

# MATERIAL SAFETY DATASHEET

According to EG Nr. 1907/2006  
Version 1, Revision date 10-Feb-17  
Print date 17-Feb-17  
GENERIC MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product Name : WE AuHg for  $\mu$ -PrepCell for evaluation  
Product number : 204.5028  
Supplier : Antec  
REACH number : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified use : Laboratory research electrode for Electro Chemical Detection

### 1.3 Details of the supplier of the safety data sheet

Company : Antec  
Industrieweg 12  
2382NV Zoeterwoude  
The Netherlands  
Telephone : +31 71-5813333  
Fax : +31 71-5813334  
Email : info@myantec.com

### 1.4 Emergency telephone number

Emergency # : 112 (Alarm number)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

H330 Fatal if inhaled  
H360D May damage the unborn child  
H372 Causes damage to organs through prolonged or repeated exposure  
H400 Very toxic to aquatic life  
H410 Very toxic to aquatic life with long lasting affects  
For the full text of the H-Statements mentioned in this Section, see Section 16

### 2.2 Label elements

#### Labelling according Regulation (EC) No 1272/2008

Pictograms



GH06



GH08



GH09

Signal word DANGER

#### Hazard-determining components of labelling

Mercury

#### Hazard statements

H330 Fatal if inhaled  
H360 May damage the unborn  
H372 Causes damage to organs through prolonged or repeated exposure  
H410 Very toxic to aquatic life with long lasting affects

#### Precautionary statement(s)

P201 Obtain special instructions before use.  
P281 Use personal protective equipment as required.  
P273 Avoid release to the environment.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P310 Immediately call a POISON CENTER/doctor.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed

#### Supplemental Hazard Statements

According to REGULATION (EC) No 1102/2008 metallic mercury or mercury mixtures, including alloys of mercury, with a mercury concentration of at least 95 % weight by weight from the Community shall be prohibited from 15 March 2011. The prohibition shall not apply to exports of compounds for research and development, medical or analysis purposes.

### 2.3 Other hazards

This substance/mixture contains no components considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

---

**SECTION 3: Composition/information on ingredients****3.2 Mixtures**

Component	Classification	Concentration
<b>Gold</b>		
CAS-no: 7440-57-5 EG-no: 231-165-9	NA	<10%
<b>Titanium</b>		
CAS-Nr. 7440-32-6 EG-Nr. 231-142-3	NA	>90%
<b>Mercury</b>		
CAS-Nr. 7439-97-6 EG-Nr. 231-106-7 Indexnr. 080-001-00-0	Acute Tox. 2, Repr 1B, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1	<0.5%

For the full text of the H-Statements mentioned in this Section, see Section 16.

---

**SECTION 4: First aid measures****4.1 Description of first aid measures****General advice**

Contains metallic mercury. Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician.

**If swallowed**

Wash out mouth with water provided the person is conscious, do not induce vomiting. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

**4.3 Indication of any immediate medical attention and special treatment needed****Notes to Physician**

Antidote: DMPS

---

**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing media**

This product is not flammable. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**

In case of a fire very toxic mercury fumes will generate. Fumes are heavier than air

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**

Cool endangered receptacles with water spray

---

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

**6.2 Environmental precautions**

Inform respective authorities in case of seepage into water course or sewage system. Prevent entry into waterways, sewers, basements or confined areas.

**6.3 Methods and materials 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 vapour. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

**6.4 Reference to other sections**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Only adequately trained personnel should handle this product. Ensure good ventilation and/or exhaustion at the workplace. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and dispose of clothing according to section 13. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry place. Keep container tightly closed in a dry and well-ventilated place.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Component	EU	ACGIH TLV	OSHA PEL	NIOSH IDLH
<b>Mercury</b> CAS-no: 7439-97-6	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>

#### Other Exposure Guidelines

No other data available.

### 8.2 Exposure controls

#### Appropriate engineering controls

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Store protective clothing separately.  
Do not inhale gases / fumes / aerosols

#### Personal protective equipment

##### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

##### Body Protection

Impervious long sleeved clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance Form:	Solid
Colour:	Pale white
b) Odour:	Odourless
c) Odour threshold:	No data available
d) pH:	Not applicable
e) Melting point/freezing point:	No data available
f) Initial boiling point and boiling range:	No data available
g) Flash point:	No data available
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	No data available
j) Upper/lower flammability or explosive limits:	No data available
k) Vapour pressure:	Not applicable
l) Vapour density:	Not applicable
m) Relative density:	Not applicable
n) Water solubility:	Not applicable
o) Partition coefficient octanol/water:	Not applicable
p) Auto-ignition temperature:	No data available
q) Decomposition temperature:	No data available
r) Viscosity:	Not applicable
s) Explosive properties:	No data available
t) Oxidizing properties:	No data available

## 9.2 Other safety information

No data available

---

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

See section 10.3.

#### 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

No information available.

#### 10.4 Conditions to avoid

No information available.

#### 10.5 Incompatible materials

No information available.

#### 10.6 Hazardous decomposition products

In the event of fire: See section 5.

#### Additional Information

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

---

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Acute oral toxicity

This information is not available

##### Acute inhalation toxicity

Fatal if inhaled

##### Acute dermal toxicity

This information is not available.

##### Skin irritation

Based on available data, the classification criteria are not met

##### Eye irritation

Based on available data, the classification criteria are not met

##### Sensitisation

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

##### Germ cell mutagenicity

Based on available data, the classification criteria are not met

##### Carcinogenicity

Based on available data, the classification criteria are not met

##### Reproductive toxicity

May damage the unborn child

##### Teratogenicity

This information is not available

##### Specific target organ toxicity - single exposure

Causes damage to organs through prolonged or repeated exposure

##### Specific target organ toxicity - repeated exposure

This information is not available

##### Aspiration hazard

Based on available data, the classification criteria are not met

#### Additional Information

The mercury is pre-treated before shipment. Therefore the danger of exposition to mercury vapours is low.  
Avoid exposure of mercury to pregnant person.

---

### SECTION 12: Ecological information

#### 12.1 Toxicity

##### Toxity to fish

LC50 Cyprinus carpio (Carp): 0,16 - 0,77 mg/l; 96 h (ECHA)

#### 12.2 Persistence and degradability

No further relevant information available

### 12.3 Bioaccumulative potential

No further relevant information available

### 12.4 Mobility in soil

No further relevant information available

### 12.5 Results of PBT and vPvB assessment

This mixture contains no components considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

Very toxic for fish

Additional ecological information:

General notes:

Water hazard class 3 (German Regulation) (Assessment by list): 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

---

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority. Return the electrode to the supplier for disposal if appropriate.

#### Contaminated packaging

Disposal must be made according to official regulations

---

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID: UN3506

IMDG: UN3506

IATA: UN3506

### 14.2 UN proper shipping name

Mercury contained in manufactured articles

### 14.3 Transport hazard class(es)

ADR/RID: 8+6.1

IMDG: 8/6.1

IATA: 8 (6.1)

### 14.4 Packaging group

ADR/RID: Void

IMDG: Void

IATA: Void

### 14.5 Environmental hazards

ADR/RID: Yes

IMDG Marine pollutant: Yes

IATA: Yes

Special Marking (ADR/RID/AND): Symbol (fish and tree)

### 14.6 Special precautions for user

Warning: Corrosive substances.

EMS Number: F-A,S-B

#### Transport/Additional information

##### ADR/RID/ADN

Limited quantities (LQ) 5 kg

Excepted quantities (EQ) Code: E0

Not permitted as Excepted Quantity

Transport category 3

Tunnel restriction code E

##### IMDG

Limited quantities (LQ) 5 kg

Excepted quantities (EQ) Code: E0

Not permitted as Excepted Quantity

#### UN "Model Regulation"

UN 3506, Mercury contained in manufactured articles, 8 (6.1), III

---

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the mixture

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

#### EU regulations

Major Accident Hazard SEVESO III

Legislation ACUTE TOXIC

H2

Quantity 1: 50 t

Quantity 2: 200 t

SEVESO III

ENVIRONMENTAL HAZARDS

E1

Quantity 1: 100 t

Quantity 2: 200 t

*Occupational restrictions*

Take note of Dir 94/33/EC on the protection of young people at work. Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

*National legislation*

Storage class 6.1B

**15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

---

**SECTION 16: Other information**

**Full text of H-Statements referred to under sections 2 and 3**

H330	Fatal if inhaled
H360D	May damage the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

**Training advice**

Provide adequate information, instruction and training for operators.

**Legend**

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average)

STEL STEL (Short Term Exposure Limit)

**16.1 Changes with previous revision**

Copyright 2017 This information is taken from sources believed to be accurate. Antec however makes no warranty as to the accuracy of the information or suitability of the recommendations as to your operations and assumes no liability to any user thereof.