

# MATERIAL SAFETY DATA SHEET

## Quala, Precapsulated Dental Amalgam

### 1 - IDENTIFICATION

**Manufacturer:** Kerr Corporation  
**Address:** 1717 Collins Ave.  
**City, State, Zip:** Orange, CA 92867  
**Telephone:** 1-800-537-7123  
**Emergency:** Chemtrec 1-800-424-9300  
**Date Prepared:** September 15, 2003

### 2 - COMPOSITION INFORMATION

#### Hazardous Ingredients

	CAS #	PEL	TLV	%
Mercury	7439-97-6	0.05 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>	47*

\* (% Based final Amalgam composition by weight)

#### Other Ingredients

Alloy powder contains silver, tin and copper metals.

### 3 - PHYSICAL /CHEMICAL PROPERTIES

**Boiling Point:** 674 °F  
**Specific Gravity (H<sub>2</sub>O = 1):** 13.35  
**Vapor Pressure (mm Hg):** 0.0012 mm Hg @ 68 °F  
**Melting Point:** -38 °F  
**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.

**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/m<sup>3</sup>.

**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]

#### State RTK: California Proposition 65 WARNING:

This product contains mercury, a chemical known to the State of California to cause birth defects or other reproductive harm.

**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. The information in this MSDS is, to the best of our knowledge, believed to be accurate.**