ON Semiconductor				9/20/2020
Base Part		MT9V034	HF	Pb-free
Orderable Part		MT9V034C12STC-DP1	Total weight (mg)	776.08

Homogenous Material	Weight (mg)	Substance in Mat.	CAS #	% Avg. Weight
Ceramic Substrate		Cobalt (Co)	7440-48-4	0.13
		Titanium Dioxide (TiO2)	13463-67-7	1
		Molybdenum (Mo)	7439-98-7	1
		Tungsten (W)	7440-33-7	4.21
		Magnesium Monoxide (MgO)	1309-48-4	0.6
		Calcium Oxide (CaO)	60873-85-0	0.51
		Silica Amorphous (SiO2)	7631-86-9	2.8
		Aluminum Trioxide (Al2O3)	1344-28-1	85.25
		Nickel (Ni)	7440-02-0	0.41
		Gold (Au)	7440-57-5	0.25
	542.28	Chromium Trioxide (Cr2O3)	1308-38-9	3.84
Die		Misc.	n/a	0.38
		Silicon (Si)	7440-21-3	98.63
	49.22	Aluminum (Al)	7429-90-5	0.99
Die Attach		Bisphenol A_Epichlorohydrin polymer	25068-38-6	4.31
		Epoxy resins	129915-35-1	30.87
		Fused Silica (SiO2)	60676-86-0	36.41
	25.14	Acrylic resins	n/a	28.41
Imaging Lens		Titanium Dioxide (TiO2)	13463-67-7	5.25
		Sodium Monoxide (Na2O)	1313-59-3	5.1
		Boron Trioxide (B2O3)	1303-86-2	5.25
		Zinc Monoxide (ZnO)	1314-13-2	5.13
		Antimony Trioxide (Sb2O3)	1309-64-4	0.5
		Aluminum Trioxide (Al2O3)	1344-28-1	5.05
		Potassium Monoxide (K2O)	12136-45-7	5.06
	151.66	Silica Crystalline (SiO2)	14808-60-7	68.66
Lid Attach		Other Additive Agents	n/a	17.42
		Photoinitiator	n/a	4.08
	5.79	Epoxy Prepolymer	n/a	78.5
Marking Ink		Bisphenol A_Epichlorohydrin polymer	25068-38-6	84.01
		1-Methoxy-2-propyl acetate (MPA)	108-65-6	4.78
		Butylglycol Acetate	112-07-2	4.82
		Cyclohexanone	108-94-1	4.98
	0.05	Xylene	1330-20-7	1.41
Wire Bond - Au	1.94	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 to 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 RoHS restricted substances. Lead (Pb) and lead oxide (PbO) are exempted with the RoHS exemption 7(a), 7(c) and 15. For further explanation on material composition calculations, please view our Product Chemical Content Brochure at:

https://www.onsemi.com/pub/Collateral/BRD8022-D.PDF