



## MATERIAL DECLARATION

Material declaration of following luminaires made by Ensto Finland Oy

Product	Materials	Note
<b>• Universal luminaires</b>		
▪ AVR 1/4/14	PC body+gear plate+diffuser	magnetic gear +thermal prot.
▪ AVR 1/4/14...E	PC body+ gear plate +diffuser	HF-gear
▪ AVR 254	PC body and PMMA diffuser	magnetic gear +thermal prot.
▪ AVR 254...E	PC body and PMMA diffuser	HF-gear
▪ AVR 254...L	PC body and PMMA diffuser	LED, constant current driver
▪ AVR 320	PC body+diffuser and Fe gear plate	Magnetic gear +thermal prot.
▪ AVR 320...D/E	PC body+diffuser and Fe gear plate	HF-gear
▪ AVR 320...L	PC body+diffuser , Cu coated LED plate	LED, constant current driver
▪ AVR 400	PC body+diffuser and Fe gear plate	Magnetic gear +thermal prot.
▪ AVR 400...D/E	PC body+diffuser and Fe gear plate	HF-gear
▪ AVR 22	ASA body, PMMA diffuser and steel gear plate	Magnetic gear
▪ AVR 70/71/72	PC body+gear plate+diffuser	Magnetic gear
▪ AVR 70/71/72...E	PC body+gear plate+diffuser	HF-gear
▪ AVR 70/71/72...L	PC body+diffuser, Cu coated LED plate	LED, constant current driver
▪ AVD190...	Al/PC body, glass diffuser	LED, constant current driver
▪ AVD370...E	Al body , PC/Glass diffuser	HF-gear
▪ AVD370...L	Al body , PC/Glass diffuser	LED, constant current driver
▪ AVD550...E	Al body , PC/Glass diffuser	HF-gear
<b>• Movement detector luminaires</b>		
▪ AVR 1...4E	PC body+ gear plate +diffuser	PIR- detector and HF-gear
▪ AVR 254...4E/9E	PC body and PMMA diffuser	PIR/Radar- detector and HF-gear
▪ AVR 254...4L/9L	PC body and PMMA diffuser	Detector, LED, constant current driver
▪ AVR 320...4E/6D	PC body+diffuser and Fe gear plate	PIR- detector and HF-gear
▪ AVR 320...4L/9L	PC body and PMMA diffuser	Detector, LED, constant current driver
▪ AVD370...4/9E	Al body , PC/Glass diffuser	HF-gear
▪ AVD370...4/9L	Al body , PC/Glass diffuser	LED, constant current driver
▪ AVR 400...4E/6D	PC body+diffuser and Fe gear plate	PIR- detector and HF-gear
▪ AVR66...4H/6D	Al body+ gear plate and PC diffuser	PIR- detector and HF-gear
▪ AVR 70/71/72...4E	PC body+gear plate+diffuser	PIR- detector and HF-gear
▪ AVR 70/71/72...4L	PC body+gear plate+diffuser	PIR-detector, LED, constant cur. driver
▪ AVS 21.4	Metal body, Al reflector and PC diffuser	PIR- detector
<b>• JONO luminaires</b>		
▪ AVR66...	Al body+gear plate and PC diffuser	Mmagnetic gear
▪ AVR66...H	Al body+gear plate and PC diffuser	Electronic starter
▪ AVR66...D/E:	Al body+gear plate and PC diffuser	HF-gear
▪ AVR66...L	Al body+gear plate and PC diffuser	LED, constant current driver
▪ AVR67	Al body+gear plate and PC diffuser	HF-gear
▪ AVK66	Al body+gear plate and PC diffuser	Magnetic gear
▪ AVK66...E	Al body+gear plate and PC diffuser	HF-gear
▪ AVL66...L	Al body+gear plate and PC diffuser	LED, constant current driver
▪ AVR68...	Steel body, PC diffuser	HF-gear



<b>Product</b>	<b>Materials</b>	<b>Note</b>
<ul style="list-style-type: none"><li>• <b>Sauna luminaires</b><ul style="list-style-type: none"><li>▪ AVH 11...</li><li>▪ AVH 15...</li><li>▪ Grills</li></ul></li></ul>	<ul style="list-style-type: none"><li>▪ Thermoplastic body+glass diffuser</li><li>▪ SPS body+ glass diffuser</li><li>▪ Pine/adler grill + metal fixing parts</li></ul>	<ul style="list-style-type: none"><li>▪ Porcelain lamp holder</li><li>▪ SPS-plastic with glass</li></ul>
<ul style="list-style-type: none"><li>• <b>Outdoor luminaires</b><ul style="list-style-type: none"><li>▪ AVS 21...</li><li>▪ AVS 70...74</li><li>▪ AVR 5...</li><li>▪ AVR51/52</li></ul></li></ul>	<ul style="list-style-type: none"><li>▪ Metal body, Al reflector and PC diffuser</li><li>▪ Metal body, Al reflector and PC diffuser</li><li>▪ PC body+glass diffuser</li><li>▪ Al body, PC diffuser</li></ul>	<ul style="list-style-type: none"><li>▪ magnetic gear</li><li>▪ LED, constant current driver</li></ul>

Most of above mentioned products includes metal components ( ballasts, thermal protection components , lampholders , wires, screws ) which are lead-, cadmium-, and quicksilver free. Metal components are made of steel copper or aluminium and they might include very little amount of tin and zinc. Electronic components includes very little amount of tin. Lampholders are mainly made of PBT- plastic. Wire sheath mainly PVC-plastic, including little halogen ( exception : AVH sauna luminaires and AVS- range, with wire sheath silicone). Polykarbonate (PC) and acryl (PMMA) did not include fire retardants or halogen

All luminaires are made according to ErP , RoHS and REACH directives .