Safety Data Sheet based on (EG) No. 1907/2006 – ISO 11014-1

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SSR Metal Halide Mercury-vapor Gas Discharge Lamps

1. Product Application and Company Name

Product Name: ssr UV-lamps [any type] XX0 Hg XX0 OE XX0 XX0 D XX0 OE XX0

Application: Industrial applications for use in ssr evo7 UV-systems

Company Name:
ssr engineering gmbh
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Emergency Information: **Germany**: Beratungsstelle für Vergiftungserscheinungen: +49(0) 89/19240 (Munich)
International: please contact your local helpdesk for intoxication.

2. Possible Hazards of the Product

The product contains small amounts of mercury. In case of a lamp breakage, mercury can escape and evaporate causing several hazards:
Inhalation: Abdominal pain. Cough. Diarrhoea. Shortness of breath. Vomiting. Fever or elevated body temperature.
Skin: May be absorbed! Redness.

T Symbol	R: 23-33-50/53	UN Hazard Class: 8
N Symbol	S: (1/2-)7-45-60-61	UN Pack Group: III

Special material. Do not transport with food and feedstuffs.

Health Hazards Acute and Chronic:

Acute:

Skin: Irritation. Absorbed through skin causing Anuria.

Eye: Irritation, corneal injury or burns.

Ingestion: Immediate necrosis in mouth, throat, esophagus and stomach. Death may occure.

Inhalation: Dyspena, cough, fever, nausea & vomiting, Diarrhea, Stomatitis, Salivation and metallic taste.

Chronic: CNS Disturbances.

Explanation of Carcinogenicity: Mercury is not listed by IARC, NTP or OSHA as a carcinogen.

Effects of Overexposure: Tremors, convulsions and other CNS Disturbances, Pneumonitis, chest pains, Dyspena, coughing, Stomatitis, Gingivitis and loosing of teeth, Salivation, loss of memory, metallic taste, dizziness, clumsiness, slurred speech, Diarrhea, pain and numbness in extremities, Nephritis, anxiety, headache, weight loss and insomnia.

Medical Cond Aggravated by Exposure: Persons with a history of Alcoholism, chronic kidney disease or known allergy to mercury may be at increased risk from exposure!

3. Composition/Information on Ingredients

Ingredient Name: Mercury / Quicksilver / Liquid silver

CAS No: 7439-97-6 (RTECS No: OV4550000; UN No: 2809; EC No: 080-001-00-0)

Atomic mass: 200.6

Other REC Limits: none specified
OSHA PEL: S, C, 0.1 mg/m³
ACGTH TLV: S, 0.05 mg/m³ [9192]

EPA REP qty: 1 lb
DOT REP qty: 1 lb

Other Hazardous Ingredient: none specified

4. First Aid Measures

Inhalation: Remove to fresh air. Give artificial respiration. Get medical attention.

Eye: Immediate flush eyes with plenty of water. Hold eyelids open for 15 minutes. Get medical attention.

Skin: Remove contaminated clothing. Wash skin with plenty of soap and water.

Ingestion: Get immediate medical attention. A 5% solution of Sodium Formaldehyde Sulfoxylate may be used to induce vomiting.

5. Fire Fighting Measures

Flash Point: none
Autoignition Temp.: none

Fire Fighting Procedures: Wear fire fighting protective equipment and a full faced self contained breathing apparatus.

Acute Hazards: Combustion or heat of fire may produce hazardous mercury vapours. Gives off irritating or toxic fumes (or gases) in a fire.

Fire Extinguisher: In case of fire in the surroundings: use appropriate extinguishing media.

Explosion: In case of fire: keep drums, etc., cool by spraying with water.

6. Accidental Release Measures

Spill release Procedure:

Small Spill: Pick up with vacuum equipment specifically designed for mercury pick up. Use mercury spill kit. Spread sulphur powder over area to react with the mercury. Sweep up dust, place in plastic bag and seal.

Large Spill: Evacuate danger area! Consult an expert! Ventilation. Collect leaking and spilled liquid in sealable non-metallic containers as far as possible. Do NOT wash away into sewer! Do NOT enter this chemical enter the environment. Wear Chemical protection suit including self-contained breathing apparatus.

7. Handling and Storage

Handling and Storage Precautions:

Handling: Always wear personal protection equipment (gloves and protective glasses) when handling Mercury Arc Lamps.

Storage: Always store Mercury Arc Lamps in a sealed container away from heat.

Risk and Safety Statements:

R23: Toxic by inhalation
R33: Danger of cumulative effects
R50: Very toxic to aquatic organisms
R53: May cause long-term adverse effects in the aquatic environment
S1: Keep locked up
S2: Keep out of the reach of children
S7: Keep container tightly closed
S45: In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)
S60: This material and its container must be disposed of as hazardous waste
S61: Avoid release to the environment. Refer to special instructions/safety data sheet

Other Precautions: This Chemical is subject to SARA Section 331 reporting. Provide preplacement and periodic medical exams for those regularly handle Mercury Arc Lamps, with emphasis on CNS, skin, lungs, liver, kidney and G.I.-tract.

8. Exposure Controls and Personal Protection

Ventilation: If Mercury is spilled, provide local exhaust at point of origin and continuously ventilation during cleanup.

Protective Gloves: Rubber, NBR, nitrile

Eye Protection: Chemical safety glasses

Other Protective Measures: Separate work and street clothing. Store work clothing in separate lockers. Shower before changing to street clothes.

Work Hygienic Practices: Observe good personal hygiene practices and recommended procedures.

Supplemental Safety and Health: Do not get on skin, in eyes or on clothing. Do not breathe vapours. Each lamp contains approximately 5 – 25 mg of mercury.

9. Physical and Chemical Properties

HCC:	N1	
Boiling Point:	357.5℃	[676F]
Melt & Freeze Temp.:	-39℃	[-38F]
Vapour Pressure:	0.26 Pa	[at 20℃]
Vapour Density:	6.93	[air = 1]
Relative Density:	13.59	[water =1]
Evaporation Rate & Reference:	1 mmHg	[at 126℃]
Solubility in Water:	none	
Appearance and Odour:	Light-silver, heavy and mobile liquid metal, no odour	

10. Stability and Reactivity Data

Stability Indicator and Materials to Avoid: Acetylenic compounds, ammonia, metals, oxygen and strong oxidizing agents.

Hazardous Decomposition Products: Thermal decomposition product is toxic mercury vapour!

11. Disposal Considerations

Waste Disposal Methods:

Do not incinerate!
Return to reclamation center!
Used and unbroken lamps can be returned to ssr engineering gmbh for disposal!

RoHS:

Discharge Lamps containing mercury are generally exempt from RoHS (Annex 1, Point 3 and 4). Therefore all these lamps from ssr engineering gmbh and its subsidiaries are exempted from RoHS. Moreover there are no other components used in those lamps, which are, concerning nature or amount, “hazardous substances” in the sense of RoHS (lead, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE)). As a result, Gas Discharge Lamps from ssr engineering gmbh and its subsidiaries are fully RoHS compliant.

WEEE:

All lamps from ssr engineering gmbh and its subsidiaries are affected by WEEE as these are defined as products belonging to group 5. The marking required by WEEE is symbolized by a crossed out garbage can. All applicable products distributed by ssr engineering gmbh and its subsidiaries are marked with this sign either on the product or alternatively on the instruction leaflet or the packaging.
Regarding registration, we work closely with national distributors to ensure the necessary steps are taken for compliance to the WEEE directive.

TCLP Conformity:

ssr engineering gmbh UV Lamps comply with TCLP regulations if disposed according to WEEE directives. In this case, a contamination of soil will not take place.

12. Legal Notice

Legal Notice and Disclaimer:

This information is formulated for internal use of companies operating equipment of ssr engineering gmbh. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation

Neither ssr engineering gmbh nor any person acting on behalf of ssr engineering gmbh is responsible.