



## **Green Purchasing Institute**

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### **MEMORANDUM**

**To: Elena Lymberidi, Zero Mercury Campaign Coordinator, EEB**

**From: Alicia Culver**

**Re: Data on Mercury Content of High-pressure Sodium (HPS) Lamps Available from Major US Manufacturers**

**Date: March 31, 2008**

Below is the data on the mercury content of high-pressure sodium (HPS) lamps offered in the United States by GE Lighting, Philips Lighting and Osram Sylvania. Generally, only GE offers both TCLP-compliant and non-TCLP compliant versions of the same lamp model. GE's Ecolux (TCLP-compliant) models almost always have less mercury, although in one case (400-watt model) the mercury content is the same as its equivalent non-TCLP-compliant model. Sylvania has the best selection of low-mercury and mercury-free HPS lamps. While all of the Philips' models are TCLP-compliant, in some cases their models have the highest mercury content. The higher the wattage, the higher the mercury content in most cases for all of the companies.

*So, what spec would facilitate the use of low-mercury HPS lamps?* In most cases, specifying TCLP-compliant HPS lamps would enable the specifier to easily get models devoid of the highest mercury levels for each wattage. You could also set numerical levels based on the best two out of three manufacturers' offerings, but that would be complicated and could change as manufacturers reformulate. It would be great to write specifications that would encourage the use of the long-lasting/low-mercury and mercury-free models, but to do so would result in a sole-source spec. What are your suggestions?



<b>Watts</b>	<b>OEM</b>	<b>Lamp Description</b>	<b>Lamp Model #</b>	<b>Mercury Content (mg)</b>	<b>TCLP (Y/N)</b>	<b>Mean Lumens</b>	<b>Rated Life (Hours)</b>	<b>Notes</b>
200	GE	LU200	44206	10-50	No	19,800	24,000+	Lucolux standard model
200	GE	LU200/ECO	45763	11-30	Yes	19,800	24,000+	Ecolux
200	PH	C200S66/ALTO	36877-9	31	Yes	19,260	24,000+	Ceramalux, ALTO
200	SY	LU200/ECO	67576	14	Yes	19,800	24,000+	Ecologic, low-mercury
200	SY	LU200/PLUS/ECO	67495	3	Yes	19,800	24,000+	Ecologic, very low-mercury and long-life
250	GE	LU250	44047	10-50	No	25,200	24,000+	Lucolux standard model
250	GE	LU250/ECO	45764	11-30	Yes	25,200	24,000+	Ecolux, made with no lead solder
250	PH	C250S50/ALTO	36879-5	31.9	Yes	24,300	24,000+	Ceramalux, ALTO
250	SY	LU250/ECO	67578	14	Yes	26,100	24,000+	Ecologic, low-mercury
250	SY	LU250/PLUS/ECO	67572	3	Yes	26,100	30,000	Ecologic, very low-mercury and long-life
400	GE	LU400	44054	11-30	No	45,000	24,000+	Lucolux standard model
400	GE	LU400/ECO	45765	11-30	Yes	45,000	24,000+	Ecolux, made with no lead solder
400	PH	C400S51/ALTO	36881-1	31	Yes	45,000	24,000+	Ceramalux, ALTO
400	SY	LU400/ECO	67533	11	Yes	45,000	24,000+	Ecologic, low-mercury
400	SY	LU400/PLUS/ECO	67312	3.7	Yes	45,000	30,000	Ecologic, very low-mercury and long-life
1000	GE	LU1000/ECO	44058	11-30	Yes	126,000	24,000+	Made with no lead solder; no LU1000 available; all TCLP-compliant
1000	PH	C1000S52/ALTO	36883-7	44	Yes	126,000	24,000+	Ceramalux, ALTO
1000	SY	LU1000/PLUS	67316	15	No	124,000	30,000	Not available in ECO (but still relatively low mercury)