



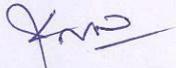
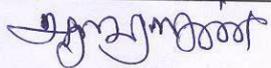
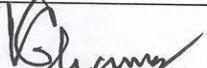
BHARAT HEAVY ELECTRICALS LTD.
SEAMLESS STEEL TUBE PLANT
TIRUCHIRAPPALLI -14

Doc. No: SSTP: CHEM: PASS:01
Rev: 00
Date: 18.01.2014

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**REQUIREMENTS FOR PASSIVATING CHEMICAL USED FOR STEEL TUBES
AFTER PHOSPHATING AND BEFORE SOAPING**

1	Appearance	White Powder
2	pH of 1% solution	8.5 – 9
3	Total alkalinity of 10 ML of 1.0% solution (10 GMS per Litre)	4 – 6 points
4	Operating Temperature of chemical bath in °C	50 - 60
5	Concentration of bath solution	0.2% (Weight/Volume)
6	Soaking time	1 to 2 Minutes (Just a dip)
7	Solubility in water	Shall be dissolved completely.
8	Application Method	Dipping
9	Passivation Test	Tube surface treated with passivation solution shall not get rusted for 3 days in normal atmospheric in-door condition (at ambient temperature)
10	Shelf Life - Months (Min)	12
11	Packing standard/marking	The passivating chemical shall be Supplied in Water proof HDPE bags with inner lining of 25 Kg. as per PO indicating the following. Degreasing chemical for SSTP /BHEL use only. Supplier's Name: Batch No: Date Quantity: Shelf Life: BHEL Specn. SSTP: CHEM:PASS: 01
12	Material Safety Data Sheet (MSDS)	Relevant MSDS shall be furnished
13	Test certificate	The supplier shall furnish test certificate for the above requirements Sl.No.1 to 9 in duplicate.

Prepared by	Reviewed by	Approved by	
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