



**National Centre for Compositional Characterisation
of Materials (NCCCM),
Bhabha Atomic Research Centre, Hyderabad, India
and
Atomic Minerals Directorate for Exploration and
Research (AMDER), Hyderabad, India**

**Certified Reference Material (CRM)
Major and Minor Constituents in Dolomite
Certificate of Analysis**

CRM BARC B1101

सीआरएम बीएआरसी बी ११०१

Certified Reference Material (CRM) of dolomite for major and minor constituents (Al_2O_3 , BaO , CaO , Fe_2O_3 , MgO and SrO) is intended for use as a calibration standard in evaluating analytical methods and the performance of instruments for the determination of elements. This CRM can also be used for data quality control (DQC) in the routine analysis of dolomite. One bottle of BARC B1101 contains 50g of the powdered dolomite material packaged in a sealed HDPE bottle.

The dolomite powder material has been certified for major and minor constituents by NCCCM-BARC and AMDER by means of an inter laboratory comparison exercise (ILCE) as given in table below. The results are certified on the material dried at 105°C . Analytical technique used for the determination of major and minor constituents by the participant laboratories is ICP-OES. The certified reference material of dolomite was prepared in accordance with the ISO Guide 17034:2016 and ISO IEC 17025:2017. The assigned property values were established according to ISO Guide 35:2017/ ISO 13528:2015 guidelines.

Constituent	Unit	Content ^{1,2}	Expanded uncertainty ^{1,2}
Al_2O_3	(wt.%)	1.3	0.1
BaO	(mg/kg)	1121	82
CaO	(wt.%)	26.9	1.0
Fe_2O_3	(wt.%)	1.1	0.1
MgO	(wt.%)	18.7	0.4
SrO	(mg/kg)	126	9