorus (P)	7723-14-0	0.02130435
<b>Mold Compound-Black</b>	<b>93.303</b>	Brominated Epoxy Resin-2	68541-56-0	2.49991962
		Ortho Cresol Novolac Resin	29690-82-2	14.9995177
		Antimony Trioxide (Sb2O3)	1309-64-4	1.99993569
		Carbon Black (C)	1333-86-4	0.50319925
		Fused Silica (SiO2)	60676-86-0	69.99774927
<b>Mold Compound-White</b>	<b>258.662</b>	Phenolic Resin (Novolac)	9003-35-4	9.99967847
		Titanium Dioxide (TiO2)	13463-67-7	20.25809744
		Zirconium Dioxide (ZrO2)	1314-23-4	0.50258639
		Ortho Cresol Novolac Resin	29690-82-2	76.0304954
		Silica Amorphous (SiO2)	7631-86-9	2.16498751
<b>Plating</b>	<b>11.6</b>	Aluminum Trioxide (Al2O3)	1344-28-1	1.04383327
<b>Wire Bond - Au</b>	<b>0.05</b>	Tin (Sn)	7440-31-5	100
		Gold (Au)	7440-57-5	100

**Materials Disclosure Disclaimer:** Even though all possible efforts have been made to provide you with the most accurate information, we cannot guarantee its accuracy since the data has been compiled based on the ranges provided, and some information provided by the subcontractors and raw material suppliers may have been withheld to protect their business proprietary information. Thus this information is provided only as estimates, and do not include trace levels fo dopants and metal materials contained within silicon devices in the finished products. There is no intentional use of Mercury, Hexavalent Chromium, Cadmium, PBB or PBDE (5 of the 6 RoHS banned substances) in this or any of our other products. For further explanation on material composition calculations, please view our Product Chemical Content Brochure at:

<http://www.onsemi.com/pub/Collateral/BRD8022-D.PDF>