IMPORTANT: Read this MSDS before handling and disposing of this product and pass this information onto employees, customers and users of this product.

24 HOUR EMERGENCY TELEPHONE NUMBER: INFOTRAC 1-800-535-5053

SECTION I - PRODUCT IDENTIFICATION
Product Name: TPWA-RT 010
CAS Number: Mixture
Product identifier Ink - Red

Chemical characterization (Mixture) Mixture of water, coloring agents, binders and additives.
Toxicological information center (Mainz/Germany) You should contact a doctor or a toxicological information center if you suspect poisoning. The toxicological information center provides free medical advice in the event of poisoning or a suspicion of poisoning to everyone around the clock.
Important questions for EMERGENCY:
- Who: - age, weight, sex of the person concerned, telephone number for recall.
- What: - All you can say about the involved agents.
- How much: - Try to estimate the maximum possible intake.
- When: - Try to get the time elapsed since the incident time estimate.
- What else: - First observed symptoms? First Measures taken?

SECTION 2: HAZARDS IDENTIFICATION
Route(s) of Entry
Signs and Symptoms of Exposure SECTION 2: Hazards identification & SECTION 11: Toxicological information
- Carcinogenicity (NTP): none
- Carcinogenicity (IARC): none
- Carcinogenicity (OSHA): none

Other hazards In principle all chemicals are particularly dangerous. Therefore they are to be handled only by specially trained personnel with the necessary care. The disposal of this product requires the expertise resp. an annual instruction according to ChemVerbotsV.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
Mixtures Hazardous components
<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1336-21-6</td>
<td>Ammonium hydroxide 25%</td>
<td>1 - 5 %</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES
Description of first aid measures
General information In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove contaminated, saturated clothing immediately. If victim is at risk of losing consciousness, position and transport on their side.
After inhalation Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Seek medical attention if problems persist.
After contact with skin After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. Repeated exposure may cause skin dryness or cracking. Use protective skin cream before handling the product. In case of skin irritation, consult a physician.
After contact with eyes If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.
After ingestion Keep at rest. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Aspiration hazard. Do not give fatty oils and milk. Do not allow a neutralization agent to be drunk. Call a physician immediately.

**Indication of any immediate medical attention and special treatment needed** There are no data available on the mixture itself.

**SECTION 5: FIREFIGHTING MEASURES**

**Extinguishing media**

**Suitable extinguishing media** The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings. In case of fire, use sand, extinguishing powder or alcohol resistant foam. Water fog. Atomized water.

**Unsuitable extinguishing media** High power water jet.

**Special hazards arising from the substance or mixture** Carbon monoxide. CO Carbon dioxide (CO2).

**Advice for firefighters** Wear a self-contained breathing apparatus and chemical resistant suit.

**Additional information** Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures** Provide fresh air. Avoid contact with skin and eyes. Wear suitable protective clothing and eye/face protection.

**Environmental precautions** Do not allow to enter into surface water or drains.

**Methods and material for containment and cleaning up** Provide adequate ventilation. Absorb with liquid-binding material (e.g., sand, diatomaceous earth, acid or universal binding agents). Clean contaminated objects and areas thoroughly observing environmental regulations. Collect in closed and suitable containers for disposal. Treat the recovered material as prescribed in the section on waste disposal.

**Reference to other sections**

- Safe handling: see section 7
- Personal protection equipment: see section 8
- Disposal: see section 13

**SECTION 7: HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling** Provide adequate ventilation as well as local exhaustion at critical locations. See information supplied by the manufacturer. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. Open and handle container with care. Keep container tightly closed.

**Advice on protection against fire and explosion** Usual measures for fire prevention.

**Conditions for safe storage, including any incompatibilities**

**Requirements for storage rooms and vessels** Keep only in the original container in a cool, well-ventilated place. Store small packages in a suitable, robust cabinet. Keep container tightly closed. Recommended storage temperature: (+15°C) - (+25°C)

**Advice on storage compatibility** Do not store together with: Oxidizing agent. Technical Rule 510 note.

**Further information on storage conditions** Protect against direct sunlight. The product is chemically stable under recommended conditions of storage, use and temperature. In case of exceeding the storage time: Product/Packaging disposal. Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Additional advice on limit values** Technical measures and the application of suitable work processes have priority over personal protection equipment.

**Exposure controls**
**Protective and hygiene measures**
Keep away from food, drink and animal feeding stuffs. Remove contaminated, saturated clothing immediately. Do not breathe gas/fumes/vapor/spray. Avoid contact with skin and eyes. Protect skin by using skin protective cream. Draw up and observe skin protection program. Wash hands before breaks and after work. When using do not eat, drink or smoke.

**Eye/face protection**
Tightly sealed safety glasses. DIN EN 166

**Hand protection**
Wear protective gloves. Recommended material: Butyl caoutchouc (butyl rubber) Thickness of the glove material >= 0,5 mm. DIN EN 374. NR (natural rubber, natural latex) limited resistance using a maximum of 10 minutes. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

**Skin protection**
Wear suitable protective clothing.

**Respiratory protection**
Extended inhalation at levels above the workplace limit value can cause irreversible damage to the lungs. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

---

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties

- **Physical state:** liquid
- **Color:**
- **Odor:** like: Solvent

<table>
<thead>
<tr>
<th>Property</th>
<th>Test method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH-Value (at 20°C)</td>
<td>not determined</td>
<td>DIN 19268</td>
</tr>
<tr>
<td>Changes in the physical state</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>79 - 110°C</td>
<td>DIN 51751</td>
</tr>
<tr>
<td>Flash point</td>
<td>N/A</td>
<td>DIN 51755</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>not Explosive</td>
<td></td>
</tr>
<tr>
<td>Lower explosion limits</td>
<td>N/A</td>
<td>DIN 51649</td>
</tr>
<tr>
<td>Upper explosion limits</td>
<td>N/A</td>
<td>DIN 51649</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>N/A</td>
<td>DIN 51794</td>
</tr>
<tr>
<td>Vapor pressure:(at 20°C)</td>
<td>23 hPa</td>
<td>DIN 51754</td>
</tr>
<tr>
<td>Density (at 20°C)</td>
<td>N/A</td>
<td>ISO 2811</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>mixable with most organic solvent cleaners</td>
<td></td>
</tr>
<tr>
<td>Viscosity/dynamic:(at 20°C)</td>
<td>N/A</td>
<td>DIN 53019</td>
</tr>
<tr>
<td>Vapor density</td>
<td>&gt; 1</td>
<td></td>
</tr>
</tbody>
</table>

---

**SECTION 10: STABILITY AND REACTIVITY**

- **Stability:** Stable
- **Possibility of Hazardous Reactions:** N/A
- **Conditions to avoid**
  Protect from sunlight. Store at temperatures not exceeding 35°C/95°F.
- **Incompatible materials**
  Keep away from strong acids, leachates, heavy metal salts and reducing materials.
- **Hazardous decomposition products**
  Carbon monoxide (CO), Carbon dioxide (CO2). Peroxide

---

**SECTION 11: TOXICOLOGICAL INFORMATION**

Information on toxicological effects

**Acute toxicity**

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Components</th>
<th>Exposure routes</th>
<th>Method</th>
<th>Dose</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>1336-21-6</td>
<td>Ammonium Hydroxide 25%</td>
<td>oral</td>
<td>LD50</td>
<td>350 mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative (4 h) vapor</td>
<td>LC50</td>
<td>1,4 mg/l</td>
<td>Rat</td>
</tr>
</tbody>
</table>
Further information Prolonged/repetitive skin contact may cause skin defatting or dermatitis. Danger of cutaneous absorption. Inhalation causes narcotic effects/intoxication. Causes eye irritation, in case of eye contact. May cause damage to liver through prolonged or repeated exposure if inhaled. Ingestion causes nausea, weakness and central nervous system effects. Observe risk of aspiration if vomiting occurs.

SECTION 12: ECOLOGICAL INFORMATION
Persistence and degradability Product is partially biodegradable. Significant residues remain.
Bioaccumulative potential No data available
Mobility in soil No data available
Results of PBT and vPvB assessment The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
Other adverse effects No data available
Further information The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see chapter 3).

SECTION 13: DISPOSAL CONSIDERATIONS
Waste treatment methods
Advice on disposal Dispose of waste according to applicable legislation. Do not empty into drains; dispose of this material and its container in a safe way. Consult the appropriate local waste disposal expert about waste disposal. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: TRANSPORT INFORMATION
US DOT 49 CFR 172.101
Proper shipping name: Not a hazardous material with respect to these transport regulations.
Not controlled under DOT
Marine transport (IMDG) N/A
Other applicable information No dangerous good in sense of this transport regulation.
Air transport (ICAO) N/A
Other applicable information No dangerous good in sense of this transport regulation.

SECTION 15: REGULATORY INFORMATION
U.S. Regulations
SARA No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
Additional information For use in industrial installations or professional treatment only.

SECTION 16: OTHER INFORMATION
Hazardous Materials Information Label (HMIS)
Health: 1
Flammability: 1
Physical Hazard: 0
Personal Protection: B

NFPA Hazard Ratings
Health: 1
Flammability: 1
Reactivity: 0
Unique Hazard: not applicable

Changes This data sheet contains changes from the previous version in section(s): 1,3.
Other data
The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations. The product should only be handled by persons over the age of 18, who were informed sufficiently about the dangerous nature or the product and about the necessary safety precautions.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor’s safety data sheet.

SECTION 17 OTHER INFORMATION

DISCLAIMER OF LIABILITY

THE INFORMATION IN THIS MSDS WAS OBTAINED FROM SOURCES WHICH WE BELIEVE ARE RELIABLE, HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS ACCURACY OR CORRECTNESS. THE CONDITIONS OR METHODS OF HANDLING, STORAGE, USE AND DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.