

## Material Composition for EN11-HSB1AF15

Sub-component	Material	% of Total Mass	Substance Name	CAS #	Substance Mass (grams)	Special Classification
Shaft	Al alloy	30.02%	Si	7440-21-3	0.0044	RoHS exemption 6(b)
			Fe	7439-89-6	0.0077	
			Cu	7440-50-8	0.0552	
			Mn	7439-96-5	5.52E-04	
			Mg	7439-95-4	0.0052	
			Pb	7439-92-1	0.0022	
			Bi	7440-69-9	0.0022	
			Zn	7440-66-6	0.0033	
Cover	PBT blend	1.66%	PBT polymer	30965-26-5	0.0214	Halogenated epoxy, contains BPA Antimony fire retardant
			Brominated epoxy resin	68928-70-1	0.0153	
			Antimony oxide	1309-64-4	0.0061	
			Glass fiber	65997-17-3	0.0183	
Ring button	Steel	3.36%	C	7440-44-0	0.0010	
			Si	7440-21-3	2.48E-04	
			Mn	7439-96-5	5.33E-04	
			P	7723-14-0	1.20E-05	
			S	7704-34-9	1.20E-05	
			Cu	7440-50-8	2.50E-05	
			Fe	7439-89-6	0.1222	
Frame	Steel	25.69%	C	231-153-3	0.0019	
			Mn	231-105-1	0.0019	
			P	231-768-7	3.78E-04	
			S	231-722-6	3.78E-04	
			Si	231-130-8	0.0028	
			Al	231-072-3	4.16E-04	
			Fe	231-096-4	0.9367	
Shaft set	Zn alloy	33.19%	Al	7429-90-5	0.0488	RoHS exemption 6(b)
			Cu	7440-50-8	0.0061	
			Mg	7439-95-4	6.10E-04	
			Fe	7439-89-6	1.22E-04	
			Pb	7439-92-1	1.20E-05	
			Cd	7440-43-9	1.00E-06	
			Sn	7440-31-5	1.00E-06	
			Zn	7440-66-6	1.1634	
Conductor base	POM	1.04%	Acetal polymer	unknown	0.0382	
			Stabilizer	unknown	7.79E-04	
Click	Steel	0.25%	C	7440-44-0	7.00E-06	
			Si	7440-21-3	5.00E-06	
			Mn	7439-96-5	1.14E-04	
			P	7723-14-0	3.00E-06	
			S	7704-34-9	1.00E-06	
			Cr	7440-47-3	0.0018	
			Ni	7440-02-0	8.31E-04	
			Fe	7439-89-6	0.0072	
Spacer plate	Steel	0.25%	C	7440-44-0	7.00E-06	
			Si	7440-21-3	5.00E-06	
			Mn	7439-96-5	1.14E-04	
			P	7723-14-0	3.00E-06	
			S	7704-34-9	1.00E-06	
			Cr	7440-47-3	0.0018	
			Ni	7440-02-0	8.31E-04	
			Fe	7439-89-6	0.0072	
Conductor	Phosphor bronze	1.28%	Cu	7440-50-8	0.0431	RoHS exemption 6(c)
			Sn	7440-31-5	0.0038	
			Zn	7440-66-6	9.40E-05	
			Pb	7439-92-1	5.00E-06	
			Fe	7439-89-6	1.90E-05	
			P	7723-14-0	2.40E-05	
Slider base	PBT blend	1.68%	PBT polymer	30965-26-5	0.0287	Halogenated epoxy, contains BPA Antimony fire retardant
			Brominated epoxy resin	68928-70-1	0.0205	
Slider	Phosphor bronze	1.17%	Ag plating	0.30%	0.0110	RoHS exemption 6(c)
			Cu	7440-50-8	0.0394	
			Sn	7440-31-5	0.0034	
			Zn	7440-66-6	8.60E-05	
			Pb	7439-92-1	4.00E-06	
			Fe	7439-89-6	1.70E-05	
			P	7723-14-0	2.20E-05	
Lubricating oil	PAO lubricant	0.04%	Polyisobutylene	9003-27-4	3.60E-04	
			PAO	68037-01-4	0.0016	
			Fumed silica	68611-44-9	4.00E-05	
Shaft oil	PAO lubricant	0.03%	Polyisobutylene	9003-27-4	0.0012	
			PAO	68037-01-4	7.00E-04	
			Fumed silica	68611-44-9	1.00E-04	
<b>Total mass</b>					<b>3.6712</b>	<b>grams</b>