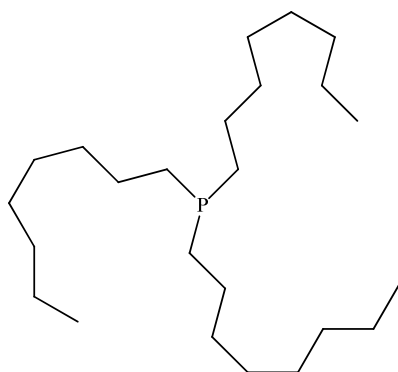


## CYTOP<sup>®</sup> 380

### Trioctylphosphine [ CAS: 4731-53-7 ]



#### Description

CYTOP 380 is a clear, colorless, non-pyrophoric liquid with a boiling point of 220 °C @10 mmHg. Additionally, CYTOP 380 is strongly reducing agent and must be handled under an inert atmosphere.

Trioctylphosphine is a useful intermediate for the synthesis of alkylphosphineoxide /sulfide solvent extractant reagents and phosphonium salts (ionic liquids). Trioctylphosphine also finds utility in polyisocyanate monomer synthesis, in Mitsunobu reactions with high stereoselectivity and as a catalyst ligand. Lately, it is the solvent of choice for the synthesis of metallic nano-particles and “quantum dots”.

#### Typical Properties<sup>1</sup>:

	Unit	Value
Purity	Wt.%	>96
Formula Weight	g/mole	370.64
Molecular formula		C <sub>24</sub> H <sub>51</sub> P
Appearance		Clear, liquid
Boiling point (@ 10 mmHg)	°C	220
Specific Gravity (@ 25 °C)	g/cc	0.825
Flash point	°C	>93

<sup>1</sup>Typical values based on samples tested. Not specifications

#### Features:

- Very low vapour pressure
- Strong reducing agent
- Non-pyrophoric
- Readily dispensed mobile liquid

#### Packaging

The standard CYTOP 380 package sizes are 40 and 450 liter returnable cylinders with lesser quantities for pilot studies available on request.

#### Storage and Handling

Keep away from heat, sparks, and flames. Keep from contact with clothing and other combustible materials. Avoid contact with air or other oxidizing agents. Handle in an atmosphere of inert gas such as nitrogen. Do not get in eyes, on skin, on clothing. Avoid breathing vapor. Store in a tightly closed container. Use with adequate ventilation. Wash thoroughly after handling. Remove and wash contaminated clothing promptly.

Exposure to air and other oxidizing material must be avoided. This material is a strong reducing agent. Store and handle under an atmosphere of inert gas such as nitrogen to avoid oxidation.

#### References

Selected references to various applications can be found on the reverse side.

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