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

1.1 Product identifier

**Ultraschall-Koppelmittel ZGF**

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

1.2.1 Relevant uses

Coupling gel

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

**Company**

GE Sensing & Inspection Technologies GmbH

Robert-Bosch-Str. 3

50354 Hürth / GERMANY

Phone +49 (0) 2233-601-0

Fax +49 (0) 2233-601-402

Homepage www.ge-mcs.com

**Address enquiries to**

Technical information

geithuerthinfo@ae.ge.com

Safety Data Sheet

scb@chemiebuero.de

1.4 Emergency telephone number

**Company**

+49 (0) 700-24112112 (GEC)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure.

2.1.2 Classification according to Directive 67/548/EEC or 1999/45/EC

No classification.

2.2 Label elements

Labelling according to Regulation (EC) 1272/2008

Hazard pictograms

![WARNING](image)

**Signal word**

WARNING

**Contains:**

Ethylene glycol

**Hazard statements**

H373 May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

P260 Do not breathe vapours.

P314 Get medical advice / attention if you feel unwell.

P501 Dispose of contents / container to in accordance with local / regional / national / international regulation.

2.3 Other hazards

**Environmental hazards**

No particular hazards known.

**Other hazards**

none
SECTION 3: Composition / Information on ingredients

Product-type:
The product is a mixture.

<table>
<thead>
<tr>
<th>Range [%]</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.5 - 20</td>
<td>Ethylene glycol</td>
</tr>
<tr>
<td></td>
<td>GHS/CLP: Acute Tox. 4: H362 - STOT RE 2: H373</td>
</tr>
<tr>
<td></td>
<td>EEC: Xn. R 22</td>
</tr>
</tbody>
</table>

| < 0.5     | Sodium nitrite         |
|           | CAS: 7632-00-0, EINECS/ELINCS: 231-555-9, EU-INDEX: 007-010-00-4 |
|           | GHS/CLP: Acute Tox. 3: H301 - Aquatic Acute 1: H400 - Ox. Sol. 3: H272 |
|           | EEC: O-T-N. R 25-8-50  |

Comment on component parts: Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements and R-phrases: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures
General information
Change soaked clothing.

Inhalation
Ensure supply of fresh air.
In the event of symptoms seek for medical treatment.

Skin contact
In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

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

Ingestion
Rinse out mouth and give plenty of water to drink.
Do not induce vomiting.
Supply with medical care.

4.2 Most important symptoms and effects, both acute and delayed
Shortness of breath
Dizziness
Cough
Headache
Gastro-intestinal complains.

4.3 Indication of any immediate medical attention and special treatment needed
Treat symptomatically.
Forward this sheet to the doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media
Suitable extinguishing media
Foam, dry powder, water spray jet, carbon dioxide.

Extinguishing media that must not be used
Full water jet.

5.2 Special hazards arising from the substance or mixture
Risk of formation of toxic pyrolysis products.
Nitrogen oxides (NOx).

5.3 Advice for firefighters
Use self-contained breathing apparatus.
Cool containers at risk with water spray jet.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.
SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
   High risk of slipping due to leakage/spillage of product.
   Ensure adequate ventilation.

6.2 Environmental precautions
   Do not discharge into surface waters/groundwater.

6.3 Methods and material for containment and cleaning up
   Pick up with absorbent material (e.g. sand, universal absorbent, diatomaceous earth).
   Dispose of absorbed material in accordance with the regulations.

6.4 Reference to other sections
   See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling
   Use only in well-ventilated areas.
   The normal safety precautions for handling chemicals must be observed.
   In the event of symptoms seek for medical treatment.
   Keep away from open flames, hot surfaces and sources of ignition.
   Do not eat, drink, smoke or take drugs at work.
   Wash hands before breaks and after work.
   Use barrier skin cream.

7.2 Conditions for safe storage, including any Incompatibilities
   Keep only in original tightly closed container.
   Do not store together with acids and oxidizing agents.
   Keep away from frost.

7.3 Specific end use(s)
   See product use, SECTION 1.2
SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

<table>
<thead>
<tr>
<th>Range [%]</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.5 - 20</td>
<td>Ethylene glycol</td>
</tr>
</tbody>
</table>

CAS: 107-21-1, EINECS/ELINCS: 203-473-3, EU-INDEX: 603-027-00-1
Long-term exposure: 20 ppm, 52 mg/m³, Vapour, particulate: 10 mg/m³
Short-term exposure (15-minute): 40 ppm, 104 mg/m³

Ingredients with occupational exposure limits to be monitored (EU)

<table>
<thead>
<tr>
<th>Range [%]</th>
<th>Substance / EC LIMIT VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.5 - 20</td>
<td>Ethylene glycol</td>
</tr>
</tbody>
</table>

CAS: 107-21-1, EINECS/ELINCS: 203-473-3, EU-INDEX: 603-027-00-1
Eight hours: 20 ppm, 52 mg/m³, H
Short-term (15-minute): 40 ppm, 104 mg/m³

DNEL

<table>
<thead>
<tr>
<th>Range [%]</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.5 - 20</td>
<td>Ethylene glycol, CAS: 107-21-1</td>
</tr>
</tbody>
</table>

Industrial, dermal, Long-term - systemic effects: 106 mg/m³.
Industrial, inhalative, Long-term - local effects: 35 mg/m³.
General population, dermal, Long-term - systemic effects: 53 mg/m³.
General population, inhalative, Long-term - local effects: 7 mg/m³.

PNEC

<table>
<thead>
<tr>
<th>Range [%]</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.5 - 20</td>
<td>Ethylene glycol, CAS: 107-21-1</td>
</tr>
</tbody>
</table>

soil, 1,53 mg/kg.
sediment (freshwater), 20,9 mg/kg.
sewage treatment plants (STP), 199,5 mg/l.
seawater, 1 mg/l.
freshwater, 10 mg/l.

8.2 Exposure controls

Additional advice on system design

Ensure adequate ventilation on workstation.

Eye protection

Safety glasses.

The details concerned are recommendations. Please contact the glove supplier for further information.

In full contact:
- Butyl rubber, >480 min (EN 374).
- Neoprene, >480 min (EN 374).
- Nitrile rubber, >480 min (EN 374).

In splash contact:
- Nitrile rubber, >120 min (EN 374).

Hand protection

Protective clothing.

Avoid contact with eyes and skin.

Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of these equipments to chemicals should be ascertained with the respective supplier.

Skin protection

Other

Respiratory protection

No special measures necessary.

Thermal hazards

No information available.

Delimitation and monitoring of the environmental exposition

not determined
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- **Form**: liquid
- **Color**: green
- **Odor**: characteristic
- **Odour threshold**: not determined
- **pH-value**: 9
- **pH-value [1%]**: not determined
- **Boiling point [°C]**: 100
- **Flash point [°C]**: not applicable
- **Flammability (solid, gas) [°C]**: not applicable
- **Lower explosion limit**: not determined
- **Upper explosion limit**: not determined
- **Oxidizing properties**: no
- **Vapour pressure/gas pressure [kPa]**: 16.49 mbar (20°C)
- **Density [g/ml]**: 1.00 (20°C)
- **Bulk density [kg/m³]**: not applicable
- **Solubility in water**: miscible
- **Partition coefficient [n-octanol/water]**: not determined
- **Viscosity**: >12 s (23°C) (DIN 53211)
- **Relative vapour density determined in air**: not determined
- **Evaporation speed**: not determined
- **Melting point [°C]**: not determined
- **Autoignition temperature [°C]**: not determined
- **Decomposition temperature [°C]**: not determined

9.2 Other information

- none

SECTION 10: Stability and reactivity

10.1 Reactivity

See SECTION 10.3.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with acids, alkalis and oxidizing agents.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

See SECTION 10.3.

10.6 Hazardous decomposition products

- Carbon dioxide (CO2).
- Carbon monoxide (CO).
- Nitrous oxides (NOx).
SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Range [%]</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.5 - 20</td>
<td>Ethylene glycol, CAS: 107-21-1</td>
</tr>
<tr>
<td></td>
<td>$LD_{50}$, dermal, mouse: &gt; 3500 mg/kg</td>
</tr>
<tr>
<td></td>
<td>$LD_{50}$, oral, Rat: 7712 mg/kg</td>
</tr>
<tr>
<td></td>
<td>$LC_{50}$, inhalative, Rat: &gt; 2.5 mg/l 6h.</td>
</tr>
<tr>
<td></td>
<td>$LD_{0}$, oral, Human: ca. 1600 mg/kg.</td>
</tr>
<tr>
<td>&lt; 0.5</td>
<td>Sodium nitrite, CAS: 7632-00-0</td>
</tr>
<tr>
<td></td>
<td>$LD_{50}$, oral, Rat: 85-160 mg/kg.</td>
</tr>
</tbody>
</table>

Serious eye damage/irritation: not determined
Skin corrosion/irritation: not determined
Respiratory or skin sensitisation: not determined
Specific target organ toxicity — single exposure: not determined
Specific target organ toxicity — repeated exposure: not determined
Mutagenicity: not determined
Reproduction toxicity: not determined
Carcinogenicity: not determined
General remarks: The product was classified on the basis of the calculation procedure of the preparation directive. Toxicological data of complete product are not available.

SECTION 12: Ecological information

12.1 Toxicity

<table>
<thead>
<tr>
<th>Range [%]</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.5 - 20</td>
<td>Ethylene glycol, CAS: 107-21-1</td>
</tr>
<tr>
<td></td>
<td>$LC_{50}$, (96h), Pimephales promelas: 72860 mg/l</td>
</tr>
<tr>
<td></td>
<td>$EC_{50}$, (96h), Selenastrum capricornutum: 6500 - 13000 mg/l</td>
</tr>
<tr>
<td></td>
<td>$EC_{50}$, (48h), Daphnia magna: &gt; 100 mg/l OECD 202.</td>
</tr>
<tr>
<td>&lt; 0.5</td>
<td>Sodium nitrite, CAS: 7632-00-0</td>
</tr>
<tr>
<td></td>
<td>$LC_{50}$, (96h), C. carpio: 0.56-1.78 mg/l.</td>
</tr>
<tr>
<td></td>
<td>$EC_{50}$, (72h), Scenedesmus subspicatus: &gt; 100 mg/l.</td>
</tr>
<tr>
<td></td>
<td>$EC_{50}$, (48h), Daphnia magna: 12.5-100 mg/l.</td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability

Behaviour in environment compartments: not determined
Behaviour in sewage plant: not determined
Biological degradability: not determined

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.
12.6 Other adverse effects

Ecological data of complete product are not available.
Do not discharge product unmixed into the environment or into the drainage.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product
Disposal in an incineration plant in accordance with the regulations of the local authorities. Coordinate disposal with the disposal contractor/authorities if necessary.

Waste no. (recommended)
070108*
160507*

Contaminated packaging
Packaging that cannot be cleaned should be disposed of as for product. Uncontaminated packaging may be taken for recycling.

Waste no. (recommended)
150110*

SECTION 14: Transport information

14.1 UN number
See SECTION 14.2 in accordance with UN shipping name

14.2 UN proper shipping name
Transport by land according to ADR/RID
NO DANGEROUS GOODS

Inland navigation (ADN)
NO DANGEROUS GOODS

Marine transport in accordance with IMDG
NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)
See SECTION 14.2 in accordance with UN shipping name

14.4 Packing group
See SECTION 14.2 in accordance with UN shipping name

14.5 Environmental hazards
See SECTION 14.2 in accordance with UN shipping name

14.6 Special precautions for user
Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not applicable
SECTION 15: Regulatory information

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

EEC-REGULATIONS
1272/2008; 75/334/EEC (2009/47/EC); 453/2010/EC

TRANSPORT-REGULATIONS

NATIONAL REGULATIONS (GB):
- Observe employment restrictions for people
- VOC (1999/13/CE)

CHIP & CHIP 4
not applicable
0%

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

16.1 R-phrases (SECTION 3)

R 22: Harmful if swallowed.
R 25: Toxic if swallowed.
R 8: Contact with combustible material may cause fire.
R 50: Very toxic to aquatic organisms.

16.2 Hazard statements (SECTION 3)

H272 May intensify fire; oxidiser.
H400 Very toxic to aquatic life.
H301 Toxic if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.
H302 Harmful if swallowed.

16.3 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
EC90 = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
ELINCS = European List of Notified Chemical Substances
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform Chemical Information Database
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
TLV/TWA = Threshold limit value – time-weighted average
TLVSTEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.4 Other information

Customs Tariff
Classification procedure

not determined
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure.
(Calculation method)
Modified position

SECTION 2 has been added: P501 Dispose of contents/container in accordance with local/regional/national/international regulation.
SECTION 2 has been added: P314 Get medical advice/attention if you feel unwell.
SECTION 2 has been added: P260 Do not breathe vapours.
SECTION 2 has been added: H373 May cause damage to organs through prolonged or repeated exposure.