



SAFETY DATA SHEET COMPACT FLUORESCENT LAMPS (integrated)

Compact Fluorescent Lamps, manufactured or distributed by FEIT ELECTRIC COMPANY, are exempted from the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) because they are "articles". The following information is provided by FEIT ELECTRIC COMPANY as a courtesy to its customers.

I. IDENTIFICATION

Trade Name (as labeled): **Feit Electric Compact Fluorescent Lamps**

Manufacturer **FEIT ELECTRIC COMPANY, INC.
4901 Gregg Road
Pico Rivera, CA 90660
(800) 543-3348**

II. HAZARD IDENTIFICATION

THERE ARE NO KNOWN HEALTH HAZARDS FROM EXPOSURE TO LAMPS THAT ARE INTACT. No adverse effects are expected from occasional exposure to broken lamps. As a matter of good practice, avoid prolonged or frequent exposure to broken lamps unless there is adequate ventilation. The major hazard from broken lamps is the possibility of sustaining glass cuts.

Warning! If lamp is broken, mercury may be harmful if inhaled and may cause irritation of the eyes and respiratory system. Seek medical attention if discomfort, irritation, or pulmonary symptoms develop. Store in well-ventilated area.

III. COMPOSITION – INFORMATION ON INGREDIENTS

The following materials, unless specified otherwise, are part of the glass bulb portion of the CFL unit and the entire CFL. The % weight, unless specified otherwise, is relative to the glass bulb portion of the CFL and the entire CFL unit. If the glass bulb is broken, the following materials may be released:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>% by wt.</u>
Glass (Soda-Lime)	8006-28-8	98
(1,4) Mercury	7439-97-6	<0.02
(1,3) Lead Oxide	1317-36-8	0.2-2.0
Aluminum Oxide	1344-28-1	0-2.0
(1,4,6) Lead Solder (as Pb)	7439-92-1	0-0.4
(5) Krypton-85	7439-90-9	0-<0.01
Fluorescent Phosphor	-----	0.5-3.0
may contain:		
(3) Barium Compounds (as Ba dust)	7440-39-3	0-0.1
(3) Manganese (as dust)	7439-96-5	0-0.1
(3) Yttrium Oxide (as Y dust)	7440-65-5	0-0.5

Product Safety Data Sheet for FEIT ELECTRIC COMPANY brand Compact Fluorescent Lamps SDS No. 1.0

- (1) These chemicals are subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372
- (2) Limits as nuisance particulate
- (3) These elements are contained in the material as part of its chemical structure; the material is not a mixture.
- (4) The mercury and lead in this product are substances known to the state of California to cause reproductive toxicity if ingested. [California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).]
- (5) This radioactive isotope is found in the glass encapsulated starting switch mounted only in the base of CFLs.
- (6) This material is found only on the base of the CFL's ballast/adaptor unit and the % weight is relative to the entire lamp & ballast/adaptor unit

NIOSH/OSHA Occupational Health Guidelines for Chemical Hazards and/or NIOSH Pocket Guide to Chemical Hazards lists the following effects of overexposure to chemicals/materials tabulated below when they are inhaled, ingested, or contacted with skin or eye:

Mercury – Exposure to high concentrations of vapors for brief periods can cause acute symptoms such as pneumonitis, chest pains, shortness of breath, coughing, gingivitis, salivation and possibly stomatitis. May cause redness and irritation as a result of contact with skin and/or eyes.

Lead - Ingestion and inhalation of lead dust or fume must be avoided. Irritation of the eyes and respiratory tract may occur. Excessive lead absorption is toxic and may include symptoms such as anemia, weakness, abdominal pain, and kidney disease.

Phosphor – Phosphor dust is considered to be physiologically inert and as such, has an OSHA exposure limit of 15 mg/cubic meter for total dust and 5 mg/cubic meter for respirable dust.

Barium Compounds – Alkaline barium compounds, such as the hydroxide and carbonate, may cause local irritation to the eyes, nose, throat, and skin.

Glass – Glass dust is considered to be physiologically inert and as such, has an OSHA exposure limit of 15 mg/cubic meter for total dust and 5 mg/cubic meter for respirable dust. The ACGIH TLVs for particulates not otherwise classified are 10 mg/cubic meter for total dust and 3 mg/cubic meter for respirable dust.

Manganese- Inhalation of manganese dust may cause local irritation to the eyes, nose, and throat.

Yttrium – Studies of workers exposed to this material showed no evidence of chronic or systemic effects.

Aluminum Oxide (Alumina) – Alumina is a non-toxic material which is very low in free silica content. Sharp-edged particles can irritate the eyes, perhaps the skin, and definitely the mucous membranes of the respiratory tract.

Krypton-85 Contained in Glow Switch – The radiation emitted by Kr-85 is 99.6% beta which is completely absorbed by the glass envelope of the glow switch and 0.4% gamma which is not. This radiation is, however, 100 to 200 times less than that allowable for clocks and watches. In the unlikely event of the glow switch breaking, the traces of krypton-85 gas immediately disperses in the air. Krypton gas and its radioactive isotope are inert (they do not react chemically with other substances) and are not absorbed by the body.

IV. FIRST-AID MEASURES

Contact, Skin: Thoroughly wash affected area with soap or detergent and water. Seek medical attention if needed.

Contact, Eye: Wash eyes, including under eyelids with water for 15 minutes. Seek medical attention.

Glass Cuts: Perform first aid procedures. Seek medical attention if needed.

Inhalation: If discomfort or irritation to the nose or throat develop, seek medical attention if needed. If breathing has stopped, perform artificial respiration and seek medical attention at once.

Ingestion: In the unlikely event of ingesting significant CFL materials, seek medical attention immediately.

V. FIRE-FIGHTING MEASURES

Flammability: Non-combustible

Fire Extinguishing Materials: Use extinguishing agents suitable for surrounding fire.

Special Firefighting Procedure: Use a self-contained breathing apparatus to prevent inhalation of dust and/or fumes that may be generated from broken lamps during firefighting activities.

Unusual Fire and Explosion Hazards: When exposed to high temperature, toxic fumes may be released from broken lamps.

VI. ACCIDENTAL RELEASE MEASURES

ONLY APPLICABLE FOR BROKEN LAMPS

Ventilation: Use adequate general and local exhaust ventilation to maintain exposure levels below the PEL or TLV limits. If such ventilation is unavailable, use respirators as specified below.

Respiratory Protection: Use appropriate NIOSH approved respirator if airborne dust concentrations exceed the pertinent PEL or TLV limits. All appropriate requirements set forth in 29 CFR 1910.134 should be met.

Eye protection: OSHA specified safety glasses, goggles or face shield are recommended if lamps are being broken.

Protective clothing: OSHA specified cut and puncture-resistant gloves are recommended for dealing with broken lamps.

Hygienic practices: After handling broken lamps, wash thoroughly before eating, smoking or handling tobacco products, applying cosmetics, or using toilet facilities.

US Environmental Protection Agency CFL Cleanup guidelines: www.epa.gov/cfl.

Before Cleanup:

- Have people and pets leave the room.
- Air out the room for 5-10 minutes by opening a window or door to the outdoor environment.
- Shut off the central forced air heating or air-conditioning system.
- Collect materials needed to clean up broken bulb: stiff paper or cardboard; sticky tape; damp paper towels or disposable wet wipes (for hard surfaces); and a glass jar with a metal lid or a sealable plastic bag.

During Cleanup:

- DO NOT VACUUM. Vacuuming is not recommended unless broken glass remains after all other cleanup steps have been taken. Vacuuming could spread mercury-containing powder or mercury vapor.
- Be thorough in collecting broken glass and visible powder. Scoop up glass fragments and powder using stiff paper or cardboard. Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder. Place the used tape in the glass jar or plastic bag. See the detailed cleanup instructions for more information, and for differences in cleaning up hard surfaces versus carpeting or rugs.
- Place cleanup materials in a sealable container.

After Cleanup:

- Promptly place all bulb debris and cleanup materials, including vacuum cleaner bags, outdoors in a trash container or protected area until materials can be disposed of. Avoid leaving any bulb fragments or cleanup materials indoors.
- Next, check with your local government about disposal requirements in your area, because some localities require fluorescent bulbs (broken or unbroken) be taken to a local recycling center. If there is no such requirement in your area, you can dispose of the materials with your household trash.
- If practical, continue to air out the room where the bulb was broken and leave the heating/air conditioning system shut off for several hours.

If you are concerned about your health after cleaning up the broken CFL, you may contact your local poison control center by calling 1-800-222-1222.

VII. SPECIAL HANDLING INFORMATION – FOR BROKEN LAMPS

ONLY APPLICABLE FOR BROKEN LAMPS

Ventilation: Use adequate general and local exhaust ventilation to maintain exposure levels below the PEL or TLV limits. If such ventilation is unavailable, use respirators as specified below.

Respiratory Protection: Use appropriate NIOSH approved respirator if airborne dust concentrations exceed the pertinent PEL or TLV limits. All appropriate requirements set forth in 29 CFR 1910.134 should be met.

Eye protection: OSHA specified safety glasses, goggles or face shield are recommended if lamps are being broken.

Protective clothing: OSHA specified cut and puncture-resistant gloves are recommended for dealing with broken lamps.

Hygienic practices: After handling broken lamps, wash thoroughly before eating, smoking or handling tobacco products, applying cosmetics, or using toilet facilities.

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Before Cleanup:

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VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

Threshold Value Limits (TLV):

Chemical Name	Exposure Limits in Air (mg/cubic m)	
	ACGIH (TLV)	OSHA (PEL)
Glass (Soda-Lime)	10.0 (2)	15.0 (2)
(1,4) Mercury	0.025	0.1 Ceiling
(1,3) Lead Oxide	0.05	0.05
Aluminum Oxide	10.0 (2)	15.0 (2)
(1,4,6) Lead Solder (as Pb)	0.05	0.05
(5) Krypton-85	---	---
Fluorescent Phosphor	10.0 (2)	15.0 (2)
may contain:		
(3) Barium Compounds (as Ba dust)	0.5	0.5
(3) Manganese (as dust)	0.2	5.0 Ceiling
(3) Yttrium Oxide (as Y dust)	1.0	1.0

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Personal Protective Equipment: OSHA specified cut and puncture-resistant gloves are recommended for dealing with broken lamps.

Eye Protection: OSHA specified safety glasses, goggles or face shield are recommended if lamps are being broken.

Skin Protection: After handling broken lamps, wash hands and face thoroughly before eating, drinking, smoking or handling tobacco products, applying cosmetics, or using toilet facilities.

Respiratory Protection: Use appropriate NIOSH approved respirator if airborne dust concentrations exceed the pertinent PEL or TLV limits. All appropriate requirements set forth in 29 CFR 1910.134 should be met.

VIV. PHYSICAL AND CHEMICAL PROPERTIES

NOT APPLICABLE FOR LAMPS

X. STABILITY AND REACTIVITY

NOT APPLICABLE FOR LAMPS

XI. TOXICOLOGICAL INFORMATION

THERE ARE NO KNOWN HEALTH HAZARDS FROM EXPOSURE TO LAMPS THAT ARE INTACT. No adverse effects are expected from occasional exposure to broken lamps. As a matter of good practice, avoid prolonged or frequent exposure to broken lamps unless there is adequate ventilation. The major hazard from broken lamps is the possibility of sustaining glass cuts.

XII. ECOLOGICAL INFORMATION

XIII. DISPOSAL CONSIDERATIONS

Feit Electric Company recommends that all CFL lamps be recycled. For a list of lamp recyclers and to obtain state and local regulatory disposal information, please refer to www.lamprecycle.org

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XIV. TRANSPORT INFORMATION

XV. REGULATORY INFORMATION

Feit Electric CFL lamps comply with the EU directive on the Restriction of Hazardous Substances RoHS II, 2011/65/EU for mercury and lead.

XVI. OTHER INFORMATION

Although Feit Electric Company attempts to provide current and accurate information herein, it makes no representations regarding the accuracy or completeness of the information and assumes no liability for any loss, damage or injury of any kind which may result from, or arise out of, the use of/or reliance on the information by any person.

In case of questions, please call: Feit Electric Company at (800) 543-3348

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