SS 152:2024
(ICS 23.020.35)

SINGAPORE STANDARD

Specification for identification of contents of industrial gas cylinders

Singapore Standards Council

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Contents

Foreword

This Singapore Standard was prepared by the Working Group on Gases set up by the Technical Committee on Chemicals and Processes under the purview of the Chemical Standards Committee.

Gas cylinders can be filled or refilled locally for either local or overseas usage. They can also be imported to meet local demands. Hence, gas cylinders that are used in Singapore have different colour schemes. SS 152 applies to those that are refilled and used within Singapore.

This standard is a revision of SS 152:2016. In this revision, one of the key changes made was to standardise visual cues used on gas cylinders, as there can be significant colour differences between RAL and its equivalent BS colours. Clarification was also made that users are supposed to follow applicable cylinder colour coding for industrial gases listed under Table 1, before the requirements in Table 2 are considered. While the size of the label and its pictogram used on gas cylinders complies AIGA 017, its contents follow SS 586-2, “Specification for hazard communication for hazardous chemicals and dangerous goods – Part 2: Globally harmonised system of classification and labelling of chemicals – Singapore’s adaptations” instead.

The colour code on industrial gas cylinders was originally an adoption of BS 349:1973, “Specification for identification of the contents of industrial gas containers” which has since been withdrawn and replaced by BS EN 1089-3, which is widely used in the European Union. Taking into consideration that the safety of end users is of paramount importance given the widespread use and acceptance of SS 152 in Singapore, the Working Group recommended the continued usage of SS 152 with changes to bring it up to date.

The primary means of identifying the contents of compressed gas cylinders is by reading the cylinder labels. The use of colour codes to identify cylinder contents is the secondary means.

IMPORTANT – The colours represented in the electronic file of this SS can be neither viewed on screen nor printed as true representations. The colours in Tables 1 and 2 are not intended to be used for colour matching. It is recommended that reference be made to the colour codes identified in both tables.

In preparing this standard, reference was made to the following publications:

AIGA 017/05	Labelling of gas containers (including associated equipment)
BS 381C:1996	Specification for colours for identification, coding and special purposes
BS EN 1089-3:2011	Transportable gas cylinders – Gas cylinder identification (excluding LPG) – Part 3: Colour coding
EIGA Document 169/24	Classification, and labelling guide
ISO 7225:2005	Gas cylinders – Precautionary labels
ISO 10286:2021	Gas cylinders – Terminology

Permission has also been sought from the Asia Industrial Gases Association for the reproduction of Figure 1 of AIGA 017/05, “Labelling of gas containers (including associated equipment)” into this standard.

Acknowledgement is made for the use of information from the above publications.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all such patent rights.

NOTE

1. *Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as "mature standards". Mature standards will not be subject to further review unless there are requests to review such standards.*

2. *An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore and the Singapore Standards Council shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR. Although care has been taken to draft this standard, users are also advised to ensure that they apply the information after due diligence.*

3. *Compliance with a SS or TR does not exempt users from any legal obligations.*

Specification for identification of contents of industrial gas cylinders

1 Scope

This Singapore Standard specifies requirements for identification of contents of gas cylinders by colour code. It also specifies gas cylinder hazard labelling and stamp marking requirements.

It does not include gas cylinders for the following applications:

- Medical gases;
- Liquified petroleum gas (LPG), compressed natural gas (CNG);
- Fire extinguishers;
- Food and beverage;
- Self-contained breathing apparatus;
- Gases for recreational purposes.

2 Normative references

The following referenced documents are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

AIGA 017	Labelling of gas containers (including associated equipment)
SS 7	Specification for solvent-based gloss enamel paint
SS 586-2	Specification for hazard communication for hazardous chemicals and dangerous goods – Globally harmonised system of classification and labelling of chemicals – Singapore's adaptations

3 Terms and definitions

No terms and definitions are listed in this standard.

In this standard, the following verbal forms are used:

- "shall" indicates that the requirement is strictly to be followed in order to conform to the standard and from which no deviation is permitted.
- "should" indicates a recommendation;
- "may" indicates a permission;
- "can" indicates a possibility or a capacity.