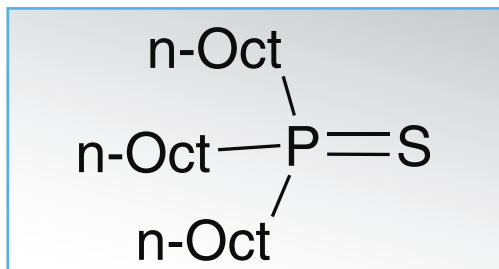


Sold in collaboration with Solvay.

Trioctylphosphine sulfide, CYTOP® 505



Product Details	
Color and Form	colorless to pale yellow liquid
Density	0.89
Flash Point	230°F
CAS No.	2551-53-3
Molecular Formula	C ₂₄ H ₅₁ PS
Molecular Weight	402.71 g/mol

Trioctylphosphine sulfide (**TOPS**) is a clear, colorless to light yellow corrosive liquid. Its' primary application is as a reagent for the manufacture of quantum dots. The product can also be supplied as a blend with trioctylphosphine.

Technical Notes:

- TOPS** is used to synthesize the ZnS shell layers for cadmium-free quantum dots: these layers passivate the surface of the nanoparticles increasing their performance efficiency. ^{1,2}
- TOPS** has also been used to deliver the sulfide to the core of CdS quantum dots. ³
- The material has also been used to prepare two-dimensional nanosheets, such as SnS. ⁴
- TOPS** has also been used to synthesize Pt@CdS photocatalysts for use in the conversion of ethanol to 2-ethylhexenal. ⁵
- In addition, CdS nanorods prepared with **TOPS** have been utilized in photochemical process for the production of hydrogen. ⁶

References:

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- Chem. Mater.*, **2020**, *32*, 3537-3544.
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Storage and Handling:

The product is currently available in developmental quantities and can be packaged in either bottles or drums as appropriate. The product has been registered with the regulatory authorities in a number of countries (see SDS for details).

Visit www.strem.com for new product information and a searchable catalog.

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