

# PHOSPHORUS PENTASULPHIDE



**PHOSPHORUS PENTASULPHIDE** is one of the vital chemicals used as an intermediate in the manufacture of Organophosphorus pesticides, Lube additives and Pharmaceuticals.

## PHYSICAL PROPERTIES

Chemical name	:	Phosphorus Pentasulphide
CAS No.	:	1314-80-3
Molecular formula	:	P <sub>4</sub> S <sub>10</sub>
Molecular weight	:	444.52
Physical state	:	Yellowish green powder or Granules or Flakes
Odour	:	Odour of Hydrogen sulphide
Boiling point, °C	:	513
Bulk Density	:	2.03 ± 0.01
Sulphur content, %	:	Normal grade - 72 ± 0.2 Special grade - 72.5 ± 0.2

## TYPICAL ANALYSIS

QUALITY	NORMAL					SPECIAL				
	FLAKES	GRANULES	POWDER	POWDER	FINE	FLAKES	GRANULES	POWDER	POWDER	FINE
FORM	FD, FB, FT	GD, GT	HD, HB, HT	HD, HB, HT	HD, HB, HT	FD,FB, FT	GD, GT	HD, HB, HT	HD, HB, HT	HD, HB, HT
Type	FD, FB, FT	GD, GT	HD, HB, HT	HD, HB, HT	HD, HB, HT	FD,FB, FT	GD, GT	HD, HB, HT	HD, HB, HT	HD, HB, HT
% P content	28.0+/-0.2	28.0+/-0.2	28.0+/-0.2	28.0+/-0.2	28.0+/-0.2	27.5+/-0.2	27.5+/-0.2	27.5+/-0.2	27.5+/-0.2	27.5+/-0.2
M.P. °C	273-285	273-285	273-285	273-285	273-285	273-285	273-285	273-285	273-285	273-285
IPA Reactivity °C/Min.	4	5	5	5	5	4	5	5	5	5
Fe ppm Max.	50	50	50	50	50	50	50	50	50	50
Sieve analysis										
> 5.00 mm	5	-	-	-	-	5	-	-	-	-
> 2.00 mm	-	5	-	-	-	-	5	-	-	-
> 1.00 mm	95	-	2.5	1.0	0.5	95	-	2.5	1.0	0.5
> 0.25 mm	-	90	55	35	25	-	90	55	35	25
> 0.10 mm	-	-	85	55	40	-	-	85	55	40

Note: IPA REACTIVITY FOR THE POWDER CAN BE VARIED UP TO 10 AS PER CUSTOMER'S REQUIREMENT IN CASE OF NORMAL GRADE.

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## PACKAGING

Unit pack	:	220kg Mild steel drum, 20 x 11 nos bags or 220kg bulk 200kg Mild Steel drum with or without liners UN approved packs available for ocean carriage
UN No.	:	1340
IMCO class	:	Primary class 4.3 Subsidiary 4.1
Packing Group	:	II

## APPLICATIONS

In the manufacture of:

- Organophosphorous compounds
- Pesticides like Malathion, Dimethoate, Phorate, Anilophos, Fenitrothion, Ethion, Terbufos, Disulfoton, Phenthoate and Phosalone
- Pharmaceuticals
- Lubricant oil additives

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*For any further information refer our Material Safety Data Sheet.*

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