



PROFICIENCY TESTING, CONTROL SAMPLES AND CONSULTING SERVICES

CERTIFIED REFERENCE MATERIAL – CRM : BA001

BATCH REFERENCE : 05201701

PRODUCT: BENZOIC ACID PELLETS

Certificate of Analysis

1. APPLIED USAGE

This product is to be used for the calibration of calorimeters, typically utilized in the coal industry for the determination of the calorific value of coal.

2. TRACEABILITY

Certification of the Coal Concepts benzoic acid pellets are traceable to NIST SRM number 39j.

ISO Guide 35 : Reference Materials – General and statistical principles for certification, was used as the guideline for the certification process.

3. MATERIAL SAFETY DATA SHEET

Contact with skin may result in mild irritation. Wash with water for about 10 minutes. If powder comes into contact with the eye, use an eye wash bottle to flush any material and seek medical attention. If large amounts are swallowed, seek immediate medical attention. Contact Coal Concepts if more information is required.

4. INSTRUCTIONS FOR USAGE

Ensure the product is received in a sealed container. The tab should not be broken or damaged upon receipt. If not in use, store in a clean, dry environment where the relative humidity does not exceed 90%. Use a pair of clean surgical gloves or clean tweezers when handling the pellets. If direct contact is made by hand, ensure adequate cleanliness to prevent contamination.

5. ASSIGNED VALUE

26.450 MJ/Kg ± 0.002 MJ/Kg

6316.3kcal/Kg ± 0.5kcal/Kg

26 450 J/g ± 2 J/g

11 371 Btu/lb ± 1 Btu/lb

6. EXPIRY DATE

Benzoic acid has no known expiry, however discard 2 years after opening, as a precautionary measure

7. MEASUREMENT UNCERTAINTY

Measurement uncertainty was calculated taking the repeatability, reproducibility, uncertainty of NIST certified value, weighing uncertainty and purity of the benzoic acid. Eurachem/Citac Guide CG 4, third edition was used as a guideline

8. LIMIT OF LIABILITY

The limit of liability is restricted to the value of 1 bottle of pelletized benzoic acid

REFERENCE MATERIAL CO-ORDINATOR

R Baboolal

THINKING QUALITY, QUALITY THINKING

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