

# TRANSPHOS (ECONOMICAL ZINC PHOSPHATE)

## For Low Cost Long-Oil Alkyd Red Iron Oxide Primer

### Production Process Features:

Starting raw material plays a vital role in the final properties of TRANSPHOS. TSIL is one of the largest manufacturers of Zinc salts from virgin Zinc Metal. This gives consistency in the finished product. TSIL's TRANSPHOS is an eco-friendly paint pigment because of its virgin zinc metal source contains low level of hazardous metallic impurity contents.

### Technical Features:

TRANSPHOS is a white, nonreactive, corrosion inhibiting pigment used in protective coating systems. TRANSPHOS is highly versatile and more economical to use than commercial zinc phosphate. Our work has shown that TRANSPHOS can exhibit a higher level of corrosion protection than commercial zinc phosphate at an equal weight replacement and its Uniform particle size and shape enables our TRANSPHOS to provide better dispersion and product with smooth surface finish.

### Advantages:

TRANSPHOS has white colour and non-toxic nature over other Corrosion Resistant Pigments much as Zinc Chromate, Zinc Tetroxy Chromate and Barium Chromate.

The use of TRANSPHOS in Primers promotes excellent inter-coat adhesion, particularly under conditions of high humidity.

### Cost Benefit:

The lower price of TRANSPHOS relative to that of red lead on a volume basis, could contribute significantly to savings in manufacturing costs.

Paint systems incorporating TRANSPHOS Primers are generally comparable in cost to those utilizing other types of primer.

NOTE : The tests and results shown were conducted in our laboratories. They do not constitute a guarantee and it is suggested that you carry out your own evaluations prior to the adoption of these products.

## Guideline formulation using TRANSPHOS in long-Oil Alkyd Red Iron Oxide Primer

*Red oxide Zinc Rich Paint formulation as per IS 2074*

Process	Ingredients	Grams
1 <sup>st</sup> Stage	Zinc Phosphate (TRANSPHOS)	8
Grinding	Iron oxide red	27
	Talc	4
	China clay	9
	Barytes/silica	2
	Zn Naphthanate 6%	0.3
	Long Linseed alkyd 60%	13
	MTO	5
	2 <sup>nd</sup> Stage(stabilization)	Long Linseed alkyd 60%
3 <sup>rd</sup> Stage(cleaning)	MTO	8
	Long Linseed alkyd 60%	15
	Lead Drier 18%	0.5
	Cobalt Drier 6%	0.2
	Manganese Drier 6%	0.1
	Copper Drier 6%	0.5
	Anti-skinning agent 10% solution	0.4
	MTO/L.LO	2
	Total	100
	To adjust Viscosity	100±5
Wt./Ltr.	1.35	

## Technical specification TRANSPHOS

### Specific Data:

Sr. No	Description	Min Value	Max Value
1)	pH (10% solution by wt.)	6.5	9.5
2)	Oil Absorption (cm <sup>3</sup> /100 gm)	z15	30
3)	Color	White Powder	

Application: Zinc rich primers / Anti-corrosive Paint