

# T<sub>2</sub>

## PROCESSING CHEMICALS



THE  
HEALTHY  
CHOICE

## OVERVIEW

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Today, we are much more aware of the long term health effects of exposure to certain chemicals and are, therefore, more accountable for the products we manufacture and use.

When the first Concentrated 3-Part Liquid x-ray Developers were introduced 30 years ago, it was a major breakthrough. The all liquid format offered a much higher level of convenience and consistency than the powdered products that had proceeded them. By separating the active components of the developer into 3-parts, and by using solvents to dissolve some of the developing agents, the industry learned how to do the “impossible.” Clearly, this was a large step in producing more consistent radiographs, but it did not come without a price. The 3-Part Developers actually contained some very hazardous components which produced strong fumes and unpleasant odors in the darkroom. In the more innocent Sixties, this was looked upon only as an annoyance, the cost of technological advancement.

When White Mountain Imaging developed the T<sub>2</sub> product line in 1990, we had two goals. The first was to make the premiere product from the point of view of radiographic quality and consistency. The second, an equally important objective, was to produce a product that was much safer to manufacture, transport and use. In order to accomplish this, White Mountain Imaging enlisted two of the pioneers of liquid x-ray developers, E.R. Townley, formerly of Ilford and Picker, and Don Titus, formerly of Eastman Kodak. The resulting product, **T<sub>2</sub> Developer**, eliminates the major hazards associated with x-ray developer.

While good products form the backbone of a business, they alone are not enough to sustain it. Companies remain successful only if they balance the needs of their customers, employees and suppliers. White Mountain takes great pride in building and fostering long term relationships. The dedication of long time employees, with a real investment in the success of the company, taking the day to day initiative to give the quality of service that builds customer loyalty is a powerful force when it is properly directed. From the outset, it has been our goal to create an environment in which our employees have the incentive and the support to give their best. White Mountain Imaging employees understand that meeting our customer's needs is the number one objective. We understand that to truly satisfy our customer's needs, the help and cooperation of our suppliers is essential. White Mountain makes every effort to build long term relations with reputable suppliers who are as committed to performing their jobs as we are to ours.



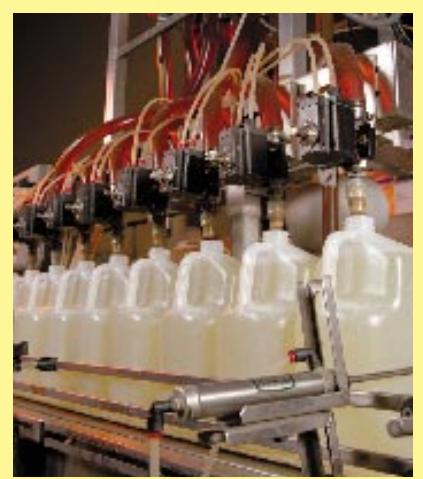
We believe that the final key element to success is consistency. This begins with product consistency. Day in and day out, White Mountain Imaging produces products whose quality and consistency is second to none. Consistency also extends to our philosophy of doing business and our company policies. Over the years, we have worked diligently to build a dealer network to sell and support our products. We support our dealers in a straightforward and consistent fashion that assists them in providing the finest products and service available.



Every company has a story to tell. If the story is well written, it will spell out a company's goals and values. Hopefully, it will go a step further and explain how the company goes about reaching these goals. At White Mountain Imaging, we believe that we write our story each day in everything we do in the course of normal business. It is a story of commitment, balance and consistency.

When White Mountain was started in 1981, its only product was the IS-199 Chemical Mixer, the first mixer to utilize Specific Gravity control and straight forward direct circuitry. At that time, chemical mixers did not enjoy the wide acceptance that they have today. Over the years, the accuracy and reliability of the IS-199, backed by the commitment of White Mountain Imaging, have made it the mixer of choice all across North America with over 15,000 satisfied users.

In 1990, when White Mountain Imaging introduced T<sub>2</sub> Developer and Fixer, very few people believed that a two-part developer was possible.

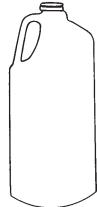


No one disputed the tremendous health benefits, but many openly questioned whether the product could prove itself over time. Again, White Mountain's commitment to this product was unwavering. In fact, our belief in T<sub>2</sub> was so strong that we discontinued production of traditional three-part developers early in 1991. Again the marketplace responded. Early users became steadfast supporters, new users

rapidly became believers. Several years of sustained growth of T<sub>2</sub> Chemicals has made White Mountain Imaging the largest independent supplier of x-ray chemicals.

# PRODUCT COMPARISON

- **T<sub>2</sub> Developer:** To appreciate the advantages of **T<sub>2</sub> Developer**, it is helpful to first look at the structure of a typical 3-Part Developer. As you can see from the schematic, parts “B & C” of a typical 3-Part Developer are corrosive and pose risks to skin, eyes and lungs, as evidenced by the OSHA PEL, the recommended maximum exposure level for a period of 10 minutes or less.



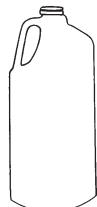
**Part “A” Developer**

**Part “B” Developer**

**Part “C” Developer**

<b>CONTAINS:</b>	Primary Developing Agents, Sulfites, Buffers	Secondary Developing Agents, Acetic acid 60-80%	Glutaraldehyde
<b>HAZARD CLASS:</b>	Non-Hazardous	Corrosive	Corrosive
<b>OSHA PEL:</b>	Non-Applicable	5 PPM	.02 PPM

- **2-Part Formulation:** In contrast, **T<sub>2</sub> Developer** does not use any acetic acid. In fact, its unique 2-Part formulation completely eliminates the traditional Part “B” by utilizing more advanced secondary developing agents, which due to their increased solubility and stability, can be combined with the primary developing agents. Also, we have replaced the traditional hardener, glutaraldehyde, with a chemical complex that is not a hazard to skin or lung tissue.



**T<sub>2</sub> Developer Part 1**

**T<sub>2</sub> Developer Part 2**

<b>CONTAINS:</b>	Primary & Secondary Developing Agents, Sulfites, Buffers	Glutaraldehyde-bis-potassium bisulfite
<b>HAZARD CLASS:</b>	Non-Hazardous	Non-Hazardous
<b>OSHA PEL:</b>	Non-Applicable	Non-Applicable

As you can see, both **T<sub>2</sub> Developer** Part 1 and Part 2 are non-corrosive and non-hazardous. The OSHA PEL Limits for these products are “non-applicable”, meaning that there is no known exposure risk.

- **T<sub>2</sub> Fixer:** The same forward thinking that produced **T<sub>2</sub> Developer** was also put into **T<sub>2</sub> Fixer**. It has been known for sometime that the sulfur dioxide given off by x-ray fixers are irritating to most and can cause severe reactions in “sensitized” individuals. In order to address this, some manufacturers have produced “low fume” fixers. Typically, these products are a compromise in design which result in less drying capacity and lower sulfite levels. By using a unique chemical surfactant, which acts like a chemical blanket to lower vapor pressure, **T<sub>2</sub> Fixer** greatly reduces fixer fumes with no compromise in hardening or sulfite levels. Thus, **T<sub>2</sub> Fixer** provides optimum compatibility with in-line silver recovery units.

# T<sub>2</sub> PROCESSING CHEMICALS



## T<sub>2</sub> DEVELOPER

**T<sub>2</sub> Developer** is a premium high activity developer formulated for all general and specialized radiographic films. Compatible with all brands of x-ray film, it meets or exceeds film manufacturers recommendations for Speed, Contrast and Base + Fog. **T<sub>2</sub> Developer** is a clean working developer with excellent resistance to aerial oxidation, and is unequalled for sensitometric stability.

- Works with all R & F Ultrasound, Angio & Laser films
- Compatible with Agfa, CEA, DuPont, Fuji, Kodak, Konica & 3M films

## T<sub>2</sub>-LA DEVELOPER

**T<sub>2</sub>-LA** is a high quality, medium activity developer. Like standard **T<sub>2</sub>**, it is a stable and clean working developer. It's primary use is in processing situations which require a bit less Speed and Contrast than standard **T<sub>2</sub>**, such as matching activity levels of other developers.

- Compatible with all brands of x-ray film
- Suitable for all studies & processing conditions



## T<sub>2</sub> FIXER

**T<sub>2</sub> Fixer** is a premium quality rapid fixer which provides superior clearing and drying with all x-ray films. It contains a proprietary surfactant which acts as a chemical blanket to greatly decrease fumes by reducing vapor pressure without compromising drying capacity or sulfite level. **T<sub>2</sub> Fixer** is a clean working formula compatible with in-line electrolytic silver recovery units.

- Reduces maintenance costs due to fixer "build-up"
- Compatible with all radiographic and cine films and all x-ray developers

## T<sub>2</sub> ESC DEVELOPER SYSTEM CLEANER

**T<sub>2</sub> ESC Developer Cleaner** is a fast acting liquid cleaner for racks, tanks and recirculation systems. **T<sub>2</sub> ESC Cleaner** is completely chromate free. Packaged with its own neutralizer, it ends the disposal and handling problems associated with traditional chromate cleaners.

- Works safely and quickly to clean developer systems
- Meets sewer code disposal guidelines



# T<sub>2</sub> FILM SPECIFIC MAMMOGRAPHY DEVELOPERS

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## T<sub>2</sub>-AG DEVELOPER

T<sub>2</sub>-AG is a film specific mammography developer. Formulated as a high activity developer, T<sub>2</sub>-AG is designed to minimize patient exposure without sacrificing detail.

- Optimum results with Agfa MR3 II, MR5 & MR6 films
- Can be used for standard and extended processing



## T<sub>2</sub>-MR DEVELOPER

T<sub>2</sub>-MR specially formulated for optimum results with Kodak mammography films. T<sub>2</sub>-MR provides optimum Contrast and Gradient at the lowest possible exposure.

- Optimum results with Kodak MR-M, MR-E & MR-H films
- Ideal for dedicated and non-dedicated applications intermixed with other Kodak films

## T<sub>2</sub>-MV DEVELOPER

T<sub>2</sub>-MV has been designed specifically to provide optimum results with DuPont mammography film. Like all T<sub>2</sub> developers, T<sub>2</sub>-MV is non-corrosive and non-hazardous. It is also clean working and very stable.

- Optimum results with DuPont Microvision-C film
- Can be used for both dedicated and non-dedicated processing with other DuPont films



## T<sub>2</sub>-UM DEVELOPER

T<sub>2</sub>-UM completes the family of film specific mammography developers. It has been designed for optimum results with Fuji mammography films. T<sub>2</sub>-UM is suitable for both extended and rapid processing.

- Optimum results with Fuji UM-MA and UM-MH films
- Provides optimum image contrast at the lowest exposure levels in both dedicated and non-dedicated environments

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