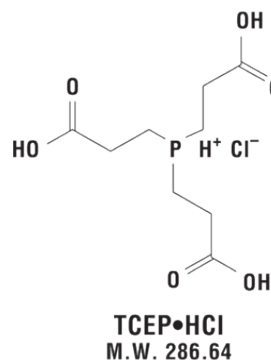


PRODUCT AND SAFETY DATA SHEET

PRODUCT NAME: TCEP hydrochloride (tris-(2-carboxyethyl)phosphine, hydrochloride)**CATALOG #:** 91049**MOLECULAR INFORMATION:** C₉H₁₅O₆P HCL
Mwt: 286.64
[51805-45-9]**PROPERTIES:**

Color & Form	White solid.
Purity	≥ 98% by TLC
Solubility	Soluble in water
$\lambda_{ex}/\lambda_{em}$	N/A
Extinction Coefficient	N/A

STORAGE AND HANDLING:

Store at 4°C or -20°C. Keep vial tightly sealed to prevent oxidation.

APPLICATION:

TCEP hydrochloride is an odorless reducing agent that is more stable and effective than dithiothreitol (DTT) or 2-Mercaptoethanol. TCEP hydrochloride is soluble in water to 310 grams per liter. Unlike DTT, TCEP hydrochloride retains its reducing power at acid pH (pH 5) and at pH above 7.5. TCEP hydrochloride is unreactive towards other functional groups found in proteins. For most applications, 5-50 mM TCEP can be used to reduce disulfide bonds within a few minutes at room temperature.

Ref: 1) *Anal. Biochem.* **180**, 231-236 (1989); 2) *Anal Biochem.* **220**, 5-10 (1994); 3) *Nature Biotech* **19**, 379-382 (2001)**TOXICITY:**

Unknown.

FIRST AID:

Potentially harmful. Avoid prolonged or repeated exposure. Avoid getting in eyes, on skin, or on clothing. Wash thoroughly after handling. If eye or skin contact occurs, wash affected areas with plenty of water for 15 minutes and seek medical advice. In case of inhaling or swallowing, move individual to fresh air and seek medical advice immediately.

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