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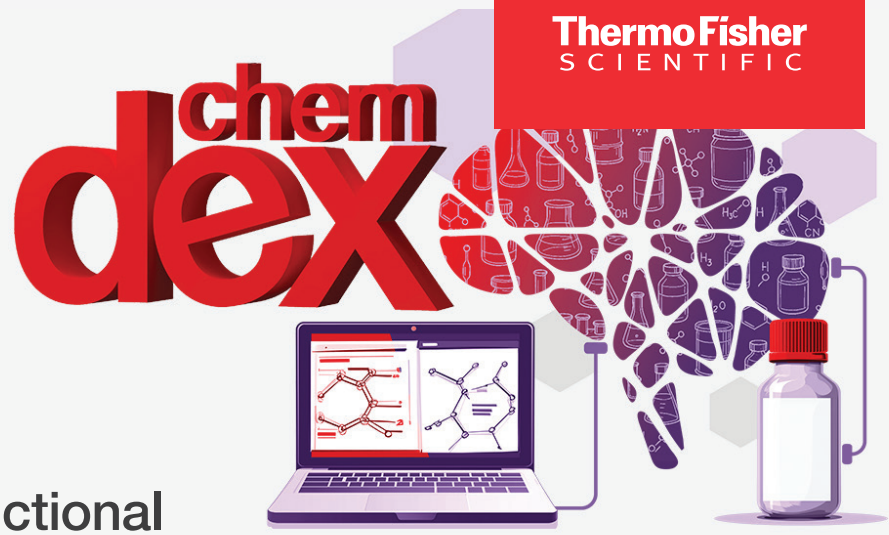

Organic synthesis

Chem dex app

The key to effortless functional group conversion in organic synthesis

From planning to product: Your alkene synthesis starts here

Discover the extensive range of high-quality chemicals from Thermo Scientific Chemicals using the chem dex web app, designed to streamline your organic synthesis projects. Whether you are focusing on direct synthesis or retrosynthesis strategies, our comprehensive product catalog is equipped to meet your needs.

Transform alkenes into valuable intermediates

Key reactions	Description
Lemieux-Johnson Oxidation	Converts alkene to aldehydes or ketones using osmium tetroxide and sodium periodate
Wacker Oxidation	Forms aldehydes or ketones using palladium (II) chloride or copper (I) chloride as catalysts
Hydroboration-Oxidation	Yields alcohols using a borane complex, followed by oxidation with hydrogen peroxide

Need to synthesize alkenes?

Key reactions	Description
Wittig reaction	Forms alkenes from aldehydes or ketones using triphenylphosphonium derivatives
Horner-Wadsworth-Emmons reaction	Converts aldehydes or ketones to alkenes using sodium hydride as base
Burgess Dehydration	Dehydrates alcohol to alkene using Burgess reagent
Elimination Reactions	From alcohols using sulfonate sulfonyl derivatives

Explore the additional resources

- **Not sure where to start?** Explore pathways, search reagents, and plan syntheses in chem dex, your interactive web app for organic synthesis here
- Access history, reaction mechanisms, applications of the reactions, relevant product links, and quiz questions in the eBook here
- Watch the chem dex video to learn more here

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