

MATERIAL SAFETY DATA SHEET

SECTION I: PRODUCT INFORMATION

Manufacturer: Transene Company, Inc.
Address: 10 Electronics Ave Danvers MA 01923
Product name: **Ti-Tungsten Etchant TiW-30**
Formula: H₂O₂ mixture
Common Synonyms: Hydrogen Peroxide Solution

Revision Date: July 23, 2002

SECTION II: PRECAUTIONARY LABELING

SAF -T-DATA™ SYSTEM

Health - 2 Flammability - 0 Reactivity - 3 Contact - 4

Laboratory protective equipment: Goggles and face shield, lab coat and apron, vent hood, proper gloves

Precautionary Labeling Statements: DANGER! STRONG OXIDIZER - CONTACT WITH OTHER MATERIALS MAY CAUSE FIRE AND BURNS. MAY CAUSE EYE INJURY. EFFECTS MAY BE DELAYED.

Keep away from contact with clothing and other combustible materials. Do not store near combustible materials. Do not get in eyes, on skin, on clothing. Avoid contamination with any source. Metals dust and organic materials that may cause rapid decomposition, generation of large quantities of oxygen gas and high pressure. In case of fire, use water only. In case of spill, flush spill area with water.

SECTION III: HAZARDOUS COMPONENTS

COMPONENT:	%	CAS #
Hydrogen Peroxide (30%)	approx. 100%	7722-84-1
Triphenyl-2H-tetrazolium Chloride	less than 0.1%	298-96-4
Surfactant	less than 0.1%	

SECTION IV: PHYSICAL DATA

Boiling Point: 106C
Melting Point: -25C
Specific Gravity: 1.11
Solubility: Complete (in all proportions)
Appearance and Odor: Clear, colorless liquid.
Vapor Pressure (mmHg): 24.8
Vapor Density: N/A
Evaporation Rate: N/A
% Volatiles by volume: 100

SECTION V: FIRE AND EXPLOSION DATA

Flash Point: N/A
Fire Extinguishing Media: Use water spray

Special Fire-Fighting Procedures: Fire-fighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece. Move exposure containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.

Usual Fire and Explosion Hazards: Strong oxidizer. Contact with other material may cause fire.

SECTION VI: HEALTH HAZARD DATA

Threshold Limit Value (TLV/TWA): 1.5 mg/m³ (1 ppm)

Acute Exposure Limit: 3 mg/m³ (2 ppm)

Effects of Overexposure: Contact with skin or eyes cause severe irritation or burns.

Emergency and First Aid Procedures: In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

SECTION VII: REACTIVITY DATA

Stability: Unstable

Hazardous polymerization : Will not occur

Conditions to Avoid: heat

Incompatibilities: Organic materials at elevated temperatures, combustible materials, strong reducing agents, most common metals, organic materials

SECTION VIII: SPILL AND DISPOSAL PROCEDURES

Steps to be taken in the event of a spill or discharge: Wear self-contained breathing apparatus and full protective clothing. Stop leak if you can do so without risk. Keep combustibles (wood, paper, oil etc..) away from spilled material. Flush area with flooding amounts of water (use caution).

Disposal Procedure: Dispose in accordance with all applicable federal, state, and local environmental regulations.

EPA hazardous waste number: D002, D003 (corrosive, reaction waste)

SECTION IX: INDUSTRIAL PROTECTIVE EQUIPMENT

Ventilation: Use general or local exhaust ventilation to meet TLV requirements.

Respiratory Protection: Respiratory protection required if airborne concentration exceeds TLV. At concentrations above 1 ppm, a self-contained breathing apparatus is advised

Eye/skin Protection: Safety goggles and face shield, uniform, protective suit, acid-resistant gloves are recommended

SECTION X: STORAGE AND HANDLING PRECAUTIONS

SAF-T-DATA TM Storage Color Code: Yellow

Special Precautions

Keep container tightly closed. Store separately and away from flammable and combustible materials.

Keep containers out of sun and away from heat.

Containers should be covered and vented.

SECTION XI: TRANSPORTATION DATA AND ADDITIONAL INFORMATION

Domestic (D.O.T)

Proper Shipping name: Hydrogen Peroxide Solution

Hazard Class: oxidizer

UN/NA: UN2014

Labels: Oxidizer

International (I.M.O)

Hazard class: 5.1

UN/NA: Un2014

Labels: Oxidizing agent, corrosive

N/A = Not applicable or not available

The information published in this Material Safety Data Sheet has been compiled from our experience and data presented in various technical publications. It is the user's responsibility to determine the suitability of this information for the adoption of necessary safety precautions. We reserve the right to revise Material Safety Data Sheets periodically as new information becomes available.