



HISTOLOGY AND CYTOLOGY REAGENTS















Avantor™ Performance Materials is extending the reach of reliable diagnostic solutions to help improve healthcare outcomes and quality of life for a changing world.



Performance Diagnostics for a Changing World

Avantor™ Performance Materials' global diagnostics business has a unique mission: Improve the quality and affordability of diagnostic tools to help benefit the health and well-being of people around the world. We offer:

- In vitro reagents and instruments for hematology, clinical chemistry, immunology – ELISA, CLIA and rapid diagnostics tests, histology, microbiology and genetic testing
- Consumables and instruments for life sciences research in academia, government and pharmaceutical labs

About Avantor™ Performance Materials

Avantor is a global leader in performance materials and chemistries in high-growth specialty chemical markets — including laboratory products, pharmaceuticals, electronic materials and diagnostics. We have seven global manufacturing facilities with certified capabilities such as ISO, cGMP and Six Sigma. Our global diagnostics offering is built on a strong foundation: a passion for quality, innovation and reliability in performance materials.

Two World-Class Diagnostics Brands

Today, our performance diagnostics solutions include:

J.T.Baker® clinical reagents — for over 30 years, solutions for hematology and histology reagents engineered for maximum performance.

BeneSphera™ diagnostics solutions — providing proven and affordable diagnostic products and systems for applications including hematology, clinical chemistry, immunology, microbiology, and life science.





Our Global Resources

Strong, in-house research & development capabilities — including the ability to develop customized solutions

Global manufacturing capability — seven manufacturing facilities on three continents with certified capabilities (such as ISO, cGMP, Six Sigma) for a strong, responsive global supply chain

Quality infrastructure and culture — a quality culture that includes rigorous testing of every raw material, packaging materials and every batch and accelerated stability and real time testing

Extensive sales & service network — more than 250 distributors in 100 countries worldwide, plus fully staffed customer service centers providing product support, application support, technical support and training.

Regulatory compliance with the following certifications
— ISO 13485:2003, ISO 9001:2008, ISO 14001:2004 and
European IVD Directive 98/79/EC (€).



Avantor™ Performance Materials is committed to advancing the quality and effectiveness of histology and cytology laboratory processes for diagnostic applications by providing a comprehensive line of J.T.Baker® brand alcohols, solvents, fixatives, stains, mounting media, and xylene alternatives. Produced using state-of-the-art manufacturing techniques at facilities certified for excellence in quality control, customers can count on Avantor's histology and cytology products to deliver efficient, reliable results, time after time.

Avantor offers the following histology and cytology products:

- Fixatives
- Alcohols and Solvents
- Solutions for a Xylene-free Laboratory
- Paraffin
- Staining Solutions
- Mounting Media



Alcohols and Solvents

A competitive range of conveniently packaged alcohols and solvents, manufactured to meet the needs of a range of histology and cytology laboratory techniques. Extensive testing has indicated that J.T. Baker® brand alcohols and solvents are of high quality and produce excellent results when used in appropriate staining and tissue preparation procedures.

Fixatives

Formaldehyde Fixatives

Effective and reproducible fixation requires the right concentration of buffered formaldehyde. The 40 mM phosphate buffer J.T.Baker® brand formaldehyde fixatives have shown optimal performance and results in immunostaining. The J.T.Baker® brand formaldehyde fixatives are available in both ready-to-use and concentrated solution.

Bouin's Fixative

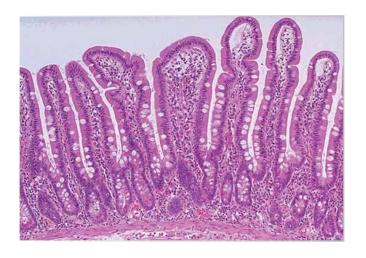
Bouin's fixative is a picric acid-based fixative that is used for the preservation of soft or delicate tissues. Excellent preservation of nuclei and chromosomes makes Bouin's fixative a popular choice to use with embryonic studies and skin.

Cervix Spray Fixative

Cervix Spray Fixative is a specially designed, non-toxic solution used to fix prepared cell smears in such a way that Papanicolaou staining gives optimized coloration of cell structures. This product helps ensure that the cell smears are fixated to produce accurate cytology results.

Formalin Neutralizer

An essential item to have on hand for histology laboratory processes, formalin neutralizer is a powdered chemical that contains a strong reducing agent to neutralize spilled or used formalin. Neutralization takes 24 hours, after which time the waste can be disposed of as non-harmful chemical waste.



Solutions for a Xylene-free Laboratory

UltraClear™ Clearing Agent

UltraClear™ is an isoparaffin-based clearing agent that can be used as a more environmentally friendly xylene replacement during tissue embedding, deparaffinization, and staining processes. Not only is UltraClear™ clearing agent odorless, less toxic, and less flammable when compared to xylene, it is also easy to adapt with existing working protocols.

UltraKitt™ Mounting Medium

UltraKitt™ mounting medium is compatible with UltraClear™ clearing agent and is a safer alternative for use in the laboratory environment, as it does not contain aromatic solvents like xylene or toluene. UltraKitt™ is also compatible with xylene, toluene, IPA and benzyl alcohol.

Paraffin

UltraPar™ Paraffin

UltraPar™ particle-free paraffin is intended for use in histology tissue embedding and sectioning. Unlike other paraffin products, UltraPar™ paraffin does not crack or shrink during cooling, and is twice as soluble in organic solvents and UltraClear™ clearing agent when compared to similar products. Increased solubility results in improved penetration, deparaffinization, and excellent results of stained sections.

Paraffin Cleaner

Paraffin cleaner is a special non-toxic cleaner for laboratory equipment, including processors and microtomes. J.T. Baker® brand paraffin cleaner contains mineral oils in an alcoholic medium. When used regularly, paraffin cleaner helps keep laboratory equipment clean and in good working order.

Staining Solutions

Hematoxylin and Eosin (H&E) Stains

Modern technology and temperature controlled manufacturing processes help produce Mayer, Harris and Gill-II Hematoxylin staining solutions that are ready to use, long-lasting and produce a consistent, bright staining of the nucleus. J.T.Baker® brand Eosin Y counter stains, offered in both alcoholic and aqueous solutions, are optimized in combination with our Hematoxylin stains. The J.T.Baker® brand product line also includes Scotch's solution, which enables a stable and optimized bluing of the cell nucleus.

May-Grünwald, Giemsa, Wright and Leishman Stains May-Grünwald, Giemsa, Wright and Leishman stains are used for tissue sections, cytology smears, blood smears and bone marrow. We strive for the highest standards when designing our production methods and modifying our formulations. This ensures that J.T.Baker® brand stains result in optimized color intensity for clear results in most testing procedures.

Papanicolaou Stains

Despite the technological advances in medicine over the last 100 years, the Pap smear test remains one of the most commonly used tests to detect the presence of premalignant lesions in cervix smears. The J.T. Baker® brand product line includes Papanicolaou 1 (hematoxylin solution according to Gill II/Harris), Papanicolaou 2A (Orange G6), Papanicolaou 2B, and Papanicolaou 3B (EA 50) stains. All of our Pap staining solutions are purified and free from contamination to ensure reliable results.





Mounting Media

UltraKitt™ Mounting Medium

UltraKitt™ mounting medium is compatible with UltraClear™ clearing agent, xylene, toluene, IPA and benzyl alcohol. UltraKitt™ mounting medium is a safer alternative for use in the laboratory environment, as it does not contain aromatic solvents like xylene or toluene.

Xylene-based Mounting Media

The xylene-based mounting media are available in a low and high viscosity. These mounting media allow for faster drying and more efficient coverslipping.

Key Benefits

- Avantor™ Performance Materials is a trusted reagent manufacturer, known for high quality products and customer service
- State-of the-art production and packaging in certified manufacturing facilities across
- Ready-to-use buffered fixatives
- Paraffin with excellent penetration and deparaffinization properties
- Alcohols and solvents meet the highest Histograde quality standards
- Complete solutions for a xylene-free laboratory
- Filtered and ready-to-use staining solutions
- Mounting media for faster and more efficient coverslipping







Gliwice, Poland 9001:2008 & 17025:2005 Selangor, Malaysia 9001:2008 Dehradun, India 9001:2008, 14001:2004 & 13485:2003



About Avantor™ Performance Materials

Avantor Performance Materials manufactures and markets highperformance chemistries and materials around the world under several respected brand names, including the J.T.Baker $^{\circ}$, Macron Fine Chemicals $^{\text{\tiny{TM}}}$, Rankem[™], BeneSphera[™] and POCH[™] brands.

Avantor products are used in a wide range of industries. Our biomedical and life science solutions are used in pharmaceutical production, laboratory research for academic, industry and quality control, and in medical lab testing. Our electronics materials products are used in the manufacturing of semiconductors. Based in Center Valley, Pennsylvania (USA), Avantor is owned by an affiliate of New Mountain Capital, LLC.

 $For additional\ information\ please\ visit\ \textbf{www.avantormaterials.com}\ or\ follow\ \textbf{www.twitter.com/avantor_news}$

Ordering Information and Assistance

Customer Service and Technical Service India

1201-1206, Pinnacle Business Tower Shooting Range Road, Surajkund, Faridabad - 121009, India TEL: +91-129-4267000, 4267100, 4267200 FAX: +91-129-4267299, 4267199

E-MAIL: diagnostics.india@avantormaterials.com

Netherlands

Teugseweg 20, 7418 AM Deventer, the Netherlands TEL: +31-570-687500 FAX: +31-570-687574

 $\hbox{E-MAIL: avantor.emea@avantormaterials.com}\\$

www.avantormaterials.com

ASK Avantor™

Our Web site features ASK Avantor.™ which includes live chat capabilities with customer service representatives. www.avantormaterials.com/askavantor

Corporate Headquarters

Avantor Performance Materials, Inc. 3477 Corporate Parkway Suite #200 Center Valley, PA 18034

Worldwide Locations

 China Malaysia • North America • India Mexico Poland • Netherlands For contact information at these locations, visit www.avantormaterials.com/WorldwideDirectory

