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

1.1 Product identifier
- Trade name: Testomat-Indikator Typ 300

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.
- Application of the substance / the preparation: Reagent for analysis

1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
  Gebrüder Heyl
  Analysentechnik GmbH & Co. KG
  Orleansstraße 75 b
  D-31135 Hildesheim
  Phone +49 (0) 5121 2893390
  Fax +49 (0) 5121 2893367
  E-Mail info@heyl.de
  Internet www.heyl.de

- Further information obtainable from: product safety department

1.4 Emergency telephone number:
- Giftinformationszentrum Nord
  Phone +49 (0) 551 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008
  GHS07
  Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
  The product is classified and labelled according to the CLP regulation.
- Hazard pictograms
  GHS07

- Signal word Warning
- Hazard statements
  H319 Causes serious eye irritation.
- Precautionary statements
  P280 Wear protective gloves/protective clothing/eye protection/face protection.
  P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P337+P313 If eye irritation persists: Get medical advice/attention.
- Labelling of packages where the contents do not exceed 125 ml
- Hazard pictograms
  GHS07

- Signal word Warning
- Hazard statements Void
- Precautionary statements Void
1.2.21

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description:
Mixture of substances listed below with nonhazardous additions according to Regulation (EC) No 1272/2008.

Dangerous components:

<table>
<thead>
<tr>
<th>CAS</th>
<th>Description</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>110-97-4</td>
<td>1,1'-iminodipropan-2-ol</td>
<td>10-&lt;25%</td>
</tr>
<tr>
<td>15708-48-2</td>
<td>Ethylenediamintetraacetic acid dipotassiummagnesium salt</td>
<td>0,1-≤2,5%</td>
</tr>
<tr>
<td>547-58-0</td>
<td>sodium 4-(4-dimethylaminophenylazo) benzenesulphonate</td>
<td>0,1-≤2,5%</td>
</tr>
</tbody>
</table>

SVHC Not applicable.

Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

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

After skin contact:
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.

After eye contact:
Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:
A person vomiting while laying on their back should be turned onto their side. Rinse out mouth and then drink plenty of water.
Seek medical treatment.

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

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture
In case of fire, the following can be released:
Nitrogen oxides (NOx)
Trade name: Testomat-Indikator Typ 300

5.3 Advice for firefighters
   Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
   Wear personal protection equipment.
6.2 Environmental precautions: Do not allow to enter sewers/surface or ground water.
6.3 Methods and material for containment and cleaning up:
   Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
   Dispose contaminated material as waste according to item 13.
   Ensure adequate ventilation.
   Clean the affected area carefully; suitable cleaners are:
   Warm water
6.4 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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
   Ensure good ventilation/exhaustion at the workplace.
   Prevent formation of aerosols.
   Information about fire - and explosion protection: No special measures required.
7.2 Conditions for safe storage, including any incompatibilities
   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:
   Keep container tightly sealed.
   Protect from heat and direct sunlight.
   Store receptacle in a well ventilated area.
   Recommended storage temperature: 15 - 25 °C
   Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
   Ingredients with limit values that require monitoring at the workplace:
   The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
   Additional information: The lists valid during the making were used as basis.
8.2 Exposure controls
   Personal protective equipment:
   General protective and hygienic measures:
   The usual precautionary measures are to be adhered to when handling chemicals.
   Keep away from foodstuffs, beverages and feed.
   Immediately remove all soiled and contaminated clothing
   Wash hands before breaks and at the end of work.
   Avoid contact with the eyes and skin.
   Do not eat, drink, smoke or sniff while working.
   Respiratory protection: Not required.
Trade name: Testomat-Indikator Typ 300

- **Protection of hands:**

  Protective gloves

  Wear gloves according to EN 374. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

  Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

  Check protective gloves prior to each use for their proper condition.

  Preventive skin protection by use of skin-protecting agents is recommended.

  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 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.

- **For the permanent contact gloves made of the following materials are suitable:**

  Nitrile rubber, NBR

  Recommended thickness of the material: ≥ 0,4 mm

  Value for the permeation: Level = 6 (> 480 min)

- **As protection from splashes gloves made of the following materials are suitable:**

  Nitrile rubber, NBR

  Recommended thickness of the material: ≥ 0,12 mm

  Value for the permeation: Level = 2 (> 30 min)

- **Eye protection:**

  Tightly sealed goggles according to EN 166

- **Body protection:** Protective work clothing

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**SECTION 9: Physical and chemical properties**

- **9.1 Information on basic physical and chemical properties**

  **General Information**

  **Appearance:**

  - Form: Fluid
  - Colour: Green
  - Odour: Characteristic
  - Odour threshold: Not determined.

  **pH-value (100 g/l) at 20 °C:** 10,9

  **Change in condition**

  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: Undetermined.

  **Flash point:** Not applicable.

  **Flammability (solid, gaseous):** Not applicable.

  **Ignition temperature:** Not determined.

  **Decomposition temperature:** Not determined.

  **Self-igniting:** Product is not selfigniting.
Trade name: Testomat-Indikator Typ 300

- Danger of explosion: Product does not present an explosion hazard.
  - Explosion limits:
    - Lower: Not determined.
    - Upper: Not determined.
  - Vapour pressure: Not determined.
  - Density at 20 °C: 1.11 g/cm³
  - Relative density: Not determined.
  - Vapour density: Not determined.
  - Evaporation rate: Not determined.

- Solubility in / Miscibility with water: Fully miscible.

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

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

- 9.2 Other information: No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity: No further relevant information available.
- 10.2 Chemical stability
  - Thermal decomposition / conditions to be avoided:
    Exothermic neutralisation reaction with acids.
    Under certain conditions possible formation of nitrosamines in the presence of nitrites or reagents causing nitrosation.
- 10.3 Possibility of hazardous reactions: No dangerous reactions known.
- 10.4 Conditions to avoid: No further relevant information available.
- 10.5 Incompatible materials: Acids, nitrites, reagents causing nitrosation.
  Do not use tools made of aluminium or copper or their alloys.
- 10.6 Hazardous decomposition products: Nitrogen oxides

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
  - Acute toxicity: Based on available data, the classification criteria are not met.
    - LD/LC50 values relevant for classification:
      | CAS          | Oral LD50 | Oral LD50 |
      | CAS: 110-97-4 | 4770 mg/kg (rat) |
      | CAS: 15708-48-2 | > 2000 mg/kg (rat) |
      | CAS: 547-58-0 | 60 mg/kg (rat) |

- Primary irritant effect:
  - Skin corrosion/irritation: Based on available data, the classification criteria are not met.
  - Serious eye damage/irritation: Causes serious eye irritation.
  - Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
  - CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
  - Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Trade name: Testomat-Indikator Typ 300

- **Carcinogenicity**: Based on available data, the classification criteria are not met.
- **Reproductive toxicity**: Based on available data, the classification criteria are not met.
- **STOT-single exposure**: Based on available data, the classification criteria are not met.
- **STOT-repeated exposure**: Based on available data, the classification criteria are not met.
- **Aspiration hazard**: Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- **12.1 Toxicity**
  - **Aquatic toxicity**: No further relevant information available.
- **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.
- **Additional ecological information**:
  - **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.
  - **12.5 Results of PBT and vPvB assessment**
    - **PBT**: Not applicable.
    - **vPvB**: Not applicable.
  - **12.6 Other adverse effects**: No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
  - **Recommendation**: Must not be disposed together with household garbage. Do not allow product to reach sewage system. Disposal must be made according to official regulations.
  - **Uncleaned packaging**:
    - **Recommendation**: Packagings that may not be cleansed are to be disposed of in the same manner as the product. Disposal must be made according to official regulations.
  - **Recommended cleansing agents**: Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

- **14.1 UN-Number**
  - **ADR, ADN, IMDG, IATA**: Void
- **14.2 UN proper shipping name**
  - **ADR, ADN, IMDG, IATA**: Void
- **14.3 Transport hazard class(es)**
  - **ADR, ADN, IMDG, IATA**: Void
- **14.4 Packing group**
  - **ADR, IMDG, IATA**: Void
- **14.5 Environmental hazards**: Marine pollutant: No
- **14.6 Special precautions for user**: Not applicable.
SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Directive 2012/18/EU
  - Named dangerous substances - ANNEX I None of the ingredients is listed.

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

SECTION 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 phrases
  H301 Toxic if swallowed.
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.
  H335 May cause respiratory irritation.

- Department issuing MSDS: product safety department.

- Contact:

- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  IATA: International Air Transport Association
  GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistent, Bioaccumulative and Toxic
  SVHC: Substances of Very High Concern
  vPvB: very Persistent and very Bioaccumulative
  Acute Tox. 3: Acute toxicity, Hazard Category 3
  Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
  Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
  STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
  * Data compared to the previous version altered.