

Australian Standard™

**Specification for general purpose
natural gas**

STANDARDS
Australia



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Appliance and Component Testing
Australian Petroleum Production and Exploration Association
Australian Pipeline Industry Association
Energy Networks Association
Energy Retailers Association of Australia
Gas Appliance Manufacturers Association of Australia
Gas Technical Regulators Committee
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PREFACE

This Standard was prepared by the Committee AG-010, Natural Gas Quality Specifications to supersede AS 4564—2003 (AG 864-2003). It serves as a specification for general purpose natural gas, with an emphasis on the safety of the gas for use in natural gas appliances and equipment and for use as fuel in natural gas vehicles.

The quality specification provided by this Standard defines the requirements for providing a natural gas suitable for transportation and for general purpose use and provides the range of gas properties consistent with safe operation of the natural gas appliance population.

The Standard provides certainty for appliance manufacturers who supply appliances for use in the Australian market.

Natural gas conforming to this Standard is suitable for transportation through pipelines, however operational problems have been reported in transmission systems with sulfur concentrations in natural gas below the 50 mg/m³ specified in this Standard. Research on this issue is continuing. The outcome of the research will be taken into account in subsequent review of the Standard.

Certain limits defined in the specification may be temporarily departed from under some circumstances. The issue of such departures is not within the scope of this Standard and is subject to and provided for under relevant gas sales contracts, legislation and/or government guidelines.

The Standard is not intended to apply to gas supplies where no 'general purpose' users are connected to the supply system, e.g., a dedicated supply to an industrial user.

Gas consumers who have specific needs that are not provided for by the specification would need to nominate in appropriate commercial contracts with gas suppliers or retailers the gas composition suitable for their particular use.

The term 'informative' has been used in this Standard and applies to appendices that are for information and guidance only.

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STANDARDS AUSTRALIA

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Specification for general purpose natural gas

SECTION 1 SCOPE AND DEFINITIONS

1.1 SCOPE**1.1.1 General**

This specification sets out requirements that ensure that general purpose natural gas that is transported and supplied is safe for use in natural gas appliances and equipment and for use as fuel in natural gas vehicles.

The specification applies to natural gas—

- (a) from petroleum, landfill, biogas, coal seam and other sources where these sources provide gas for direct or blended supply on a commercial basis through supply systems serving general purpose customers;
- (b) transported and supplied to users for use in natural gas appliances and equipment complying with the relevant Standards. This includes natural gas powered vehicles, natural gas compressors and refuelling facilities.

This specification is not intended to apply to natural gas for supply as a process feedstock, but may provide a basis for such a specification.

Gas complying with this specification is safe for general purpose use but is not necessarily fit for purpose in all applications.

General purpose natural gas is subject to contractual requirements between buyer and seller and in some cases to National or State requirements as to quality, including allowable excursions from the specification.

1.1.2 Inclusions and exclusions

The specification covers gas for general purpose use but is not intended to apply to gas supplies where no 'general purpose' users are connected to the supply system, e.g., a dedicated supply to an industrial user.

General purpose natural gas can be formed by blending gas from different supplies.

The hydrocarbon dewpoint limit in the specification may be more restrictive than need be for some general purpose natural gas supply systems that are confined to only one State. For these systems, the relevant State regulatory body may provide for a higher limit if local conditions are favourable and it is possible to avoid excessive condensation with the higher limit. Compliance with such higher limit will constitute compliance with the Standard within that State only. In the absence of such provision the limit in the specification shall apply.

Certain limits defined in the specification may be temporarily departed from under some circumstances. The issue of such departures is not within the scope of this Standard and is subject to and provided for under relevant gas sales contracts, legislation and/or government guidelines.

NOTE: This specification is supported by informative Appendices that provide further information and guidance on the derivation of the requirements, additional issues to be considered in contracts and testing methods to verify compliance. See Appendices A, B and C.