

Safety Data Sheet for Transportation, Cd Lamp

Not subject to Dangerous Goods Regulation

0. Advisory Note

Safety Data Sheet for Transportation is not subject to national regulation, provides knowledge and advice regarding practices of transportation, in relation with dangerous goods regulation. This document is subject to revision without further notice. For use and handling of lamps, see user information of retail package or contact your SHIMADZU sales manager.

1. Product and Company Identification

1.1 Name of Products

This type of discharge lamp generates light between two metal electrodes. For stable and defined operation, glass bulb contains a low quantity of hazardous substances (Solid Cadmium: 10mg Typical). There are no other significant substances contained.

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|--------------------------|---------------------------------|
| Part Number: | SSSOTD013927702 |
| Product Name: | Cd LAMP, CD-B for REFRACTOMETER |
| Manufacturer Model Name: | SPECTRAL LAMP CD-B |

1.2 Company Identification

| | |
|--------------------|---|
| Company Name: | Shimadzu Device Corporation |
| Address: | 250 Tokimata, Iida-shi, Nagano 399-2563, Japan |
| Phone: | +81-265-26-9121 |
| Facsimile Number: | +81-265-26-9120 |
| Emergency Contact: | kalnew@group.shimadzu.co.jp |
| Manufacturer Name: | SHIMADZU RIKA CORPORATION 1-32, Kanda Jimbocho, Chiyoda-ku, Tokyo, Japan |

1.3 Recommended Applications

Measurement of glass refractive indices

2. Hazards Identification

Lamps are manufactured articles for end consumers, subject to corporate quality management and delivered in safe packaging. Regulation for hazardous substances is not applicable for consumer products.

- There are no immediate hazards to health by substances contained in the lamp, as long as the lamp bulb is undamaged.
- In case of broken lamp bulbs, avoid contact of skin with the sharp shades of glass or metal.
- Immediately after bulb is broken, the low quantity of hazardous substance will be affixed at the inner surface of the glass bulb or its components will fade away into environment. There is no potential of posing significant risk for health by this low quantity of substance.

3. Transportation Information

Transportation in SHIMADZU retail packaging is not subject to dangerous goods regulation. This lamp type contains material meeting classification criteria of dangerous goods but below threshold for declaration.

3.1 International Regulations (IATA)

UN No.: Not applicable
Ocean Polluting Substances: Not applicable

4. Risks of Fire and Fire-Fighting Measures

4.1 Risks of Fire and Explosion

Lamps and all its components are not flammable.

4.2 Extinguishing Media

Use extinguishing agent suitable for type of surrounding fire.

5. Accidental Release Measures

In case of an accident, stay calm and care for people in the near environment. There are no immediate hazards to health by lamps as long as the lamp bulb is undamaged.

In case of broken lamp bulb:

- Avoid contact of skin with sharp shades of glass or metal.
 - o Use of gloves recommended protecting skin from injuries.
 - o If skin is injured, apply medical service as appropriate.
 - If accident happened in closed room, ventilate the near environment with fresh air.
 - Clean the ground and other surfaces.
 - o Do not eat during cleaning procedure to avoid swallowing small parts of the broken lamp.
 - o Carefully remove all fragments of the broken lamp.
 - o Use of vacuum cleaner recommended if fragments on uneven or rough surface.
 - Dispose lamp fragments as locally regulated.
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6. First-Aid Measures

This lamp type does not contain much of hazardous substances. In case of broken lamps:

- Skin injury: apply medical service as appropriate.
 - Eye contamination with solid material: rinse out with plenty of water for 1 minute with the eyelid wide open. Look for help by an ophthalmologist if medical service is necessary.
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7. Disposal Considerations

For disposal of lamps or its components, follow local regulation for disposal. Especially in member states of the European Union, there is national regulation based on the Waste Electrical and Electronic Equipment Directive (WEEE Directive 2012/19/EU).

8. Other Information

Read also attached reference document, Manufacturer's Document (Written in Japanese Only).
“島津理化Cdランプ成分表”

株式会社島津理化 御中

企画開発部 生方 様

弊社、カドミウムランプの主成分表を下記により、ご報告いたします

2019/6/10

線スペクトルカドミウム(Cd)ランプ 成分表

重量 69g

| | 使用部品 | 品名 | 主要成分 | | |
|---|----------|------------|----------------------|-----------------------|---------|
| 1 | ガラス外管 | ソーダガラス35g | SiO ₂ 70% | Na ₂ O 14% | CaI 14% |
| 2 | ガラス内管 | コバールガラス15g | SiO ₂ 68% | BaO ₃ 18% | Kovar |
| 3 | ガラスステム9g | 鉛ガラス | SiO ₂ 56% | PbO 29% | |
| 4 | フィラメント | タングステン | W 95% | | |
| 5 | リード線 | コバール | Fe 58% | Ni 28% | |
| 6 | カソード | Baオキサイド | Sr 40% | BaO ₃ 50% | |
| 7 | カドミウム | | Cd 0.01g | | |
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