

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 02/28/2006

Reviewed on 02/28/2006

1 Identification of substance

- **Product details**
- **Trade name:** Aurosteel Aktivierung
- **Application of the substance / the preparation** Electroplating auxiliary
- **Manufacturer/Supplier:**
Wieland Dental + Technik GmbH & Co.KG
Schwenninger Str. 13
75179 Pforzheim
Telefon + 49 (07231)-37050, Telefax + 49 (07231)-357959
- **Information department:** Abteilung Umweltschutz

2 Composition/Data on components

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

7647-01-0	hydrogen chloride	10-25%
7664-93-9	sulphuric acid	5-10%

3 Hazards identification

- **Hazard description:**



Corrosive

- **Information pertaining to particular dangers for man and environment:**

Causes burns.
Irritating to respiratory system.

- **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **NFPA ratings (scale 0 - 4)**



Health = 3
Fire = 0
Reactivity = 0

- **WHMIS-ratings (scale 0 - 4)**



Health = 3
Fire = 0
Reactivity = 0

4 First aid measures

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **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:** Drink copious amounts of water and provide fresh air. Immediately call a doctor.

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5 Fire fighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- **Person-related safety precautions:**
Wear protective clothing.
Ensure adequate ventilation
- **Measures for environmental protection:**
Do not allow product to reach sewage system or any water course.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:** Work only in fume cabinet.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.

8 Exposure controls and personal protection

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

Components with limit values that require monitoring at the workplace:

7647-01-0 hydrogen chloride

PEL	Short-term value: C 7 mg/m ³ , C 5 ppm
REL	Short-term value: C 7 mg/m ³ , C 5 ppm
TLV	Short-term value: C 2.98 mg/m ³ , C 2 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:** Plastic gloves
- **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 manufacturer.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing

* 9 Physical and chemical properties

· General Information

Form:	Fluid
Color:	Colorless
Odor:	Product specific

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 110°C (230°F)

· **Flash point:** Not applicable.

· **Ignition temperature:** Not applicable

· **Auto igniting:** Product is not selfigniting.

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

· Explosion limits:

Oxidizing properties None

· **Vapor pressure at 20°C (68°F):** 23 hPa (17 mm Hg)

· **Density at 20°C (68°F):** 1.1 g/cm³

· Solubility in / Miscibility with

Water: Fully miscible.

· **pH-value at 20°C (68°F):** < 1

· Solvent content:

Organic solvents: 0.0 %

· **Solids content:** 0.0 %

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· **Dangerous reactions** Develops corrosive gases / fumes.

· **Dangerous products of decomposition:** Hydrogen chloride (HCl)

* 11 Toxicological information

· Acute toxicity:

· Primary irritant effect:

· **on the skin:** Caustic effect on skin and mucous membranes.

· **on the eye:** Strong caustic effect.

· **Sensitization:** No sensitizing effects known.

· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Corrosive

USA

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12 Ecological information

- **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**

- **Recommendation:** Must be specially treated adhering to official regulations.

- **Uncleaned packagings:**

- **Recommendation:**

Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **DOT regulations:**



- **Hazard class:**

8

- **Identification number:**

UN3264

- **Packing group:**

II

- **Proper shipping name (technical name):** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (HYDROCHLORIC ACID, SULPHURIC ACID)

- **Label**

8

- **Land transport ADR/RID (cross-border):**



- **ADR/RID class:**

8 (C1) Corrosive substances

- **Danger code (Kemler):**

80

- **UN-Number:**

3264

- **Packaging group:**

II

- **Description of goods:**

3264 Corrosive liquid, acidic, inorganic, n.o.s., hydrochloric acid

- **Maritime transport IMDG:**



- **IMDG Class:**

8

- **UN Number:**

3264

- **Label**

8

- **Packaging group:**

II

- **EMS Number:**

F-A,S-B

- **Marine pollutant:**

No

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· **Propper shipping name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(hydrogen chloride, SULPHURIC ACID)

· **Air transport ICAO-TI and IATA-DGR:**



· **ICAO/IATA Class:** 8
 · **UN/ID Number:** 3264
 · **Label:** 8
 · **Packaging group:** II
 · **Propper shipping name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(hydrogen chloride, SULPHURIC ACID)

15 Regulations

· **Sara**

· **Section 355 (extremely hazardous substances):**

7647-01-0	hydrogen chloride
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7664-93-9	sulphuric acid
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· **Section 313 (Specific toxic chemical listings):**

7647-01-0	hydrogen chloride
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7664-93-9	sulphuric acid
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· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **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:**

None of the ingredients is listed.

· **Carcinogeny categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**

7647-01-0	hydrogen chloride	3
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7664-93-9	sulphuric acid	1
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· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

7664-93-9	sulphuric acid	A2
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· **MAK (German Maximum Workplace Concentration)**

7664-93-9	sulphuric acid	4
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· 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 informations:

The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard symbols:

Corrosive

· Risk phrases:

Causes burns.

Irritating to respiratory system.

· Safety phrases:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable gloves and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately.

This material and its container must be disposed of as hazardous waste.

· National regulations:

· Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

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.

· Department issuing MSDS: Abteilung Umweltschutz

· Contact: Herr Selzer

· * Data compared to the previous version altered.

USA