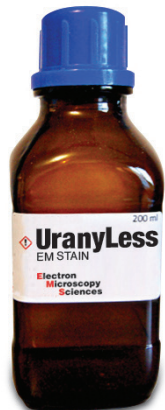


an amazing new substitute for Uranyl Acetate...

UranylLess

EM STAIN



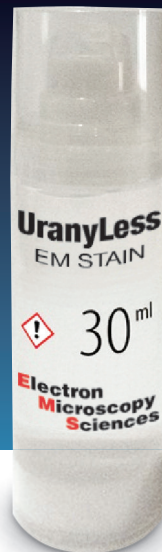
200ml Bottle

A new contrast solution for transmission electron microscopy, ultra-fine sections, or negative staining

EMS is proud to introduce UranylLess, a new contrast stain solution for TEM, for all of your negative staining applications. It is an amazing substitute for Uranyl Acetate with similar results.

UranylLess has been tested on many biological tissue (animal and plant): intestine, skeletal and cardiac muscle, liver, kidney, adrenal gland, nerve, cell culture, plant tissue, and also on negative staining of bacteriophage, bacteria, and polymers. UranylLess is ideal because of its ability to stain any kind of material and results are reproducible.

Now also available in a 200ml bottle for automated staining applications.



30ml Airless Bottle

Storage Conditions

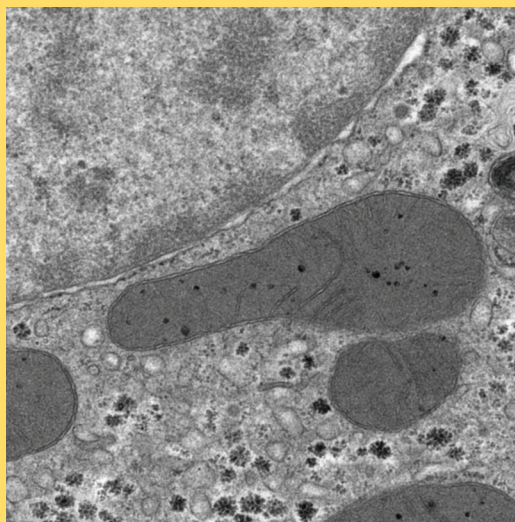
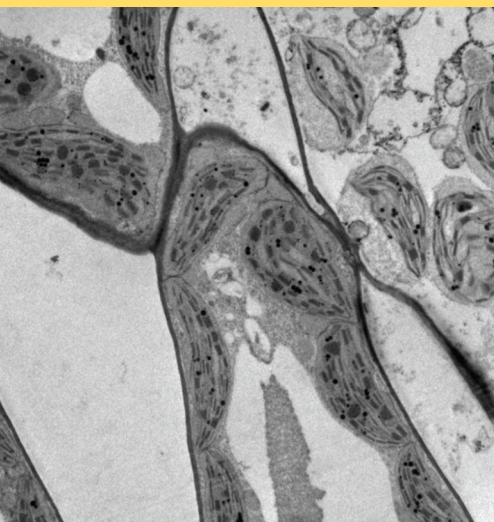
Room Temperature

pH

6.8

Disposal

With heavy materials (rare earths)



References

- "Easier and Safer Biological Staining: High Contrast UranylLess Staining of TEM Grids"
1. Delta Microscopies, 22, B route de saint Ybars, La côte blanche, 31190, Mauressac, France
 2. Université Toulouse, CMEAB Faculté Medecine, 118 route Narbonne, 31062, Toulouse, France
 3. Microscopy Innovations LLC, 213 Air Park Rd, Suite 101, Marshfield, WI, 54449, USA
- "C-Nap1 mutation affects centriole cohesion and is associated with a Seckel-like syndrome in cattle." Nature Communications. Published 23 Apr 2015. Sandrine Floriot, all.

EMS has it!

UranylLess

Uranyl Acetate Substitute

Frequently Asked Questions...

What UranylLess is made from?

UranylLess is a ready-for-use solution, made from a mix of lanthanides (rare-earths).

In what form is it prepared?

Currently, UranylLess is available exclusively in aqueous solution (water). However, additional Uranyl Acetate substitutes Ethyl UranylLess and Acetone UranylLess are being developed.

How to contrast with UranylLess?

Simply drop UranylLess on your grid, and wait a minute. Dry, then contrast with lead citrate according to Reynolds method.

Can it be used on negative staining?

Yes, *Please visit our website at www.emsdiasum.com for the complete protocols.*

What kind of resin should be used with UranylLess?

It works with every kind of resin (Epon, Araldite, Spurr...).

Is it adapted to a cryo use?

No, because it is prepared in water.

Is it efficient on marine specimens?

Yes, UranylLess provides great contrasts.

CONTACT US FOR MORE INFORMATION...

Electron Microscopy Sciences

P.O. Box 550 • 1560 Industry Rd.

Hatfield, Pa 19440

Tel: (215) 412-8400

Fax: (215) 412-8450

email: sgkcck@aol.com

or stacie@ems-secure.com

www.emsdiasum.com

SEM & TEM Sample Preparation

Microscopy



DESK V TSC

Sample Coater

- Fully automated
- Minimize sample charge
- Reduce e-beam damage
- Increase secondary electron emissions

BENCH TOP TURBO

Evaporation Tool for Tissue and Life Science

- Carbon coating
- Sputtering
- AC glow discharge
- Low-voltage thermal evaporation

Support Performance Value

DV-502

Large Sample, High Throughput Sputter & Evaporation

- Rotary shadowing for metals and carbon
- High vacuum gate valve for rapid cycling
- Recipe development

DENTON VACUUM

Enabling Innovation

www.dentonvacuum.com

All Denton Vacuum Microscopy tools are backed by a 12 month warranty, over 50 years of process knowledge, an in-house process engineering group, worldwide support, and Global factory service center.

To learn more about how to better prepare your samples, contact your electron microscope manufacturer or call us at +1-800-666-6004

CONGRATULATIONS TO THE 2016 DIATOME POSTER AWARD WINNERS

DIATOME hosts a poster contest each year during Microscopy & Microanalysis annual meeting where members of the MSA council select the best poster presentation using Diamond Knives. DIATOME is proud to announce the following award winners for the 2016 meeting.

1st PLACE WINNER (A trip to Switzerland including a visit to our factory): Gang Nin

Poster: Drebrin Depletion Causes Abnormal Morphology in Mouse Skin

2nd PLACE WINNER (A finely sculptured Swiss Watch): Cynthia Goldsmith

Poster: Emergence of Previously Unknown Poxviruses

3rd PLACE WINNER (A finely sculptured Swiss Watch): Eric Hanssen

Poster: A Third Hand for Array Tomography

The Diamond Knife raffle winners were as follows:

Day 1: Amanda Lawrence, Mississippi State University

Day 2: Karen Kelley, University of Florida

Day 3: Clayton Loehn, PhD, Louisiana State University

Day 4: Frank Macaluso, Albert Einstein College of Medicine

A heartfelt Congratulations is extended from DIATOME to the Winners.

Sincerely yours,
Stacie Kirsch, Managing Director

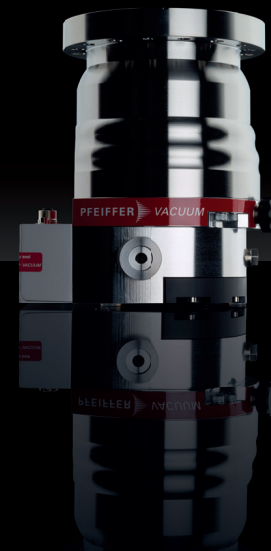


YOUR OPTICAL
COATING PARTNER
**FOR SO MANY
REASONS**

REASON #9:

LIFE SCIENCES
CATALOG INCLUDES
**FLUORESCENCE
FILTERS**

www.alluxa.com
1-855-4ALLUXA



HIPACE[®] 300 H

The turbopump with highest
compression for light gases

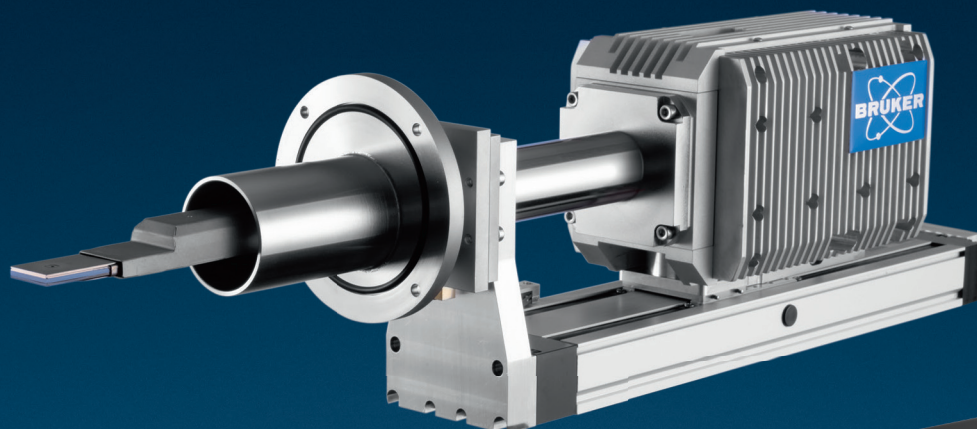
- Ideal for HV and UHV applications
- Best UHV pressures even in combination with diaphragm pumps



Are you looking for a perfect vacuum solution?
Please contact us:

Pfeiffer Vacuum, Inc. · USA
T 800-248-8254
F 603-578-6550
contact@pfeiffer-vacuum.com
www.pfeiffer-vacuum.com

Someone has to be first.
XFlash[®] FlatQUAD, multiple detector systems & VZ



Analyze textured
samples with ease.



- The unique XFlash[®] FlatQUAD offers a large solid angle and an amazing take-off angle. This minimizes shadowing so you can see every nook and cranny of your sample in record time.
- Bruker's multiple detector systems provide large solid angles and great take-off angles too. You can start with one detector building up to four, depending on your needs.
- The Variable Z (VZ) adapter allows you to optimize take-off angles in-situ, which significantly improves the analysis of topographically challenging samples.

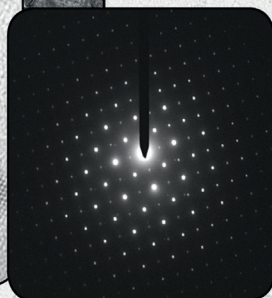
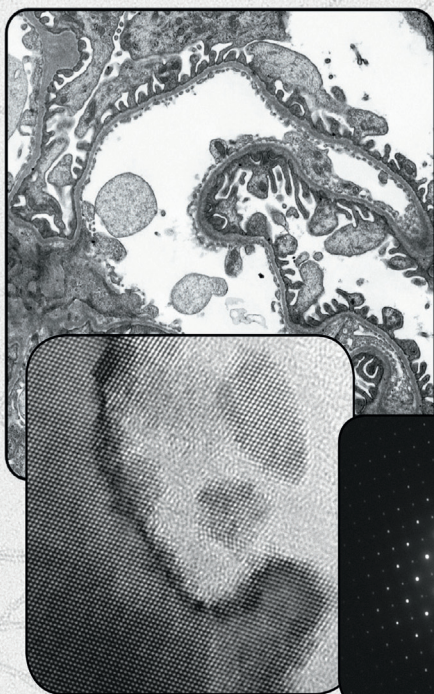
Someone has to be first.



www.bruker.com/quantax-flatquad

SIA

1 TO 50 MEGAPIXELS live and slow scan
MAGNIFICATION FACTOR OF 1 on bottom mounted cameras
DIFFRACTION BEAM STOP on side mounted cameras



Affordable TEM camera systems for research, education, healthcare, and industry since 2001

Scientific Instruments and Applications
2773 Heath Lane • Duluth, GA 30096
(770) 232 7785 • www.sia-cam.com

INDEX TO ADVERTISERS

Alluxa	A15a
Bruker Nano GmbH	A16
Denton Vacuum	A14a
Diatome	Cover 2, A14b
EDAX	A3
Electron Microscopy Sciences, EMS	A13, Cover 3
FEI Company	A6
Hitachi	A9
JEOL	A10, Cover 4
Pfeiffer Vacuum	A15b
Protochips	A11
Scientific Instruments & Applications (SIA)	A17a
Tescan	A5
ZEISS	A12

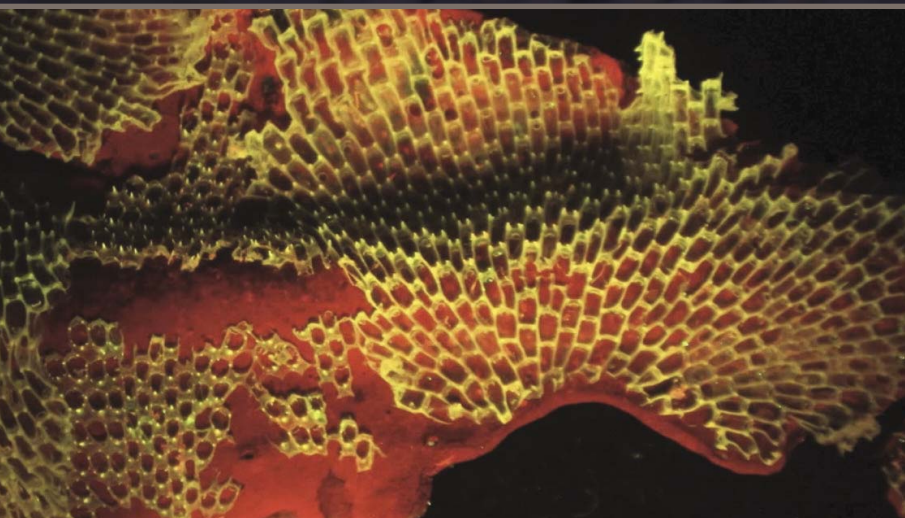
however you
look at it...



DIGITAL 3D...



DIGITAL WI-FI...



FLUORESCENCE-ADAPTED...

...EMS has it!

CONTACT US FOR MORE INFORMATION...

**Electron
Microscopy
Sciences**

P.O. Box 550 • 1560 Industry Rd.
Hatfield, Pa 19440
Tel: (215) 412-8400
Fax: (215) 412-8450
email: sgkcck@aol.com
or stacie@ems-secure.com

www.emsdiasum.com



MORE GLOW FOR THE DOUGH



NIGHTSEA™ Fluorescence Viewing Systems

- ▶ Quick screening and sorting of your fluorescent genotypes
- ▶ Fluorescence-aided dissection, injection, or micromanipulation
- ▶ Free up your research-grade fluorescence microscopes for more demanding work
- ▶ Installs in seconds - just clicks into place

Full brochure available, contact us for more information.

VERSATILE & PORTABLE

Mic-Fi Digital Wi-Fi Microscopes

Easily realize the following functions: measurement, conservation, copy and transfer of images and video, which are difficult for a traditional microscope. They are small, easy to operate, light, and portable. They can be used with all the most popular smartphones, tablets and even PCs. This is the new state-of-the-art way to observe the micro-world!

Full brochure available, contact us for more information.



COST-EFFECTIVE 3D IMAGING

Edge® Digital 3D Micro/Microscopes

- ▶ Fully automated 3D imaging
- ▶ Plug & play and user friendly
- ▶ Breakthrough value

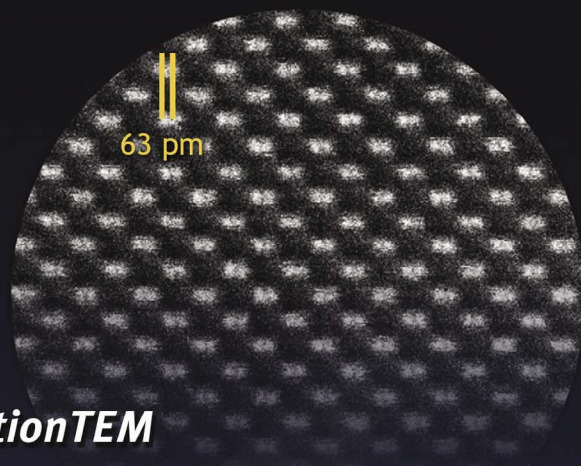
Full brochure available, contact us for more information.



STELLAR RESULTS AT THE ATOMIC SCALE

ARM-200F • ARM-300F Atomic Resolution TEM

- Highest resolution commercially-available S/TEM
- 200kV and 300kV models
- C_s correctors – innovative options
- Cold FEG
- Superior SDD technology
- Ultimate stability



Learn more at jeolusa.com/atomicresolutionTEM

A leader never stops innovating

www.jeolusa.com • salesinfo@jeol.com

Color image: Moon Kim, University of Texas at Dallas • 2014 Grand Prize Winner, JEOL Image Contest