

Metrological Hierarchy

PRGM

Primary Reference Gas Mixture

PRGMs are the highest quality standards available for use by commercial organisations. These reference gases have the lowest achievable uncertainties and are used by ISO 17025 laboratories who need to establish reference values for internal gas standards.

EffecTech supplies Certified Reference Materials (ISO 17034 accredited) calibration gases for the following applications:

natural gas and LNG for the oil and gas industry

sulphur and odourant gases for the oil and gas industry

continuous emission monitoring (CEM) gases for the stack testing industry

CRM

Certified Reference Material

CRMs are the most frequently used calibration gases for the calibration of gas chromatographs and other analytical devices because they balance low uncertainties with value for money, especially when supplied in large volume cylinders. A CRM produced under ISO 17034 accreditation has its stability assessed, which means a shelf life can be included on the certificate.

CGM

Calibrated Gas Mixture

EffecTech supplies calibrated gas mixtures (CGM) covered by its ISO 17025 accreditation including blast furnace gases for process control and emissions trading requirements in iron and steel manufacturing; for specialty gas manufacturers requiring accredited calibration gas mixtures for their customers we offer a calibration service of 3rd party mixtures; and for customers returning mixtures to EffecTech we offer a recalibration service. These mixtures will be certified as CGMs and are individually calibrated analytically by a traceable comparison method in accordance with ISO 6143 and ISO 12963.

