

Common Name: **VINYL TOLUENE**

Synonyms: Methyl Styrene; Tolyethylene

CAS No: 25013-15-4

 Molecular Formula: C₉H₁₀

RTK Substance No: 2010

Description: Clear, colorless liquid with a strong, disagreeable odor

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
2 - Health 2 - Fire 2 - Reactivity DOT#: UN 2618 ERG Guide #: 3 Hazard Class: (Flammable)	Vinyl Toluene is a COMBUSTIBLE LIQUID. Use dry chemical, CO ₂ , water spray or foam as extinguishing agents. Vinyl Toluene polymerizes (self-reacts) at elevated temperatures when not stabilized. POISONOUS GASES ARE PRODUCED IN FIRE. CONTAINERS MAY EXPLODE IN FIRE. Use water spray to keep fire-exposed containers cool. Vinyl Toluene may form an ignitable vapor/air mixture in closed tanks or containers.	Vinyl Toluene reacts violently with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE) and ALUMINUM CHLORIDE. Vinyl Toluene is not compatible with STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC) and IRON SALTS.

SPILL/LEAKS

Isolation Distance:

Spill: 50 meters (150 feet)

Fire: 800 meters (1/2 mile)

Absorb liquids in vermiculite, dry sand, earth, or a similar material and place into sealed containers for disposal.

For liquid spills use oil-skimming equipment and sorbent foams.

 Keep **Vinyl Toluene** out of confined spaces, such as sewers, because of the possibility of an explosion. DO NOT wash into sewer.

PHYSICAL PROPERTIES

Odor Threshold:	50 ppm
Flash Point:	127°F (53°C)
LEL:	0.8%
UEL:	11%
Auto Ignition Temp:	1,000°F (538°C)
Vapor Density:	4.1 (air = 1)
Vapor Pressure:	1 mm Hg at 68°F (20°C)
Specific Gravity:	0.9 (water = 1)
Water Solubility:	Very slightly soluble
Boiling Point:	334°F (168°C)
Freezing Point:	-94° to -103°F (-70° to -75°C)
Ionization Potential:	8.2 eV
Molecular Weight:	118.18

EXPOSURE LIMITS

OSHA: 100 ppm, 8-hr TWA

NIOSH: 100 ppm, 10-hr TWA

ACGIH: 50 ppm, 8-hr TWA; 100 ppm STEL

IDLH: 400 ppm

PROTECTIVE EQUIPMENT

Gloves:	Silver Shield®/4H®, Viton and Barrier® (>8-hr breakthrough)
Coveralls:	Tychem® BR, Responder®, and TK; and Trelchem® HPS and VPS (>8-hr breakthrough for <i>Hydrocarbons, aromatic</i>)
Respirator:	>50 ppm - full facepiece APR with <i>Organic Vapor filters</i> >400 ppm - SCBA

HEALTH EFFECTS

Eyes:	Irritation
Skin:	Irritation
Inhalation:	Nose and throat irritation with coughing and wheezing

FIRST AID AND DECONTAMINATION

Remove the person from exposure.
Flush eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn.
Remove contaminated clothing and wash contaminated skin with soap and water.
Begin artificial respiration if breathing has stopped and CPR if necessary.
Transfer promptly to a medical facility.