2.5-10%

Material Safety Data Sheet According to 91/155 EEC

Printing date 12.05.2006

Reviewed on 18.01.2006

1 Identification of substance:

· Product details:

· Trade name: GS-50/GS-500 cleaning conzentrate

· Article number: 13503/13504

· Supplier:

Greiner vibrograf AG Elektronische Geräte CH-4900 Langenthal TEL +41 (0)62 923 44 33 FAX +41 (0)62 923 18 46

· Emergency information:

Swiss Toxicological Information Centre

CH-8030 ZÜRICH

Tel.: +41 (0)1 251 51 51 National emergency call: 145

2 Composition/Data on components:

- · Chemical characterization
- · Description:

Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

Amines 2.5-10 % Xn; R 22-38-41-48/22 2.5-10 % Xi; R 38-41

X1; R 38-41

CAS: 64-02-8 Tetrasodium ethylenediaminetetraacetate

EINECS: 200-573-9 Xn; R 22-36/37/38-52/53

3 Hazards identification

· Hazard description:



Xi Irritant

• Information pertaining to particular dangers for man and environment
The product has to be labelled due to the calculation procedure of the
"General Classification guideline for preparations of the EU" in the
latest valid version.

R 38 Irritating to skin.

R 41 Risk of serious damage to eyes.

Classification system

The classification was made according to the latest editions of the EU-lists, and expanded upon fom company and literature data.

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 rinse with water.

If skin irritation continues, consult a doctor.

· After eye contact

Rinse opened eye for 15 minutes under running water. Then consult a doctor.

· After swallowing

Rinse out mouth and then drink plenty of water. If symptoms persist consult 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.

· Special hazards caused by the material, its products of combustion or resulting gases:

Formation of toxic gases is possible during heating or in case of fire.

· Protective equipment: Wear self-contained respiatory protective device.

6 Accidental release measures

· Person-related safety precautions:





Wear protective equipment. Keep unprotected persons

Measures for environmental protection:

Prevent seepage into sewage system, workpits and cellars. Do not allow to enter sewers/ surface or ground water.

· Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

7 Handling and storage

- · Handling
- · Information for safe handling:

Open and handle receptacle with care.

Ensure good ventilation/exhaustion at the workplace.

· Information about protection against explosions and fires: No special measures required.

· Storage

· Requirements to be met by storerooms and receptacles:

No special requirements.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

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:

57-55-6 Propylene glycol-1.2

OES Long-term value: $474*\ 10**\ mg/m³$, $150*\ ppm$ *total (vapour and particulates) **particulates

Monoethanolamine

OES Short-term value: 15 mg/m 3 , 6 ppm Long-term value: 7.6 mg/m 3 , 3 ppm

· Additional information:

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

- · Personal protective equipment
- · General protective and hygienic measures

The usual precautionary measures should be adhered to when handling chemicals.

Avoid contact with the eyes and skin.

- · Breathing equipment: Not required.
- · Protection of hands:

Protective gloves.

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The glove material has to be impermeable and resistant to the product/

the substance/ the preparation.

· Eye protection: Tightly sealed goggles.

Body protection: Protective work clothing.

9 Physical and chemical properties:

· General Information

Form: Colour:

fluid vellow clear

Odour:

recognisable

· Change in condition

Melting point/Melting range: undetermined

Boiling point/Boiling range: > 100°C (DIN 51761)

· Flash point:

> 100°C (DIN 51755)

· Self igniting:

Product is not self-igniting.

· Danger of explosion:

Product does not present an explosion

hazard.

· Density at 20°C:

1.045 g/cm³ (DIN 51757)

· Solubility in / Miscibility with

Water:

fully miscible

· pH-value at 20°C:

9.5

· Refractive index (20°C) at 20°C: 1.419-1.425

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· Materials to be avoided: Strong acids.

· Dangerous reactions No dangerous reactions known

· Dangerous products of decomposition:

No dangerous decomposition products known

11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.

· on the eye: Irritant effect.

· Sensitization: No sensitising effects known.

12 Ecological information:

- · Ecotoxical effects:

Die organischen Komponenten sind biologisch gut abbaubar.

Enthält Komplexbildner.

Abbau des Netzmittels: 61% (Parameter C) im Coupled Units Test.

· General notes:

Water hazard class 1 (German Regulation) (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.

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13 Disposal considerations

- · Product:
- · Recommendation



Must not be disposed of together with household garbage. Do not allow product to reach sewage system. $\,$

Must be disposed of in an incinerator for hazardous waste.

- · Uncleaned packagings:
- · Recommendation: Disposal according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

- · Land transport ADR/RID (cross-border)
- · ADR/RID class:
- Maritime transport IMDG:
- · IMDG Class:
- · Marine pollutant: No
- · Air transport ICAO-TI and IATA-DGR:
- · ICAO/IATA Class:
- Transport/Additional information:

Transport Emergency Card (Road):

Number: -

15 Regulations

- Markings according to EU guidelines:
- · Code letter and hazard designation of product:



Xi Irritant

Risk phrases:

38 Irritating to skin.

41 Risk of serious damage to eyes.

· Safety phrases:

Do not breathe fumes/aerosol.

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

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

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

· National regulations

Swiss Legislation:

BAGT-Nr./BAG-EDV-Nr. : 611 500

class of toxicity : 0 (frei/free/hors)

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- · Technical instructions (air):
- · Class Share in %
- Wasser 35.4 II 8.8 NK 9.0
- · Water pollution class:

Water pollution class WGK 1 (self classification, D): slightly hazardous to 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.

- · Relevant R-phrases
 - 22 Harmful if swallowed.
 - 36/37/38 Irritating to eyes, respiratory system and skin.
 - 38 Irritating to skin.
 - 41 Risk of serious damage to eyes.
 - 48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
 - 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- · Department issuing MSDS: Labor, KK/br
- · Contact: Ask your supplier.
- · * Data compared to the previous version altered.