



RFQ Master Enquiry

Ref No PACL/ENQ/1/hcb/PL-REQ-01075

Date 23/03/2018
Unit SITE OFFICE

Dear Sir,

Kindly Send us your most competitive offers so as to reach us on or before 06-APR-18 for the supply of the under mentioned items :

S. Item Code / No Description Of Material	Quantity	Unit	
1 PL-011-10094 BARIUM CARBONATE	500.000	MT	AS PER ANNEXURE ENCLOSED (6 month requirement)

Terms & Conditions : EMD OF RS 50000/- AS DD IN FAVOUR OF PUNJAB ALKALIES & CHEMICALS LTD TO BE SENT ALONGWITH THE OFFER.

Please send your quotation in a sealed envelop mentioning our enquiry Ref.No. strictly on the top of the envelope.

For PUNJAB ALKALIES & CHEMICAL LIMITED

Assistant Manager (Purchase)

1. Quotation received after the due date may not be considered.
2. Exact rates of Sales Tax, Central Sales Tax, Excise duty, Octroi etc. whenever leviable should be clearly specified by you in your quotation, as no subsequent claims will be entertained by us in respect of these, it will not be sufficient to applicable.
3. Any alteration or erasure in the quotation should be absolutely legible & duly attested. Over-writing or over-typing of any information may disqualify your quotation.
4. Our enquiry reference must be indicated clearly on top of the envelope.
5. Your quotation must be for units specified in this enquiry and should be valid for 90 days from date of opening of offer.
6. At our option we may change the quantity of our requirment, or delete items.
7. Please give detailed specification and indicate the name of manufacturer of each item and enclose literature.
8. Your offer should be duly supported by all relevent technical literature/catalogue/brochure etc.
9. Please quote clearly whether your warehouse is covered under excise preview or not. We shall like you to supply material through cenvetable invoice. Next of modvat notes will be compared for commercial evaluation.

IMP: PLEASE INDICATE TARRIF/SUB HEAD UNDER WHICH EXCISE DUTY IS TO BE CHARGED.

0201

ANNEXURE-1
SPECIFICATIONS FOR RAW MATERIAL

BARIUM CARBONATE

Supplier should ensure that the supplied Barium Carbonate conform to BIS specification for precipitated Barium Carbonate, Technical, as per IS : 3205 – 1984.

**SPECIFICATIONS FOR PRECIPITATED BARIUM CARBONATE,
TECHNICAL AS PER IS:3205 GRADE-2**

S.NO	CHARACTERISTIC	REQUIREMENT
1	Barium (as Ba), percent by mass, min.	68.20
2	Carbonate (as CO ₃) percent by mass, min	29.80
3	Moisture, percent by mass, max.	0.25
4	Matter insoluble in Hydrochloric acid, percent by mass, max.	1.6
5	Free Alkali	To pass test
6	Water soluble sulphide (as BaS), percent by mass, max.	0.4
7	Total Sulphur (as SO ₂), percent by mass, max.	----
8	Alkali and other metal sulphates (as BaSO ₄) percent by mass max.	2.0
9	Sodium oxides (as Na ₂ O), percent by mass max.	----
10	Iron (as Fe ₂ O ₃), percent by mass, max.	0.04
11	Tap density, gms/cc	---
12	Residue retained on 63 micron IS sieve percent by mass, max.	---
13	Reaction Efficiency (after 45 min.) percent by mass, Min.	85

For acceptance of the material the following parameters will be tested for confirmation. Other parameters as specified in the IS specification may be tested at random or during inspection at supplier's end.

S.NO	CHARACTERISTICS	REQUIREMENT	MINIMUM ACCEPTANCE LEVEL
1	Purity (as Barium carbonate) % w/w, min.	98.0	96.00 (Min.)
2	Bulk density. Gms/cc	1.0	0.7-1.2 (Max)
3	Physical appearance	White powder	-----

Material below 98% purity shall be accepted with single pro-rata deduction upto 97% purity and 5 times pro-rata deduction upto 96% purity material below 96% purity shall be rejected.



In case of moisture receive more than 0.25% in any consignment, material shall be accepted after deducting weight loss on pro-rata basis upto 0.5% & 1.5 times above 0.5% shall be applicable.

Reaction efficiency :

Reaction efficiency should be 85% Material from 85% and upto 83% reaction efficiency shall be accepted with penalty as under and material below 83% reaction efficiency shall be rejected and shall have to replace free of cost.

$$\text{Total Quantity Supplied} \times \frac{85 - \text{actual reaction efficiency}}{85} = \text{Excess consumption}$$

$$= \text{Landed cost} \times \text{Excess consumption} \times 1.5 = \text{Total penalty}$$

For determination of reaction efficiency, standard method adopted by PACL as per detail given below. Test method for determination of reaction efficiency given in the BIS specification No:IS-3205-1984 precipitated Barium Carbonate will be alternate method for reference.

DETERMINATION OF REACTION EFFICIENCY

A) METHOD

1. Weight accurately 1.00 gram of sample into 500 ml breaker.
2. Weigh 4 gms of sodium sulphate and add into the sample.
3. Add 200 ml. Of hot distilled water and keep under boiling with occasional stirring for exactly 45 minutes.
4. Allow the precipitate to settle, filter through whatman no.1 filter paper. Wash the precipitate with hot distilled water. Collect the filtrate and washings into a clean titration flask.
5. Titrate the combined filtrate and washings against 1.0 N hydrochloric acid using methyl orange indicator. End point is colour change from yellow to red. Note the volume of HCL consumed (TV).

B) CALCULATION

$$\text{Reaction Efficiency} = \text{TV} * \text{N} * 0.986$$

Where

$$\begin{aligned} \text{TV} &= \text{Volume of HCL consumed} \\ \text{N} &= \text{Normality of HCL} \end{aligned}$$

REFERENCES :

- i. IS 3205-1984
- ii. Vogel's Inorganic Quantitative Analysis
- iii. Work Instruction for preparation of standard solutions reagents and indicators.