1. Identification

Product Identifier
Trade name: Quala Dispersed Phase High Copper Alloy

Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

Application of the substance / mixture
Dental Amalgam

Details of the supplier of the safety data sheet
Distributed by:
NDC, Inc.
402 NBA Drive, Suite 500
Nashville, TN 37217
Telephone: 800-929-4232

Quality Assurance / Regulatory Affairs

Information Department:
Emergency telephone number:
24 Hour emergency Assistance:
INFOTRAC US + 1-201-894-5500
International + 1-800-535-5053

2. Hazard(s) Identification

Classification of the substance or mixture
Very toxic
Very toxic by inhalation
Toxic
May Cause harm to unborn child. Toxic: danger of serious damage to health by
Prolonged exposure through inhalation
Safety Data Sheet
According to OSHA (HCS)

Trade name: Quala Dispersed Phase High Copper Alloy
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Classification system
The classification was made according to the latest editions of international Substances list, and expanded upon company literature and data.

Label elements
Code letter and hazard designation of product

Very Toxic
Dangerous for the environment

Hazard-determining components of labeling:
Mercury

Risk Phrases
May cause harm to unborn child.
Very toxic by inhalation
Toxic: danger of serious damage to health by prolonged exposure through inhalation.
Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.

Safety Phrases
Avoid exposure - obtain special instructions before use.
Keep container in a well-ventilated place.
After contact with skin, wash immediately with plenty of soap and water.
Wear suitable protective clothing, gloves and eye/face protection.
In case of accident or if you feel unwell, seek medical advice immediately (Show the label where possible).
Use appropriate container to avoid environmental contamination.

Classification system
NFPA ratings (scale 0 - 4)
Health = 4
Fire = 0
Reactivity = 0
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HMIS-ratings (scale 0 - 4)
    REACTIVITY
        *4
        0
        0
    Health = *4
    Fire = 0
    Reactivity = 0

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3. Composition / information on ingredients

Chemical characterization: Mixtures

Description:
    Alloy powder and mercury in pre-dosed capsules.

Dangerous components:
    7439-97-6 mercury 50%

4. First-aid measures

Description of first aid measures
General information:
    Immediately remove any clothing soiled by the product.

After inhalation:
    Supply fresh air or oxygen; call for doctor.
    In case of unconsciousness place patient stably in side position for transportation

After skin contact:
    Immediately wash with water and soap and rinse thoroughly.
After eye contact: 
   Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: 
   Rinse out mouth and then drink plenty of water. 
   Do not induce vomiting; immediately call for medical help.

Most important symptoms and effects, both acute and delayed: 
   No further relevant information available.

Indication of any immediate medical attention and special treatment needed 
   Antidote: DMPS

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing agents: 
   The product is not flammable. 
   Use fire fighting measures that suit the environment.

Special hazards arising from the substance or mixture 
   In case of a fire very toxic mercury fumes will generate. 
   Fumes are heavier than air.

Advice for firefighters

Protective equipment: 
   Wear self-contained respiratory protective device.

Additional information: 
   Cool endangered receptacles with water spray.
Safety Data Sheet
According to OSHA (HCS)

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.

Environmental precautions
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.

Methods and material for containment and cleaning up
Spillages of mercury should be removed immediately, including from places which are
difficult to access.
Use a plastic syringe to draw it up. Smaller quantities can be covered by sulphur
Powder and removed.
Avoid inhalation of vapors
Ensure adequate ventilation.
Dispose contaminated material as waste according to item 13.

Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7. Handling and storage

Precautions for safe handling
Only adequately trained personnel should handle this product.
Ensure good ventilation/exhaustion at the workplace.
For use in dentistry only

Information about protection against explosions and fires
Keep respiratory protective device available.
Conditions for safe storage, including any incompatibilities

Storage
Requirements to be met by storerooms and receptacles
Store only in unopened original receptacles

Information about storage in one common storage facility
Not required.

Further information about storage conditions
Keep receptacle tightly sealed.
Store receptacle in a well ventilated area.

Specific end use(s):
No further relevant information available.

8. Exposure controls / personal protection

Additional information about design of technical systems
No further data; see item 7.

Control parameters
Components with limit values that require monitoring at the workplace

7439-97-6 mercury
PEL Long-term value: 0.1 mg/m³
as Hg; see OSHA standard interpretation memo
REL Long-term value: 0.05* mg/m³
Ceiling limit value: 0.1 mg/m³
as Hg; *Vapor; Skin
TLV Long-term value: 0.025 mg/m³
as Hg; Skin; BEI

Ingredients with biological limit values

7439-97-6 mercury
BEI 35 µg/g creatinine
Medium: urine
Time: prior to shift
Parameter: Total inorganic mercury (background
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According to OSHA (HCS)

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15 µg/L
Medium: blood
Time: end of shift at end of workweek
Parameter: Total inorganic mercury (background)

Additional information:
The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment

General protective and hygienic measures
Usual hygienic measures for dental practice
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
Store protective clothing separately

Breathing equipment
In case of brief exposure or low pollution use respiratory filter device. In case of
Intensive or longer exposure use respiratory device that is independent of
Circulating air

Recommended filter device for short term use
Special gas filter Hg-P3

Protection of hands
Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/
the preparation after use of gloves apply skin-cleaning agents and skin cosmetics.

Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on
further marks of quality and varies from manufacturer to manufacture.
Natural rubber, NR
Nitrile rubber, NBR
Butyl rubber, BR
Fluorocarbon rubber (Viton)
9. Physical and chemical properties

Information on basic physical and chemical properties

**General Information**
The physical and chemical properties in this section refer to the mercury.

**Appearance**
- **Form:** Fluid
- **Color:** Silver grey
- **Odor:** Odorless
- **Odor threshold:** Not determined.
- **pH-value:** Not determined.

**Change in condition**
- **Melting point/Melting range:** -38 °C (-36 °F)
- **Boiling point/Boiling range:** 356 °C (673 °F)
- **Flash point:** Not applicable.
- **Auto igniting:** Product is not self-igniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits:**
- **Lower:** Not determined.
- **Upper:** Not determined.

**Vapor pressure:** Not determined.

**Density at 20 °C (68 °F):** 13.54 g/cm³ (112.991 lbs/gal)

**Relative density:** Not determined.

**Vapour density:** Not determined.

**Evaporation rate:** Not determined.

**Solubility in / Miscibility with**
- **Water:** Insoluble.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**
- **Dynamic:** Not determined.
- **Kinematic:** Not determined.

**Other information** No further relevant information available
10. Stability and reactivity

Reactivity
   No further relevant information available.

Chemical stability
   Stable under normal handling and storage conditions

Thermal decomposition / conditions to be avoided
   No decomposition if used according to specifications.

Possibility of hazardous reactions
   No dangerous reactions known.

Conditions to avoid
   No further relevant information available.

Incompatible materials
   No further relevant information available.

Hazardous decomposition products
   None under normal conditions of storage and use

Additional information
   Avoid contact with ammoniac, amines, metals and strong acids.

11. Toxicological information

Information on toxicological effects

Acute toxicity

Primary irritant effect

On the skin
   No irritant effect.
## On the eye
No irritating effect.

## Sensitization
Mercury may have a sensitizing effect on the skin and lungs, or act as a nephrotoxin or neurotoxin.

## Additional toxicological information
The product shows the following dangers according to internally approved calculation methods for preparation.
- **Harmful**
- **Very toxic**
  - Alloy powder and mercury are predosed in closed capsules, therefore the danger of exposition to mercury vapors are low.
  - Avoid exposure of mercury to pregnant person.

## Carcinogenic categories

### IARC (International Agency for Research on Cancer)
- 7439-97-6 mercury 3

### NTP (National Toxicology Program)
None of the ingredients is listed.

### 12. Ecological information

#### Toxicity

#### Aquatic toxicity
No further relevant information available.

#### Persistence and degradability
No further relevant information available.

#### Bioaccumulative potential
No further relevant information available.

#### Mobility in soil
No further relevant information available.
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According to OSHA (HCS)

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Ecotoxic effects

Remark
Very toxic for fish

Additional ecological information

General notes
Water hazard class 3 (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system,
Even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground
Also poisonous for fish and plankton in water bodies
Very toxic for aquatic organisms

Results of PBT and vPvB assessment

PBT:
Not applicable.

vPvB:
Not applicable.

Other adverse effects No further relevant information available.

13. Disposal considerations

Waste treatment methods

Recommendation
Must be specially treated adhering to official regulations.
Must not be disposed of together with household garbage. Do not allow product to
reach sewage system.

Uncleaned packagings

Recommendation: Disposal must be made according to official regulations.
14. Transport information

UN-Number
DOT UN2809
ADR, IMDG, IATA 2809
UN proper shipping name
IMDG, IATA MERCURY
Transport hazard class (es)
DOT, IMDG, IATA
Class 8 Corrosive substances.
Label 8
ADR
Class 8 (C9) Corrosive substances
Label 8
Packing group
DOT, ADR, IMDG, IATA III
Environmental hazards:
Marine pollutant: Yes
Special precautions for user Warning: Corrosive substances
Danger code (Kepler): 80
EMS Number: F-A, S-B
Segregation groups Heavy metals and their salts (including their organometallic compounds)
Transport in bulk according to Annex II of
MARPOL 73/78 and the IBC Code Not applicable

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture:
Section 355 (extremely hazardous substances)
None of the ingredients is listed.
Section 313 (Specific toxic chemical listings)
7439-97-6 mercury
TSCA (Toxic Substances Control Act):
7439-97-6 mercury
Proposition 65
Chemicals known to cause cancer
None of the ingredients is listed.
Chemicals known to cause reproductive toxicity for females
None of the ingredients is listed.
Chemicals known to cause reproductive toxicity for males
None of the ingredients is listed.
Chemicals known to cause developmental toxicity
7439-97-6 mercury
Carcinogenic categories
EPA (Environmental Protection Agency)
7439-97-6 mercury D
TLV (Threshold Limit Value established by ACGIH)
7439-97-6 mercury A4
NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.
OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.
Product related hazard information:
Hazard symbols:

- Very toxic
- Dangerous for the environment

Hazard-determining components of labeling
Mercury
Risk phrases
May cause harm to the unborn child.
Also very toxic by inhalation
Also toxic: danger of serious damage to health by prolonged exposure through Inhalation
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety Data Sheet
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Safety phrases
Avoid exposure - obtain special instructions before use.
Keep container in a well-ventilated place.
After contact with skin, wash immediately with plenty of soap and water.
Wear suitable protective clothing, gloves and eye/face protection.
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Use appropriate container to avoid environmental contamination.

National regulations
Other regulations, limitations and prohibitive regulations
This product is classified as a medical device under US and Canadian regulations and by the US Food and Drug Administration and Health Canada.

Chemical safety assessment
A Chemical Safety Assessment has not been carried out.

16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Date of preparation / last revision: March 27, 2015