American MasterTech
scientific laboratory supplies

Ion-Exchange Decal Unit

Ready to Use Decalcification Unit

(Rev. 3/8/18)

Ion-Exchange Decal Unit, The product and its purpose:
Ion-Exchange is a process by which one type of ion is absorbed into a solid material and replaced by an equivalent quantity of another ion of the same charge. Using this process, we developed an advanced decalcification system that removes calcium from bone, resulting in a specimen that has superior cellular detail. The **Ion-Exchange Decal Unit (I.E.D. Unit)** contains a strong cation Ion-Exchange resin in a weak acid solution that removes calcium ions from bone and replacing them with hydrogen ions. The Ion-Exchange process does not require the strong acid solutions used in other decalcification methods, so delicate cellular structures and detail are preserved, and a wide variety of stain procedures can be successfully performed. **The Ion-Exchange Decal Unit** is intended for In Vitro Diagnostic use only. Active ingredients: Hydrochloric Acid (<25%), Formic Acid (<25%).

Ion-Exchange Decal Unit, Instructions for use:

1. Completely fix specimen prior to decalcification.
2. Rinse fixed specimen in running tap water at least 10 minutes.
3. Place specimen in the **Ion-Exchange Decal Unit**. To ensure complete decalcification, trim specimen to less than 6mm thickness; periodically agitate the container to ensure complete exposure of the specimen.
4. Determine decalcification end point using standard procedures, such as flexibility, resistance to probing, X-ray, or chemical analysis, using the **MasterCal™ End Point Test Kit,** (sold separately, see below).
5. If decalcification is incomplete, return specimen to the **Ion-Exchange Decal Unit** and repeat Steps 3 and 4 until specimen is completely decalcified.
6. Wash specimen in running tap water at least 10 minutes.
7. Process, embed, and section specimen using standard procedures.

Ion-Exchange Decal Unit, End point determination:
Determine decalcification end point using standard procedures, such as flexibility, resistance to probing, X-ray, or chemical analysis, using the using the **MasterCal™ End Point Test Kit, Item Number DCM1626**.

Ion-Exchange Decal Unit, Storage and Stability:
Store at 15 - 30°C; it is stable under normal laboratory conditions. See product label for shelf life.

Ion-Exchange Decal Unit, Precautions:
See Safety Data Sheet (SDS) for warnings and precautions.

Ion-Exchange Decal Unit, Disposal:
Dispose the **Ion-Exchange Decal Unit** in accordance with all local, state, federal, environmental and/or EU regulations.

CE MARKINGS AND DESIGNATIONS:

REF	Catalogue Number		Temperature Limitation		Manufacturer	American MasterTech Scientific 1330 Thurman St. Lodi, CA 95240 USA Tel 800 860 4073 Fax 209 368 4136
LOT	Batch Code		Use By	EC REP	Representative	Emergo Europe Prinsessegracht 20 2514 AP The Hague The Netherlands
IVD	In Vitro Diagnostic Medical Device		Consult Instructions Prior to Use	CE		
 GHS05	Corrosive	 GHS07	Irritant			

1. Carson, Freida L. *Histotechnology: A Self-instructional Text*. Chicago: ASCP, 2009. 46-49. Print.
2. Modifications by AMTS Research & Development