HAEMA – **LT-SYS®**
Quick-Stain (Diff-Quick)

- Easy handling – **brilliant staining in only 1 minute**
- Three-Step-Procedure Stain kit containing 3 ready-to-use solutions
- Staining results equivalent to Pappenheim method
- Provides **consistent, reproducible staining quality**
- Clear, differential results
- Rapid staining for haematology, cytology and histology
- High stability, excellent yield and colour intensity
- For human- and veterinary labs

With Haema-Quick-Stain numerous specimen slides can be processed simultaneously, thus making it suitable for use in industrial Haematology laboratories, private practices and for emergency diagnosis.

**PROCEDURE**
Prepare smear slide with blood or other specimen according to standard procedure:

1. Dip slide into Fixing Solution 5 times for 1 second, allowing excess reagent to drain.
2. Dip slide into Colour Reagent I, red 3 - 5 times for 1 second, allowing excess reagent to drain.
3. Dip slide into Colour Reagent II, blue 3 - 5 times for 1 second, allowing excess reagent to drain.
4. Rinse slide with distilled water and allow to dry.

**PRODUCT DATA**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LT 005</td>
<td>Haema Quick Stain Set with Fixing Solution, Colour reagent I, red and II, blue, each 100 ml</td>
</tr>
<tr>
<td>LT 001</td>
<td>Haema Quick Stain Set with Fixing Solution, Colour reagent I, red and II, blue, each 500 ml</td>
</tr>
<tr>
<td>LT 008/S</td>
<td>Haema Quick Stain, 1000 ml Fixing Solution</td>
</tr>
<tr>
<td>LT 002</td>
<td>Haema Quick Stain, 2,5 l Fixing Solution</td>
</tr>
<tr>
<td>LT 003</td>
<td>Haema-Quick Stain, 2,5 l Colour Reagent I, red</td>
</tr>
<tr>
<td>LT 004</td>
<td>Haema-Quick Stain, 2,5 l Colour Reagent II, blue</td>
</tr>
<tr>
<td>1210</td>
<td>Dye-bath Set includes: 3 Glass Troughs with cover, 1 Stainless Steel Rack, 1 Glass Trough approx. 27.5 x 15 x 6 cm</td>
</tr>
<tr>
<td>2407/1</td>
<td>Microscope Slides, 76 x 26 mm each, frosted ends, pack of 50 pcs.</td>
</tr>
<tr>
<td>LT-FLIO</td>
<td>Immersion Oil, 100 ml</td>
</tr>
</tbody>
</table>

Corresponding to the In-vitro-Diagnostic guideline 98/79/EC all our products are CE registered. Our Quality Management System is certified by the TÜV according EN ISO 9001:2008 and EN ISO 13485:2012/AC:2012.

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**MORE THAN 40 YEARS: HIGH QUALITY CLINICAL REAGENTS AT LOW PRICES!**
HAEMA QUICK STAIN

**INTENDED USE**
Stain set for rapid, differential staining of hematological smears and different clinical specimens - in vitro diagnosticum -.

**PRINCIPLE**
The Haema Quick Stain Set constitutes a differential staining system for blood cells that combines the polychromy and quality of classical systems with a very quick execution (3 step process into a 15 second detaining operation).

The typical colour of cell nuclei, namely purple, is due to molecular interaction between eosin Y and an azure B-DNA complex. Both dyes build up the complex later. The intensity of the staining depends on the azure B content and on the ratio azure B/eosin Y. The staining result can be influenced by several factors such as the pH of the solutions and buffer solution, buffer substances, fixation, staining time.

**PREPARATION AND STABILITY**
All Solutions are ready-to-use.
When stored at +15 °C - +25 °C, the reagent will remain stable up to the expiration date stated on the label.
The bottles must be kept tightly closed at all times.

Cuvettes that contain the stains shall always be stored capped, specially the fixing solution, in order to avoid undesirable evaporation that could promote deviations from the usual staining colours.
Add new dye solutions to the cuvettes to keep a daily appropriate (constant) level to compensate for drain losses.
From time to time renovate the whole contents of the cuvettes.

**SPECIMEN**
Capillary blood or venous blood with EDTA.
Capillary blood should be used as soon as possible.
Stability in venous EDTA blood: at +15°C to +25°C: 24 hours.
Longer storage (+2°C - +8°C) requires cautious but completely mixing by shaking probes.
Bone marrow gained by sternal punctation is also usable for staining as other clinical specimens like cytological textures and lavages.

**RESULTS**

<table>
<thead>
<tr>
<th>Cells/Graines</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erythrocytes</td>
<td>pink to yellowish red</td>
</tr>
<tr>
<td>Thrombocytes</td>
<td>Violet to purple granules</td>
</tr>
<tr>
<td>Leucocytes (polynucleous neutrophiles)</td>
<td>Nuclei dark-blue, cytoplasm pale pink, granules reddish to violet</td>
</tr>
<tr>
<td>Eosinophilic granulocytes</td>
<td>Nuclei blue, cytoplasm blue, granules red to red-orange</td>
</tr>
<tr>
<td>Basophilic granulocytes</td>
<td>Nuclei purple to dark-blue, granules dark-blue to black</td>
</tr>
<tr>
<td>Monocytes</td>
<td>Nuclei violet, cytoplasm blue-grey to smoke-coloured</td>
</tr>
<tr>
<td>Lymphocytes</td>
<td>Nuclei blue-violet, cytoplasm sky blue</td>
</tr>
<tr>
<td>Bacteria's</td>
<td>blue</td>
</tr>
<tr>
<td>Area between cells</td>
<td>clear</td>
</tr>
</tbody>
</table>

**PRECAUTION INSTRUCTIONS**
For professional use only.
In order to avoid errors, the staining process must be carried out by qualified personnel.
National guidelines for work safety and quality assurance must be followed.
Microscopes equipped according to the standard must be used.
Effective measures must be taken to protect against infection in line with laboratory guidelines.
PROCEDURAL LIMITATIONS
Good technique in preparing the blood smears should be used at all time. The unique division of stains in the Haema Quick Stain gives the user the advantage of varying dips in colour reagent I and II to produce different degrees of shading and intensity. However, one must never use less than 3 dips of one full second. The Haema Quick Stain is an aqueous stain and the water soluble portions of cell material may take the stain differently than the classical alcohol based Pappenheim stain. This phenomenon is most noticeable when observing basophiles. The granulocytes will appear “washed out” or partially dissolved. If basophiles are suspected the specimen should be stained using Pappenheim method (Giemsa, May-Grünwald).

SAFETY AND PRECAUTION WARNINGS
1. Fixing solution is a methanolic solution, is flammable and toxic in case of ingestion or inhalation.
2. Colour reagent I contains NaN_3 to conserve.
3. Safety data sheets are available by request.
4. Obey special safety requirements for using laboratory reagents.
5. Waste products must be handled as per local’s regulations.

REAGENTS
Fixing Solution
Methanol
Methylene blue
Colour reagent I
Phosphate buffer, pH 6.8
Eosin
Detergents
Colour reagent II
Phosphate buffer, pH 6.8
Azure