

I. PRODUCT IDENTIFICATION: TISAB II with CDTA

Orion 940909 & 940999

PRODUCT USE: Reagent

NFPA RATINGS: HEALTH: 1 FLAMMABILITY: 1 REACTIVITY: 0

II. COMPOSITION/INFORMATION ON INGREDIENTS

		%	LD ₅₀ mg/kg
COMPONENT	Acetic Acid (C ₂ H ₄ O ₂)		
CAS NO.	64-19-7	1	3,310 (ORL-RAT)
COMPONENT	Sodium Acetate (C ₂ H ₃ NaO ₂)		
CAS NO.	127-09-3	8	3,530 (ORL-RAT)
COMPONENT	Sodium Chloride (NaCl)		
CAS NO.	7647-14-5	6	3,000 (ORL-RAT)
COMPONENT	Trans-1,2-Diamino Cyclohexane Tetra Acetic Acid (CDTA)		
(Monohydrate)			
CAS NO.	13291-61-7	<1	150 (IPR-MUS)
COMPONENT	Deionized Water (H ₂ O)		
CAS NO.	7732-18-5	>84	190,000 (IPR-MUS)

III. HAZARDS IDENTIFICATION

TARGET ORGANS: Skin, eyes.

ACUTE TOXICITY: Ingestion may cause nausea, breathing difficulties, and damage to stomach and digestive tract. Low hazard for skin and inhalation.

CHRONIC TOXICITY: Irritation of eyes, skin, throat.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Respiratory ailments, person with sensitive skin may be affected.

IV. FIRST AID MEASURES

EYE AND SKIN CONTACT: Irrigate with plenty of water.

INHALATION: Fresh air. Consult physician.

INGESTION: Dilute with large amounts of water. Consult physician.

V. FIRE FIGHTING MEASURES

FLASH POINT: NA AUTOIGNITION POINT: NA

FLAMMABILITY LIMITS: UPPER: NA LOWER: NA

EXTINGUISHING MEDIA: Dry chemical, CO₂, alcohol foam or mist.

VII. ACCIDENTAL RELEASE MEASURES

Vacuum up and set aside for waste disposal.

VII. HANDLING AND STORAGE

Always wear eye protection and gloves when working with this product.

Keep away from oxidizers and caustics. Keep well sealed and store at room temperature.

VIII. EXPOSURE CONTROLS/ PERSONAL PROTECTION

OSHA & ACGIH THRESHOLD LIMIT: Acetic acid: 25 mg/m³.

PROTECTIVE EQUIPMENT: Safety glasses, lab coat and gloves.

IX. PHYSICAL AND CHEMICAL PROPERTIES

STATE: Clear liquid ODOR THRESHOLD: vinegar-like

SENSITIVITY TO MECHANICAL IMPACT: None

SENSITIVITY TO STATIC DISCHARGE: None

COEFFICIENT OF OIL/WATER DISTRIBUTION: None

SOLUBILITY IN WATER: Soluble pH: 5.0 – 5.5

SPECIFIC GRAVITY: 1.07

BOILING POINT: 100°C MELTING POINT: Not determined

VAPOR DENSITY: Not determined

X. STABILITY AND REACTIVITY

Product is stable. Hazardous polymerization will not occur.

Incompatibles: Strong oxidizers (HNO₃, Chromic acid, Sodium Peroxide), contact with strong caustics can cause spattering.

Hazardous decomposition product: Toxic gases, such as carbon monoxide, may be released during a fire.

XI. TOXICOLOGICAL INFORMATION

Route of Exposure: Irritation in respiratory tract, upset stomach, or nausea, irritation of eyes, nose, throat.

Teratogen Status: None

Mutagen Status: None

Reproductive Toxicity: None

Carcinogen Status: None

XII. ECOLOGICAL INFORMATION

None available.

XIII. DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with Federal, State and Local Regulations.

XIV. TRANSPORT INFORMATION

Product is not hazardous for transport.

XV. REGULATORY INFORMATION

EUROPEAN INFORMATION:

None.

US/ CANADA INFORMATION

SARA/Title III: Acetic acid is a CERCLA hazard and is subject to section 304 of SARA Title III.

Cal. Proposition 65: Ingredients not listed.

US TSCA Inventory: Ingredients are listed.

CPR Class: None.

TDG Class: None.

MSDS discloses elements required by the CPR.

XVI. OTHER INFORMATION

THE ABOVE INFORMATION IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. ALL PRODUCTS ARE OFFERED IN ACCORDANCE WITH THE MANUFACTURER'S CURRENT PRODUCTION SPECIFICATIONS AND ARE INTENDED SOLELY FOR USE IN ANALYTICAL TESTING. THE MANUFACTURER SHALL IN NO EVENT BE LIABLE FOR ANY INJURY, LOSS OR DAMAGE RESULTING FROM THE HANDLING, USE OR MISUSE OF THESE PRODUCTS.

MSDS prepared by Quality Assurance Group.