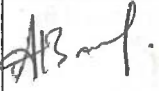
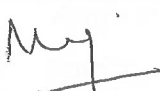
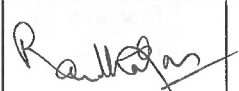
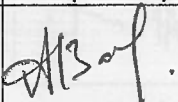
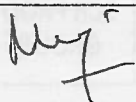
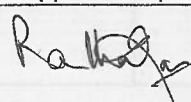


MATERIAL CODE : EL5421800083		PURCHASE SPECIFICATION FOR MONOETHANOLAMINE (MEA)				ISSUE NO : 06												
						DOC.NO: SCR-D-RM-010												
						REV : 00	JULY 2019											
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1.0 GENERAL This specification governs the requirements of MONOETHANOLAMINE liquid for application in manufacturing catalyst for selective catalytic reduction of NO_x (Oxides of Nitrogen) 2.0 APPEARANCE A clear, hygroscopic liquid with a mild ammonia like odor and substantially free of suspended matter 3.0 CHEMICAL PROPERTIES: <table border="1"> <thead> <tr> <th>Constituents/Components</th> <th>Acceptable Limit</th> </tr> </thead> <tbody> <tr> <td>Monoethanolamine, wt. %</td> <td>>99</td> </tr> <tr> <td>Dietanolamine, wt. %</td> <td><1.0</td> </tr> <tr> <td>Water content, wt. %</td> <td><1.0</td> </tr> <tr> <td>Iron, ppm</td> <td><1.0</td> </tr> <tr> <td>Chlorine, ppm</td> <td><1.0</td> </tr> </tbody> </table> 4.0 CONDITION OF DELIVERY Material shall be supplied in tamper proof drums as per Purchase order. 5.0 TEST SAMPLES Test samples will be drawn as per IS 7910.	Constituents/Components	Acceptable Limit	Monoethanolamine, wt. %	>99	Dietanolamine, wt. %	<1.0	Water content, wt. %	<1.0	Iron, ppm	<1.0	Chlorine, ppm	<1.0	Revision (00): 1st Issue					
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						REV : 00	JULY 2019	
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COPY RIGHT AND CONFIDENTIAL The information on this document is the property of Bharat Heavy Electricals Limited. It must not be used directly or indirectly in anyway detrimental to the interest of the company.	6.0 TEST CERTIFICATE Copies of test certificates shall be supplied along with each consignment, giving the following information: In addition, the supplier shall ensure to enclose one copy of the test certificate along with the despatch documents to facilitate quick clearance of the material. The supplier shall submit test certificates giving the following information							
	a) Purchase Order no. b) Purchasing specification no. c) Suppliers reference and name d) Batch no. e) Consignment identification f) Results of various tests as called for in this specification g) Details of packing and the standards being followed h) Batch no. details with traceability							
	7.0 PACKING & MARKING Manufacturer can follow any national or international standard to ensure moisture proof packing. Each pack shall be legibly identified with the following information							
	a) Supplier's/Manufacturer's Name and Trade mark, if any b) BHEL Purchase Order no. c) Quantity in the package d) Consignment identification e) Lot (or batch) identification f) Packing date							
	8.0 ENVIRONMENTAL REQUIREMENT The supplier shall furnish Material Safety Data Sheet (MSDS) covering all information relating to human safety and environmental impacts of the hazardous materials particularly during their transportation, storage, handling and disposal along with each supply. Each container shall be marked with corresponding symbol and minimum worded cautionary notice for flammable / corrosive / toxic / harmful / irritant and oxidizing etc., as applicable.							
	9.0 INSPECTION AT VENDOR'S PREMISES BHEL's representative shall have free access to all parts of Vendors' premises at all times when work on the contract is being executed. The vendor shall offer BHEL's representative all reasonable facilities to convince the latter that the material is being manufactured in accordance with this specification.							
	10.0 REJECTION Materials not conforming to the above stipulations shall be rejected. Also in the event of proving defective in the course of any further processing the same shall be rejected notwithstanding any previous certification of satisfactory testing and/or inspection							
	Revision (00): 1 st Issue							
	Issued By		Prepared By		Checked By		Approved By	
	SCR PROD GROUP							
						Date		