



MASTERTECH BULLETIN

(Revised 04/28/11)

TRANSFORM

BREAKDOWN 10% FORMALIN INTO CARBON DIOXIDE AND WATER IN MINUTES

TRANSFORM, THE PRODUCTS AND THEIR PURPOSE:

Three **TRANSFORM** products are available to assist you with your daily use of 10% Formalin. **First** is **TRANSFORM Spray**, developed for personal use in the grossing room, autopsy room, surgical suite or any other location where 10% Formalin is used. **TRANSFORM Spray** eliminates Formalin and its hazardous fumes associated with small spills, leaky specimen containers, grossing sinks, Pathology grossing board, etc. **Second** is **TRANSFORM FSA**, designed to absorb and control accidental Formalin spills. **TRANSFORM FSA** works in seconds to completely absorb and neutralize a 10% Formalin spill. In approximately one minute, it forms small, easy to clean-up clumps that can be collected and sent to your local refuse site. **Third** is **TRANSFORM Complete** Dry-Crystals packaged in easy-to-use packets for neutralizing 10% Formalin in just minutes to a neutral pH, clear liquid waste. Each packet of **TRANSFORM Complete** will neutralize one gallon of 10% Formalin. Just add the dry-crystals to 10% Formalin and mix thoroughly before discarding in local sewer system. **TRANSFORM** products eliminate the need for expensive and dangerous hazardous waste hauling to landfills. Every **TRANSFORM** product has a unique application to make handling and using 10% Formalin safer and easier.

TRANSFORM, HOW IT WORKS:

The active compound in **TRANSFORM** neutralizes Formalin through the ability of oxygen to accommodate a negative charge on the carbonyl group, which governs the chemistry of all aldehydes. This provides nucleophilic addition and increases the acidity of hydrogen atoms attached to alpha carbon. Since mobile electrons are pulled toward oxygen, Formalin is very susceptible to attack by electron negative-rich nucleophilic reagents. Therefore, the ammonium derivative component of **TRANSFORM**, through oximation, neutralizes the molecular chain of Formalin. The final by-product is a non-hazardous and bio-degradable aqueous waste. NOTE: Please see the **TRANSFORM** Analytical Report located on the opposite side of this bulletin.

TRANSFORM, STABILITY:

TRANSFORM Spray shelf life is 1 year.

TRANSFORM FSA and **TRANSFORM Complete** shelf life is 4 years.

TRANSFORM, PRECAUTIONS:

As with all laboratory reagents, proper safety procedures must be followed. It is recommended that proper eye protection, skin protection and ventilation be used when working with **TRANSFORM** products and 10% Formalin.

TRANSFORM, GOVERNMENT REGULATIONS:

There are no E.P.A., O.S.H.A., F.D.A., or D.O.T. restrictions on this product when used as directed. A hazardous waste permit or license is not required to use this product.

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TRANSFORM

ANALYTICAL REPORT

Testing performed by Severn Trent Laboratories, Inc. STL Tallahassee

8315A Carbonyl Compounds by HPLC

10% Formalin

Method:	8315A	Analysis Batch: 640-8616	Instrument ID: LCK Waters 486
Preparation:	8315_W_Prep	Prep Batch: 640-8139	Lab File ID 1H01K26.d
Dilution:	25		Initial Weight/Volume: 15 uL
Date Analyzed:	08/02/2005 0118		Final Weight/Volume: 4 mL
Date Prepared:	07/22/2005 1551		Injection Volume:

<u>Analyte</u>	<u>Result ug/L (%)</u>	<u>Detectable Limit</u>
Formaldehyde	33000000 (3.3%)	8300000

Transform Treated 10% Formalin

Method:	8315A	Analysis Batch: 640-8626	Instrument ID: LCK Waters 486
Preparation:	8315_W_Prep	Prep Batch: 640-8139	Lab File ID 2G26K14.d
Dilution:	1.0		Initial Weight/Volume: 250 uL
Date Analyzed:	07/26/2005 1806		Final Weight/Volume: 4 mL
Date Prepared:	07/22/2005 1551		Injection Volume:

<u>Analyte</u>	<u>Result ug/L (%)</u>	<u>Detectable Limit</u>
Formaldehyde	160000 (0.016%)	20000

8260B Volatile Organic Compounds by GC/MS

Using this method **TRANSFORM** Treated 10% Formalin was tested for 66 different Volatile Organic Compounds.

Results: All Volatile Organics tested were below federal wastewater guidelines.

Note: Test results are summarized due to the length of the report. The full 18 page report is available upon request from American MasterTech.

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