

Is the lamp or light a compact fluorescent lamp < 9 inches in length?

Yes



No



Compact fluorescesnts lamps (CFLs) are usually single-based florescent lighting with a plug-in or screw-in base and are generally smaller and more compact than linear fluorescents.

Is the lamp or light a compact fluorescent lamp < 9 inches in length?

Yes
→

RoHS exemption for Mercury (Application 1) and Lead (Application 5)

The lamp or light may contain no more than a maximum concentration in homogeneous materials of:

- 0.1% by weight (1,000 ppm) of lead (other lead exemptions may apply – see Application 6 and 7),
- 0.1% by weight (1,000 ppm) hexavalent chromium, PBBs, or PBDEs, and
- 0.01% by weight (100 ppm) of cadmium.

RoHS Application 1. Mercury in compact fluorescent lamps (CFLs) may not exceed 5 mg per lamp.

RoHS Application 5. No restrictions on the amount of lead in the glass of fluorescent tubes.

RoHS Application 6. Lead used as an alloying element in steel can contain up to 0.35% lead by weight, 0.4% lead by weight for aluminum and 4% lead by weight for copper alloy.

RoHS Application 7. No restrictions on lead used in high melting temperature type solders (i.e. tin-lead based alloys containing 85% by weight or more lead).

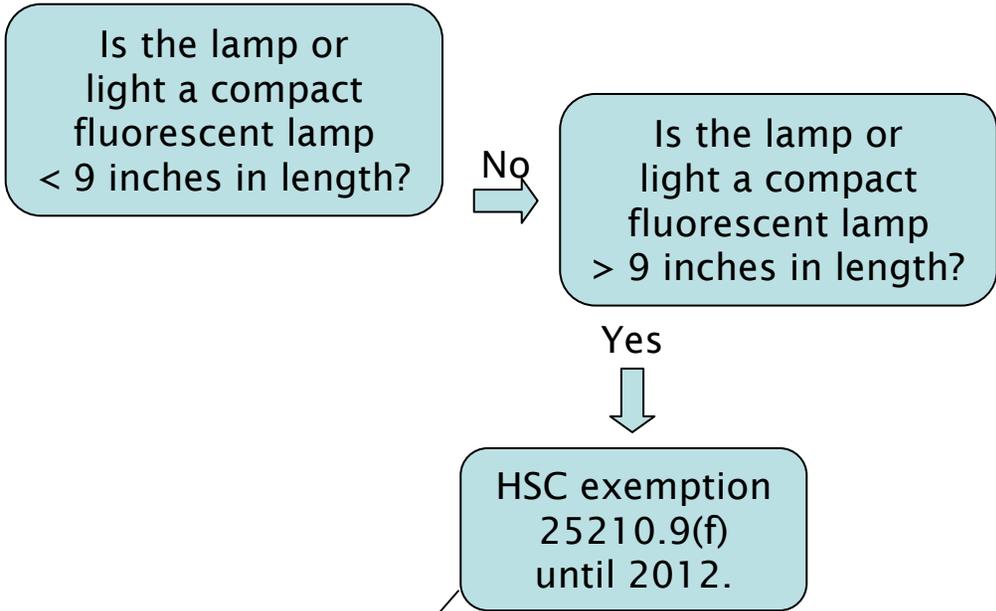
Is the lamp or light a compact fluorescent lamp < 9 inches in length?

No
→

Is the lamp or light a compact fluorescent lamp > 9 inches in length?

Yes
↓

No
↓



25210.9(f) - restrictions on the hazardous substances do not apply to high intensity discharge lamps and compact fluorescent lamps greater than nine inches in length until January 1, 2012.

Is the lamp or light a compact fluorescent lamp < 9 inches in length?

No →

Is the lamp or light a compact fluorescent lamp > 9 inches in length?

No ↓

Is the lamp or light a straight fluorescent?

Yes ↓

No ↓

Straight (linear) fluorescent lamps generally have a double-pinned base. Non-linear lamps such as u-bent and circular models, induction fluorescents, and neon lamps are not considered straight (linear) fluorescent lamps.

Is the lamp or light a compact fluorescent lamp?

RoHS Application 4. No restrictions on the amount of mercury in other lamps not mentioned in RoHS Directive Annex.

RoHS Application 5. No restrictions on the amount of lead in the glass of fluorescent tubes.

RoHS Application 6. Lead used as an alloying element in steel can contain up to 0.35% lead by weight, 0.4% lead by weight for aluminum and 4% lead by weight for copper alloy.

RoHS Application 7. No restrictions on lead used in high melting temperature type solders (i.e. tin-lead based alloys containing 85% by weight or more lead).

Is the lamp or light a compact fluorescent lamp > 9 inches in length?

No



Is the lamp or light a straight fluorescent?

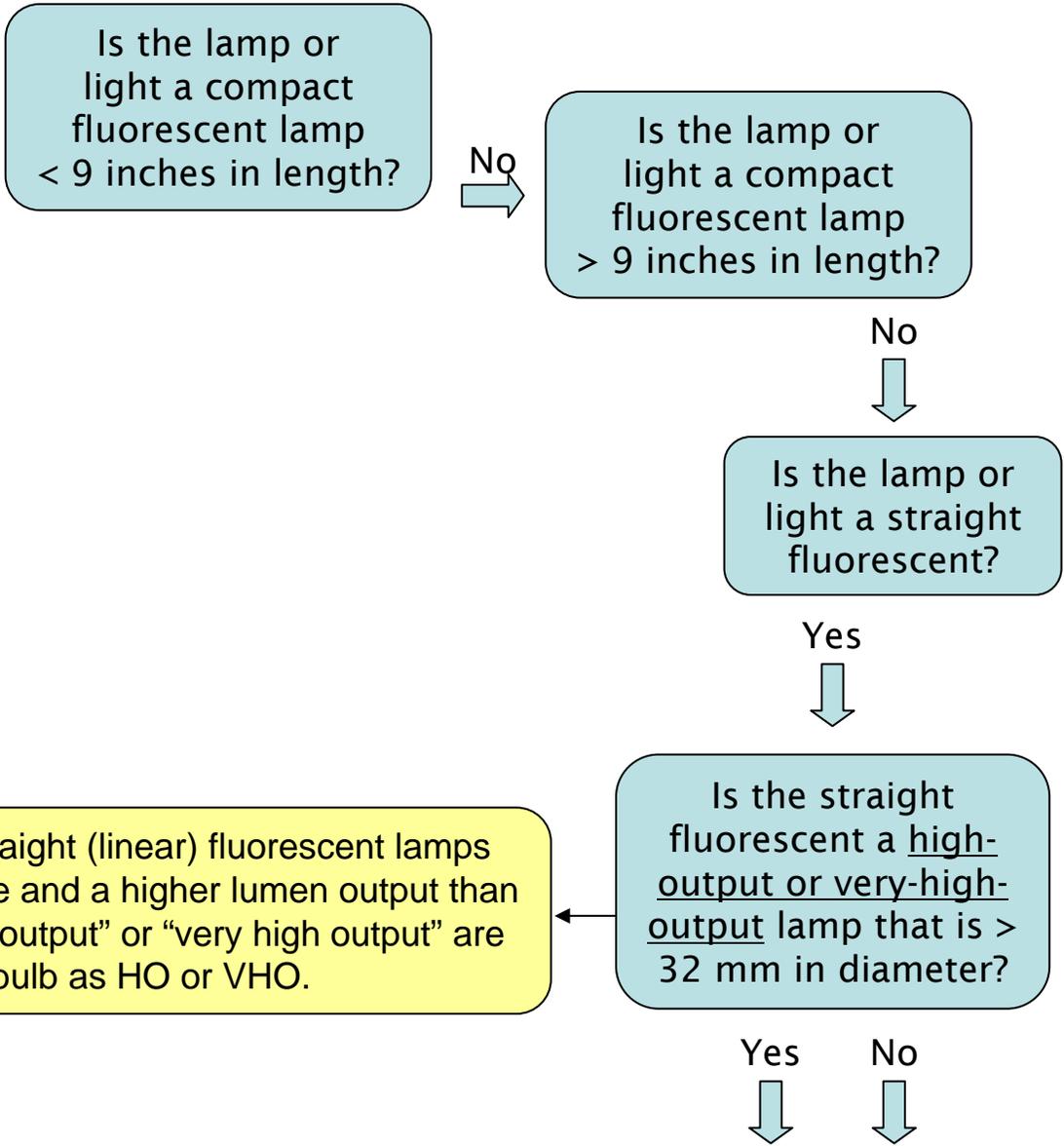
No



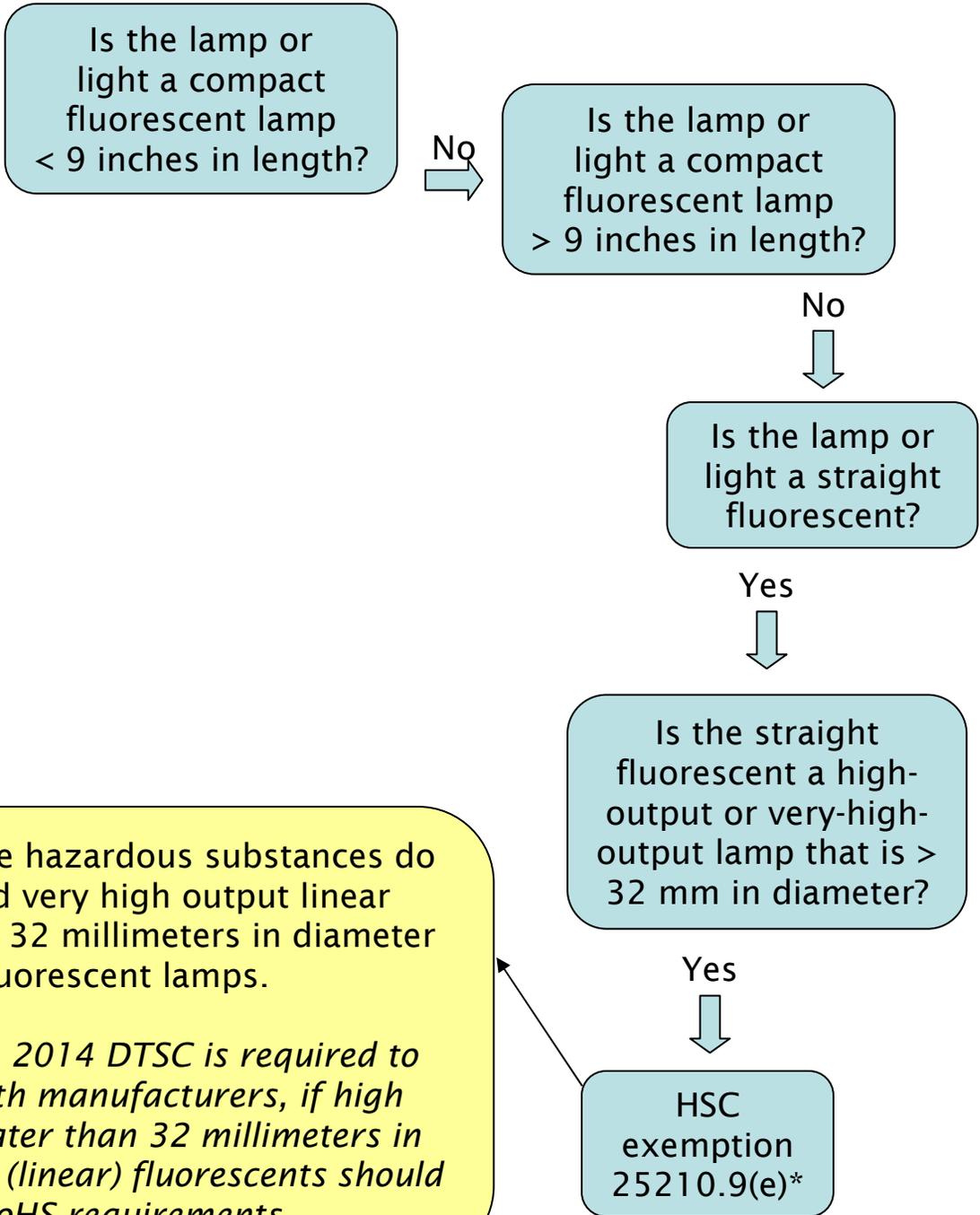
RoHS exemption for Mercury (Application 4) and Lead (Application 5).

The lamp or light may contain no more than a maximum concentration in homogeneous materials of:

- 0.1% by weight (1,000 ppm) of lead, (other lead exemptions may apply - see Application 6 and 7),
- 0.1% by weight (1,000 ppm) hexavalent chromium, PBBs, or PBDEs, and
- 0.01% by weight (100 ppm) of cadmium.



“High output” and “very high output” straight (linear) fluorescent lamps usually have a lower starting temperature and a higher lumen output than standard fluorescents. The words “high output” or “very high output” are usually abbreviated on the bulb as HO or VHO.



25210.9(e) - restrictions on the hazardous substances do not apply to high output and very high output linear fluorescent lamps greater than 32 millimeters in diameter and preheat linear fluorescent lamps.

**Please note: After January 1, 2014 DTSC is required to determine in consultation with manufacturers, if high output, very high output (greater than 32 millimeters in diameter) and preheat straight (linear) fluorescents should be subject to the EU RoHS requirements.*

Is the lamp or light a compact fluorescent lamp < 9 inches in length?

No →

Is the lamp or light a compact fluorescent lamp > 9 inches in length?

No ↓

Is the lamp or light a straight fluorescent?

Yes ↓

Is the straight fluorescent a high-output or very-high-output lamp that is > 32 mm in diameter?

No ↓

Yes ←
No ←

Is the straight fluorescent a pre-heat lamp?

Preheat fluorescent lamps are designed to be used in fixtures with a starter - a switch that briefly allows electrical current to run through the lamp's filaments. Preheat fluorescent lamps can be identified from their relatively short rated life (5,000 to 9,000 hours) and their relatively low CRI (50-70).

Is the lamp or light a compact fluorescent lamp < 9 inches in length?

No →

Is the lamp or light a compact fluorescent lamp > 9 inches in length?

No ↓

Is the lamp or light a straight fluorescent?

Yes ↓

Is the straight fluorescent a high-output or very-high-output lamp that is > 32 mm in diameter?

No ↓

Is the straight fluorescent a pre-heat lamp?

Yes ←

HSC exemption 25210.9(e)*

25210.9(e) - restrictions on the hazardous substances do not apply to high output and very high output linear fluorescent lamps greater than 32 millimeters in diameter and preheat linear fluorescent lamps.

**Please note: After January 1, 2014 DTSC is required to determine in consultation with manufacturers, if high output, very high output (greater than 32 millimeters in diameter) and preheat straight (linear) fluorescents should be subject to the EU RoHS requirements.*

Is the lamp or light a compact fluorescent lamp < 9 inches in length?

No →

Is the lamp or light a compact fluorescent lamp > 9 inches in length?

No ↓

Is the lamp or light a straight fluorescent?

Yes ↓

Is the straight fluorescent a high-output or very-high-output lamp that is > 32 mm in diameter?

No ↓

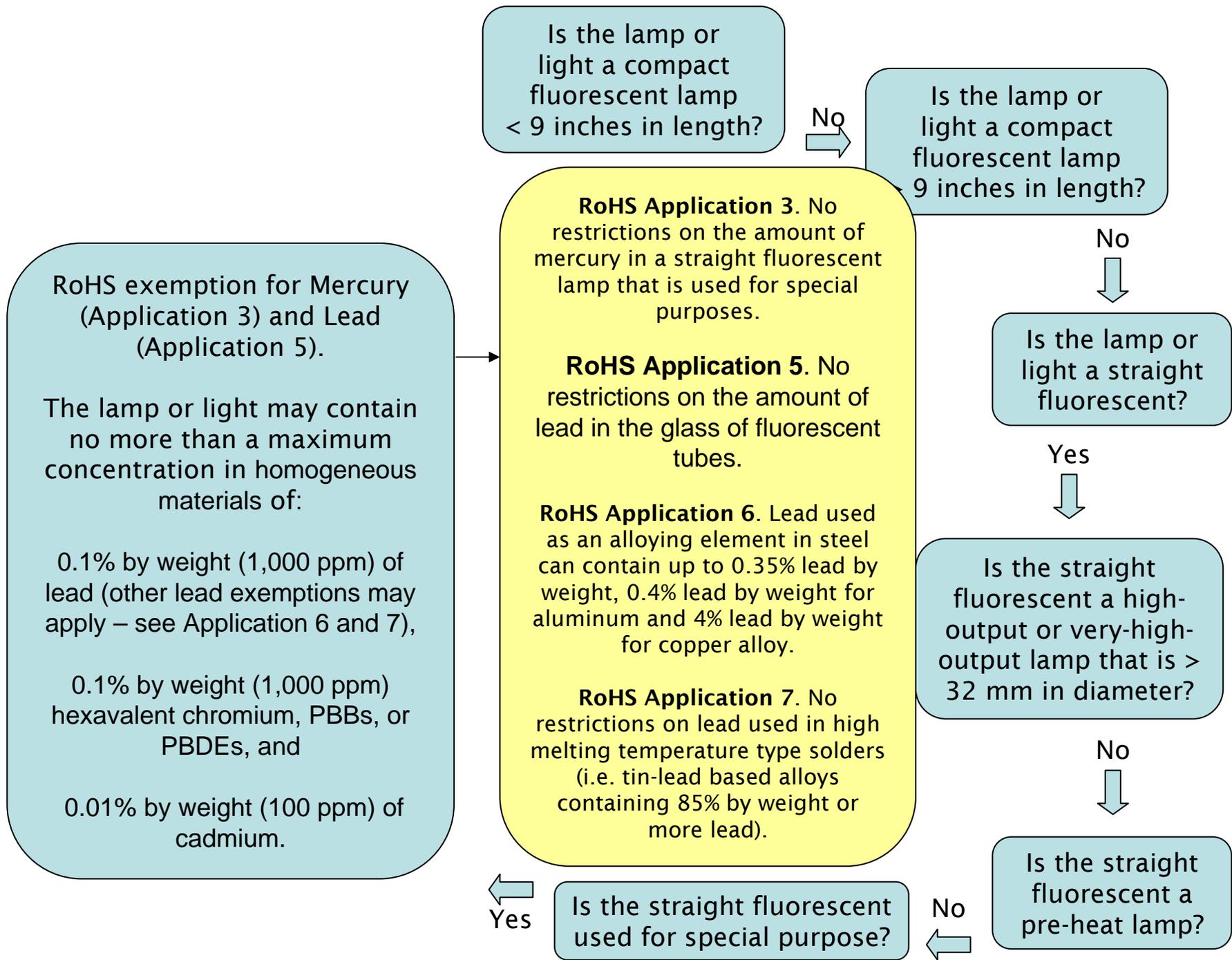
Is the straight fluorescent a pre-heat lamp?

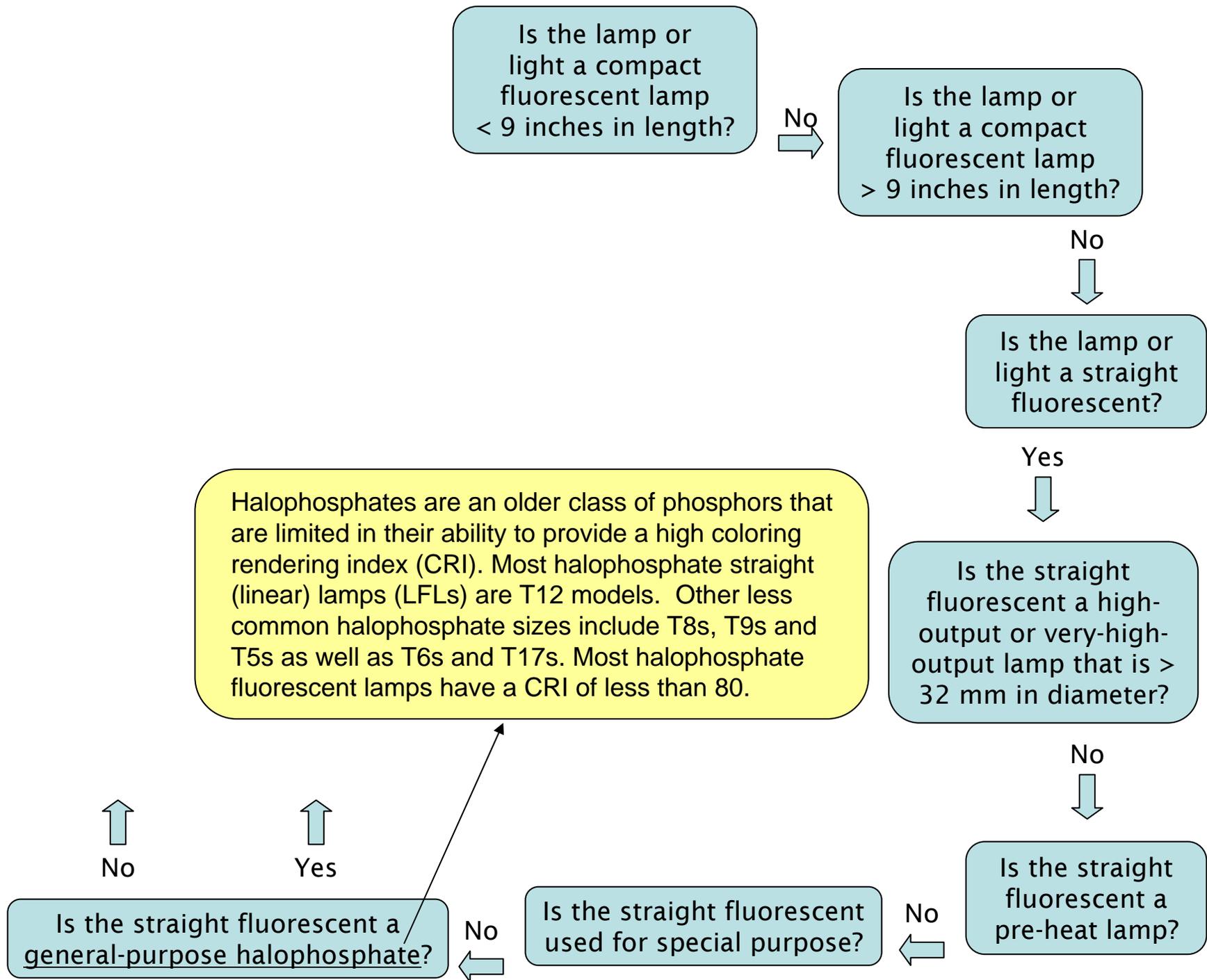
No ←

Is the straight fluorescent used for special purpose?

Yes ←
No ←

Special purpose lamps include those used for tanning, lamps used in appliances such as refrigeration units, black lights (i.e., ultraviolet lights), aquarium and shatter-resistant models, long length lamps (greater than 1800mm in length), disinfection lamps with special components (e.g. integrated reflectors or external protection sleeves), lamps with special ignition features (e.g. designed for low temperatures), amalgam lamps, exit signs, and LCD back light lamps. (This is list of examples and should not be considered all-inclusive.)





Is the lamp or light a compact fluorescent lamp < 9 inches in length?

No →

Is the lamp or light a compact fluorescent lamp > 9 inches in length?

RoHS exemptions for Mercury (Application 2) and Lead (Application 5).
The lamp or light may contain no more than a maximum concentration in homogeneous materials of:

- 0.1% by weight (1,000 ppm) of lead, (other lead exemptions may apply - see Application 6 and 7),
- 0.1% by weight (1,000 ppm) hexavalent chromium, PBBs, or PBDEs, and
- 0.01% by weight (100 ppm) of cadmium.

RoHS Application 2. Mercury in a straight fluorescent lamp that is used for general purpose may not exceed:

- 10 mg in halophosphate lamps
- 5 mg in triphosphate lamps with a normal lifetime
- 8 mg in triphosphate lamps with a long lifetime

RoHS Application 5. No restrictions on the amount of lead in the glass of fluorescent tubes.

RoHS Application 6. Lead used as an alloying element in steel can contain up to 0.35% lead by weight, 0.4% lead by weight for aluminum and 4% lead by weight for copper alloy.

RoHS Application 7. No restrictions on lead used in high melting temperature type solders (i.e. tin-lead based alloys containing 85% by weight or more lead).

↑
Yes

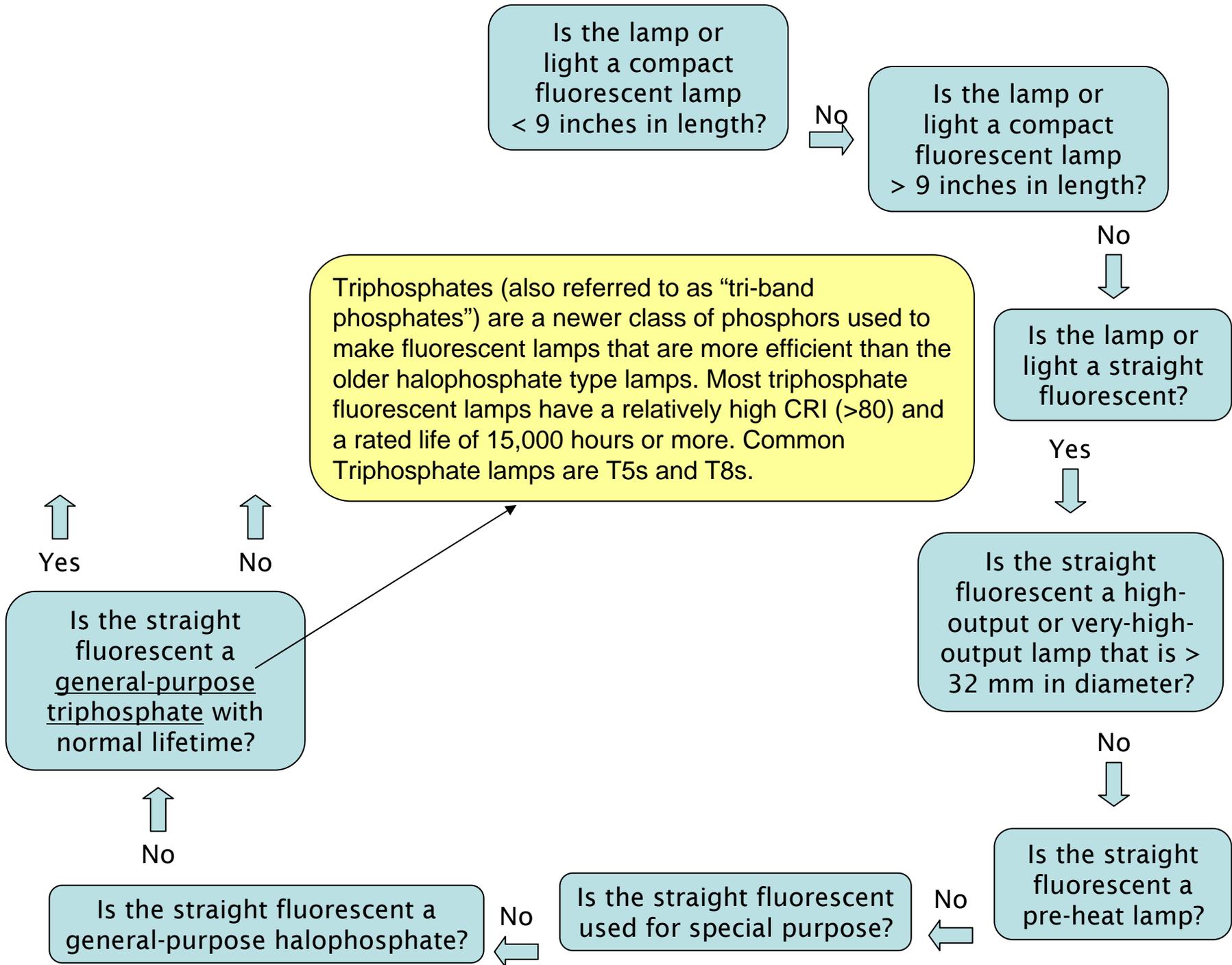
Is the straight fluorescent a general-purpose halophosphate?

No ←

Is the straight fluorescent used for special purpose?

No ←

Is the straight fluorescent a pre-heat lamp?



RoHS exemption for Mercury (Application 2) and Lead (Application 5).

The lamp or light may contain no more than a maximum concentration in homogeneous materials of:

- 0.1% by weight (1,000 ppm) of lead (other lead exemptions may apply – see Application 6 and 7),
- 0.1% by weight (1,000 ppm) hexavalent chromium, PBBs, or PBDEs, and
- 0.01% by weight (100 ppm) of cadmium.

Is the lamp or light a compact fluorescent lamp > 9 inches in length?

No
↓

Is the lamp or light a straight fluorescent?

Yes
↓

RoHS Application 2. Mercury in a straight fluorescent lamp that is used for general purpose may not exceed:

- 10 mg in halophosphate lamps
- 5 mg in triphosphate lamps with a normal lifetime
- 8 mg in triphosphate lamps with a long lifetime

RoHS Application 5. No restrictions on the amount of lead in the glass of fluorescent tubes.

RoHS Application 6. Lead used as an alloying element in steel can contain up to 0.35% lead by weight, 0.4% lead by weight for aluminum and 4% lead by weight for copper alloy.

RoHS Application 7. No restrictions on lead used in high melting temperature type solders (i.e. tin-lead based alloys containing 85% by weight or more lead).

Is the lamp or light a high-voltage-high-temperature lamp that is > 1/2 inch in diameter?

No
↓

Is the lamp or light a straight fluorescent a heat lamp?



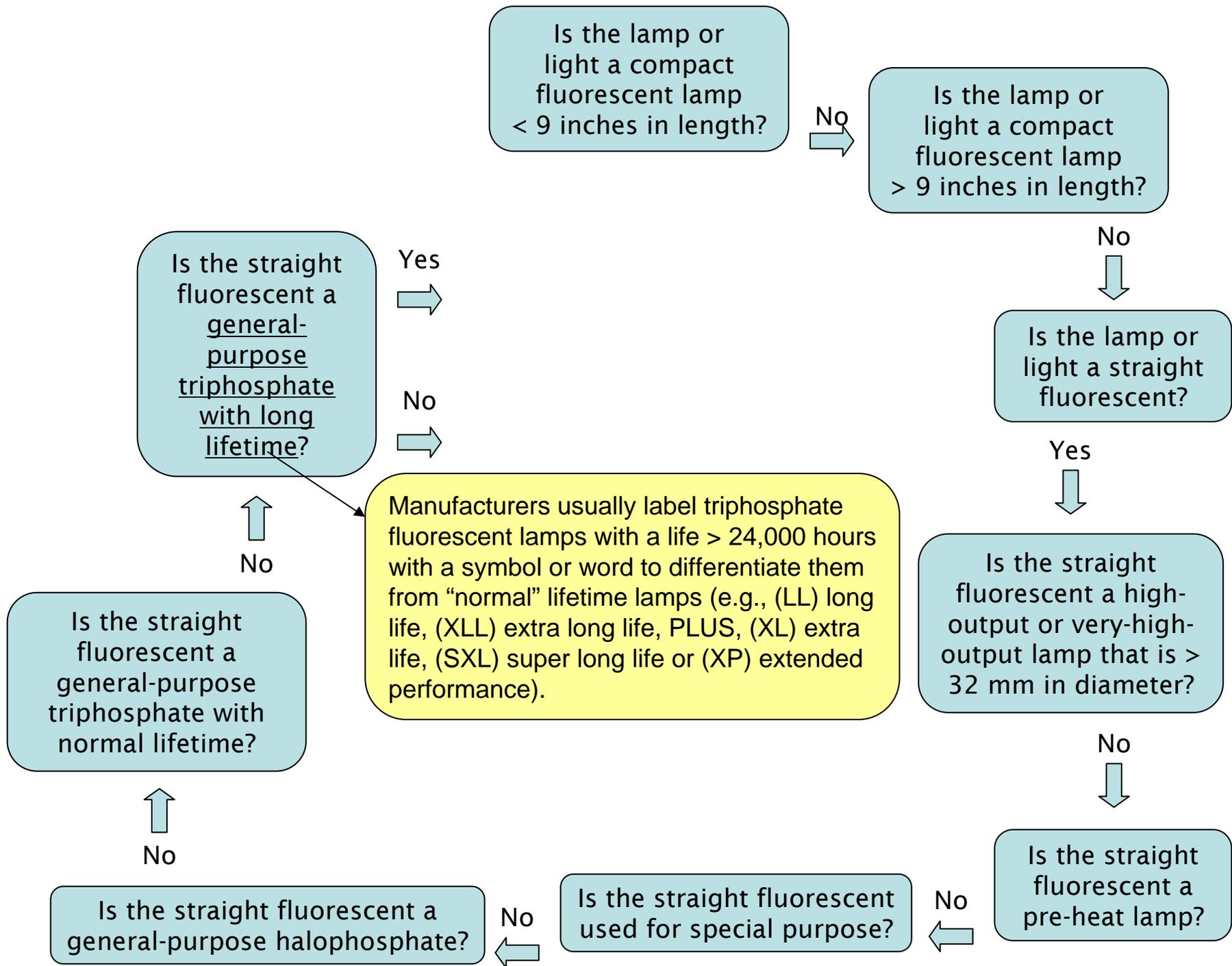
Yes

Is the straight fluorescent a general-purpose triphosphate with normal lifetime?



No

Is the straight fluorescent a general-purpose halophosphate lamp?



Is the straight fluorescent a general-purpose triphosphate with long lifetime?

Yes



RoHS exemptions for Mercury (Application 2) and Lead (Application 5).

The lamp or light may contain no more than a maximum concentration in homogeneous materials of:

- 0.1% by weight (1,000 ppm) of lead (other lead exemptions may apply - see Application 6 and 7),
- 0.1% by weight (1,000 ppm) hexavalent chromium, PBBs, or PBDEs, and
- 0.01% by weight (100 ppm) of cadmium.

RoHS Application 2. Mercury in a straight fluorescent lamp that is used for general purpose may not exceed:

- 10 mg in halophosphate lamps
- 5 mg in triphosphate lamps with a normal lifetime
- 8 mg in triphosphate lamps with a long lifetime

RoHS Application 5.

No restrictions on the amount of lead in the glass of fluorescent tubes.

RoHS Application 6. Lead used as an alloying element in steel can contain up to 0.35% lead by weight, 0.4% lead by weight for aluminum and 4% lead by weight for copper alloy.

RoHS Application 7. No restrictions on lead used in high melting temperature type solders (i.e. tin-lead based alloys containing 85% by weight or more lead).

