

MATERIAL SAFETY DATA SHEET

DENTAL AMALGAM ALLOYS:

1 - IDENTIFICATION

Henry Schein UK Holdings Ltd.

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Henry Schein, Inc.

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2 - COMPOSITION INFORMATION

Hazardous Ingredients

	<u>CAS #</u>	<u>PEL</u>	<u>TLV %</u>
Mercury	7439-97-6	0.05 mg/m3	0.05 mg/m3 47

* (% based final Amalgam composition by weight)

Other Ingredients:

Alloy powder contains silver, copper and tin metals.

3 - PHYSICAL /CHEMICAL PROPERTIES

Boiling Point: 674 °F

Specific Gravity (H2O = 1): 13.35

Vapor Pressure (mm Hg): 0.0012 mm Hg @ 68 °F

Melting Point: -38 °

Vapor Density: N/E

Evaporation Rate: N/E

Solubility in Water: 0.0002g/100g water @ 68 °F

Appearance and Odor: Powder: Odorless dark-gray alloy of silver, tin and copper.

Liquid: Mercury is a silvery, mobile, odorless liquid.

This MSDS addresses the mercury (liquid) portion of the product, which is a known health hazard. The powder is not considered to be hazardous. The health hazard data section references information relative to bulk quantities of elemental mercury and may not reflect the actual hazards of small quantities such as those encountered with this product.

4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): N/A

Flammable Limits: LEL: N/A **UEL:** N/A

Extinguishing Media: Carbon dioxide, dry chemical foam

Special Fire Fighting Procedures: Firefighters should wear self-contained

breathing apparatus when fighting a fire in an area containing mercury.

Unusual Fire Fighting Procedures: Emits toxic fumes in fire conditions.

5 - REACTIVITY DATA

Stability: Stable

Conditions to Avoid: High temperatures

Incompatibility (Material to Avoid): Halogens, ammonia, and strong oxidizing agents.

Hazardous Decomposition Byproducts: Mercury vapor

Hazardous Polymerization: Will not occur

6 - HEALTH HAZARD DATA

Routes of Entry:

Skin: Irritant/Sensitizer/Neurotoxin/Nephrotoxin

Acute Exposure: May cause redness and irritation. **Chronic Exposure:**

Possible sensitization, dermatitis and swelling. Mercury may be absorbed through intact skin causing urinary problems

Eyes: Irritant

Acute Exposure: Contact may cause irritation. Mercury is corrosive and may cause corneal injury or burns. **Chronic Exposure:** Mercury may be deposited in the lens of the eye, causing visual disturbances.

Inhalation: Irritant/Sensitizer/Neurotoxin

Acute Exposure: Inhalation of mercury vapor can cause cough, fever, nausea, and vomiting. **Chronic Exposure:** Inhalation of high concentrations mercury vapor over a long period causes mercurialism. Findings are extremely variable & include tremors, salivation, stomatitis, loosening of teeth, blue lines on gums, pain & numbness in extremities.

Ingestion: Neurotoxic/Nephrotoxic

Acute Exposure: May cause nausea, vomiting, kidney damage and nerve effects. **Chronic Exposure:** Symptoms include Central Nervous System (CNS) disorders.

Carcinogenicity: NTP: No

IARC Monographs: No

OSHA Regulated Carcinogen: No

7 - EMERGENCY AND FIRST AID PROCEDURES

Skin: Wash thoroughly with soap and water. Use hand cream. If irritation

Persists, consult a physician.

Eyes: Flush with water for at least 15 minutes. Consult a physician.

Inhalation: Move to fresh air. If irritation persists, consult a physician.

Ingestion: Contact a physician. May cause neurotoxic/nephrotoxic effects.

8 - PRECAUTIONS FOR SAFE HANDLING & USE

Steps to be taken in case material is released or spilled:

Isolate the area and begin clean-up immediately. Do not touch spilled material.

Cover all liquid droplets with a commercially available

Mercury vapor suppressant such as HG-X or elemental sulfur.

Collect the droplets using specialized mercury vacuum cleaners or use backing of x-ray film.

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Waste Disposal Method: Material should not be allowed to enter sewers.

All scrap mercury liquid and set alloy must be sent for reclamation by a commercial metal recycling facility.

Precautions to be taken in handling and storing: Store in a cool, dry place away from ignition sources.

Other precautions: Use according to directions. Wash hands thoroughly before smoking or eating.

9 - CONTROL MEASURES

Respiratory Protection (Specify Type): Not needed for small quantities as encountered in this product.

AVOID BREATHING OF VAPORS. HIGHLY TOXIC - IRRITANT - SENSITIZER.

VENTILATION:

Local Exhaust: Use in a well ventilated area to keep exposure under 0.05 mg/m3.

Mechanical (General): Should be sufficient

Other: N/A

Protective Gloves: Chemical resistant or protective gloves required.

Eye Protection: Safety glasses with side shields. Full face shields.

Other Protective Clothing or Equipment: None

Work/Hygiene Practices: USE ONLY ACCORDING TO DIRECTIONS.

Wash thoroughly after handling. Handle in accordance with good personal hygiene and safety practices. These practices include avoiding unnecessary exposure.

10 - TRANSPORTATION INFORMATION

Regulated: DOT, IATA, IMO

Proper Shipping Name: Mercury

UN Number: 2809

Label: Corrosive

Hazard Class: 8

Packing Group: III

NOTE: See 49CFR 173.4

11 - SPECIAL INFORMATION

HMIS (Hazardous Material Identification System) Rating:
H3 F0 R0

[HMIS Index: 4 - Severe Hazard; 3 - Serious Hazard;
2 - Moderate Hazard; 1 - Slight Hazard; 0 - Minimum Hazard]

Note: This MSDS was prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and is to be used only for this product.

EXCLUSION OF LIABILITY

The above information is believed to be accurate but does not purport to be all inclusive and shall be used as a guide only. The company does not accept liability arising from the use of this information, or the use, application, adaptation or process of any product described.