



DI- *t*-BUTYLNEOPENTYLPHOSPHINE

CAS No. not available

QS-PDS-048 Revision: 00

Product Name	Di- <i>tert</i> -butylneopentylphosphine, DTBNpP	
Formula	C ₁₃ H ₂₉ P	
Appearance	Colorless to yellow liquid.	
Application	DTBNpP is a DEVELOPMENTAL product which is used as a ligand in metal catalyzed coupling reactions (Suzuki, Heck, Sonagashira, formylations, aminations, and hydrogenations). This reagent is also used in catalytic polymerization reactions. For general reviews of phosphine applications see: 1) <i>Palladium Reagents and Catalysts</i> , John Wiley & Sons: Chichester, 1995 p.345-356. 2) <i>Advanced Synthesis & Catalysis</i> , Wiley-VCH Verlag GmbH 2001 p.118-136.	

Product Specification

% Purity by ³¹ P NMR	<u>Guaranteed*</u> 95 min
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**This product can be made to agreed upon customer specifications*

Solvent None

Physical Properties	Molecular weight	216.40
	Density @20°C	>1.0 estimated
	Melting point	Not determined to date
	Percent volatile	0%
	Pyrophoricity	Pyrophoric

Solubility Insoluble in water. Soluble in most organic solvents.

Thermal Stability This material is thermally stable up to at least 180°C and can be stored at ambient temperature indefinitely, if stored properly.



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Toxicity/Safety Data Corrosive to eyes (may cause blindness), skin, nose, throat and stomach. May be harmful if swallowed, inhaled, or absorbed through skin.

ADDITIONAL INFORMATION ON SAFETY IS CONTAINED IN THE OPTIMA NEW PRODUCT DATA SHEET (NPDS) AVAILABLE FOR THIS PRODUCT.

Handling/Storage/Disposal Corrosive liquid. Do not get in eyes, on skin or clothing. Wash thoroughly after handling. Keep away from heat, sparks and flame. Keep container tightly closed.

Shipping Containers Glass bottle 125 mL, 500 mL

Shipping Limitations Shipments of Di-*tert*-butylneopentylphosphine are described as "Pyrophoric liquid, organic, N. O. S. (*DI-T-BUTYL NEOPENTYL PHOSPHINE*) 4.2, UN2845, PGI." Shipments require a "Spontaneously Combustible" label.

Post, Parcel, Air	Forbidden	
Sea	Class 4.2	(IMODG)
Road, Rail	Class 4.2	(DOT, RID/ADR)

For shipments within Europe, labeling for supply requirements are:

F	Flammable
C	Corrosive
R&S Phrase	See Material Safety Data Sheet

Responsible Care® initiative dictates that all shipments must be transported in a DOT-approved vehicle in a responsible manner (i.e., no flat bed trucks).

Additional Resources Refer to the Organometallics and Reactive Specialty Organics Safe Handling Guide available on-line at www.optimachem.com.