

Safety Data Sheet

Product Name: LUXEON LED Products (all generations) Date: April 25, 2018

Section 1: Identification

Product	All LED products
Company Name	Lumileds LLC 370 West Trimble Road San Jose, California 95131 United States of America
Emergency Telephone Number	+1 408-964-5300
Information calls:	+1 408-964-2562
SDS Author:	Mitch Cole, Environmental Engineer

Section 2: Hazards Identification

General Statement: These products are not considered to be or to contain hazardous chemicals based on evaluations made by our company under the OSHA Hazard Communication Standard 29 CFR 1910.1200. Additionally, the products classify as articles under the standard: An "article" means a manufactured item: (1) which is formed to a specific shape or design during manufacture (2) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (3) which does not release, or otherwise result in exposure to, a hazardous chemical under normal conditions of use. Any product that meets the definition of an "article," would be exempt from the requirements of the Standard.

Hazard Classification: Inert
Signal word: N/A
Hazard Statement:
Pictogram: None
Precautionary Statement: Keep out of reach of children.

Section 3: Composition/Ingredients

No hazardous ingredients

Section 4: First Aid Measures

Health Hazards (Acute and Chronic)

Skin Contact: not expected to cause any adverse effect.
Eye Contact: not expected to cause any adverse effect.
Ingestion: not expected to cause any adverse effect.
Inhalation: This is not a likely route of exposure.
Injection: This is not a likely route of exposure.

First Aid

Skin Contact: Remove product from skin.
Eye Contact: Remove from eye. Seek medical attention if necessary.
Ingestion: Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person.
Inhalation: Bring victim to fresh air as soon as possible and let rest. As a large solid object, inhalation of product is unlikely.

Section 5: Fire Fighting Measures

Extinguishing media
Whatever is appropriate for the surrounding fire
Special Fire Fighting Procedure
None
Unusual Fire and Explosion Hazard
None

Section 6: Accidental Release Measures

Steps to be taken in case material is released or spilled: Contain the spill or leak. Collect broom and dust pan and place in container for recycling.

Section 7: Handling and storage

Keep away from heat and flame
Keep out of reach of children

Section 8: Exposure controls/personnel protection

Exposure Guidelines: Not established
Special Hazard: None
Respiratory Protection: None under normal conditions
Protective Gloves: Not needed
Eye protection: Safety glasses

Section 9: Physical and chemical properties

Appearance (physical state, color, etc.): Solid, various colors
Odor: None
Odor threshold: NA
pH: Neutral
Melting/freezing point: Solid at room temperature
Initial boiling point and boiling range: Decomposes above 350°C
Flash point: Non combustible
Evaporation Rate: Solid
Flammability (solid, gas): Non combustible
Upper/lower flammability/explosive limits: Non Combustible
Vapor pressure: Solid
Vapor density: Solid
Relative density 1.1 – 1.4
Solubility: Not soluble in water
Auto-ignition temperature: Decomposes above 350°C
Decomposition temperature: 350°C
Viscosity: Not applicable

Section 10: Stability and Reactivity

Conditions to Avoid: None
Incompatibility (material to avoid): None
Hazardous Decomposition Products: Thermal breakdown of these products during a fire or very high heat conditions may evolve decomposition products.

Hazardous Polymerization: Will not occur.

Section 11: Toxicology information

Not applicable

Section 12: Ecological information:

Not soluble in water, not mobile in soil.
No bioaccumulation hazard.

Section 13: Disposal Considerations:

Preferred Management Method for End of Life: recycle for the copper and gold content along with electronic waste.

Dispose/Recycle in accordance with local/regional/national/international regulations.

Section 14: Transport Information:

ID No.: None
Classification and Class: None
Packaging Group: None
Proper Shipping Name: None
Technical Shipping Name: None
Marine Pollutant: None

Section 15 Regulatory information:

Toxic Substances Control Act: This product is an article and therefore not subject to TSCA.

US Department of Transportation: 49CFR 172.101: Not classified as a hazardous material.

Directive 2011/65/EU on Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS): All Lumileds LED products are RoHS compliant.

Directive 2000/53/EC on end-of-life vehicles (ELV): All Lumileds Automotive LED products are ELV compliant.

Regulation (EC) No. 1907/2006 concerning Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) – Article 59(10): This product does not contain any substance of very high concern (SVHC) over threshold quantities.

Section 16 Other Information:

Disclaimer: The information set forth is based on information which Lumileds believes to be accurate. No warranty, express or implied is intended. Users should satisfy themselves that they have all current data relevant to their particular use. The information is provided solely for the information and consideration and Lumileds LLC assumes no legal responsibility for the use or reliance thereon.