

**PBT source reduction - mercury**

Possible 1 point

**Intent**

To reduce the release of Persistent Bioaccumulative and Toxic (PBTs) chemicals associated with the life cycle of building materials.

**Requirements**

Specify and install fluorescent lamps with both low mercury content (MR Prerequisite PBT Source Reduction—Mercury) and long lamp life, as listed in Table 1.

**Table 1. criteria for rate life of low-mercury lamps**

Lamp	Maximum content	Lamp Life (hrs)
T-8 fluorescent, eight-foot	10 mg mercury	<b>standard output</b> - 24,000 rated hours on instant start ballasts or program start ballasts (3-hour starts) <b>high output</b> - 18,000 rated hours on instant start ballasts or program start ballasts (3-hour starts)
T-8 fluorescent, four-foot	3.5 mg mercury	both standard and high output 30,000 rated hours on instant start ballasts, or 36,000 rated hours on program start ballasts (3 hour starts)
T-8 fluorescent- two foot and three foot	3.5 mg mercury	24,000 rated hours on instant start ballasts or program start ballasts (3-hour starts)
T-8 fluorescent, U-bent	6 mg mercury	18,000 rated hours on instant start ballasts, or 24,000 rated hours on program start ballasts (3-hour starts)
T-5 fluorescent, linear	2.5 mg mercury	<b>both standard and high output</b> - 25,000 rated hours on program start ballasts
Compact fluorescent, nonintegral ballast	3.5 mg mercury	12,000 rated hours
Compact fluorescent, integral ballast	3.5 mg mercury, ENERGY STAR qualified	<b>Bare bulb</b> - 10,000 rated hours <b>covered models such as globes, reflectors, A-19s</b> - 8,000 rated hours
High-pressure sodium, up to 400 watts	10 mg mercury	Use noncycling type or replace with LED lamps or induction lamps
High-pressure sodium, above 400 watts	32 mg mercury	Use noncycling type or replace with LED lamps or induction lamps

Do not specify or install circular fluorescent lamps or probe start metal halide lamps.