

SS 586 : Part 1 : 2021
(ICS 13.300)

SINGAPORE STANDARD

**Specification for hazard communication for
hazardous chemicals and dangerous goods**

– Part 1 : Transport and storage of dangerous goods

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The content of this Singapore Standard was approved on 14 April 2021 by the Chemical Standards Committee (CSC) under the purview of the Singapore Standards Council.

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DuPont Company (Singapore) Pte Ltd

Evonik (SEA) Pte. Ltd.

Infineum Singapore Pte Ltd

Maritime and Port Authority of Singapore

Ministry of Manpower

National Environment Agency

Petrochemical Corporation of Singapore (Private) Ltd

SETSCO Services Pte Ltd

Shell Eastern Petroleum (Pte) Ltd

Singapore Civil Defence Force

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Foreword

This Singapore Standard was prepared by the Working Group on Review of SS 586 set up by the Technical Committee on Chemicals and Processes under the purview of CSC.

It is a revision of SS 586 : Part 1 : 2014. This revision includes an update on the requirements, transport emergency information panel and storage emergency information panel.

SS 586 'Specification for hazard communication for hazardous chemicals and dangerous goods' consists of the following three parts which are complementary to one another:

Part 1 : Transport and storage of dangerous goods,

Part 2 : Globally harmonised system of classification and labelling of chemicals – Singapore's adaptations, and

Part 3 : Preparation of safety data sheets (SDS).

SS 586 : Part 1 provides information and guidance on the classification of dangerous goods (DG) by the types of hazards they present. It also provides information on standard hazard communication DG labels. This part applies to the storage and transportation of dangerous goods by road in Singapore, which includes carriages in bulk, tank-vehicles, vehicles with demountable tanks as well as by vehicles carrying dangerous goods in packages.

SS 586 : Parts 2 and 3 provide guidance for the implementation of the globally harmonised system of classification and labelling of chemicals (GHS) and preparation of SDS in Singapore. The GHS is an international system for the classification of chemicals by the types of hazards they present. It provides information on standard hazard communication elements including labels and SDS. The GHS helps to ensure that information on physical hazards, health hazards and environmental hazards from chemicals is made available, in order to enhance the protection of human health and the environment during the handling, transport, storage and use of these chemicals. The GHS also provides for the global harmonisation of rules and regulations on the classification, labelling and SDS of chemicals.

In preparing this standard, reference was made to the United Nations Recommendations on the Transport of Dangerous Goods (UNRTDG Orange Book, 20th revised edition). The UNRTDG document may be obtained from https://www.unece.org/trans/danger/publi/unrec/rev20/20files_e.html.

Annex A was reproduced from the UN Recommendations on the Transport of Dangerous Goods – Model Regulations, by UN Model Regulations, © 2017 United Nations. Reprinted with the permission of the United Nations.

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

This standard is expected to be used by chemical manufacturers, importers, suppliers, users, and supply chain service providers and relevant government agencies / authorities.

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 of 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 hazard communication for hazardous chemicals and dangerous goods – Part 1 : Transport and storage of dangerous goods

IMPORTANT – The colours represented in the electronic file of this part of SS 586 can be neither viewed on screen nor printed as true representations. Although the copies of this part of SS 586 printed have been produced to correspond (with an acceptable tolerance as judged by the naked eye) to the colour requirements, it is not intended that these printed copies be used for colour matching. Instead, it is recommended that reference be made to the colour codes identified in Annex F.

1 Scope

This standard adopts the United Nations' Recommendations on the Transport of Dangerous Goods (UNRTDG), which provides an international system for the classification of dangerous goods according to the types of hazards that they present. It also specifies standard hazard communication DG labels.

This standard applies to the storage and transportation of dangerous goods on land in Singapore. The transportation of dangerous goods by sea and air is subject to the requirements of International Maritime Organisation (IMO) and International Air Transport Association (IATA) / International Civil Aviation Organisation (ICAO) respectively and is not covered in this standard.

Figure 1 shows the illustration of dangerous goods (for storage and transport purposes). For storage of dangerous goods in workplaces, the GHS requirements (refer to SS 586 Part 2) have to be used to communicate the hazards of the substances stored in the workplace.

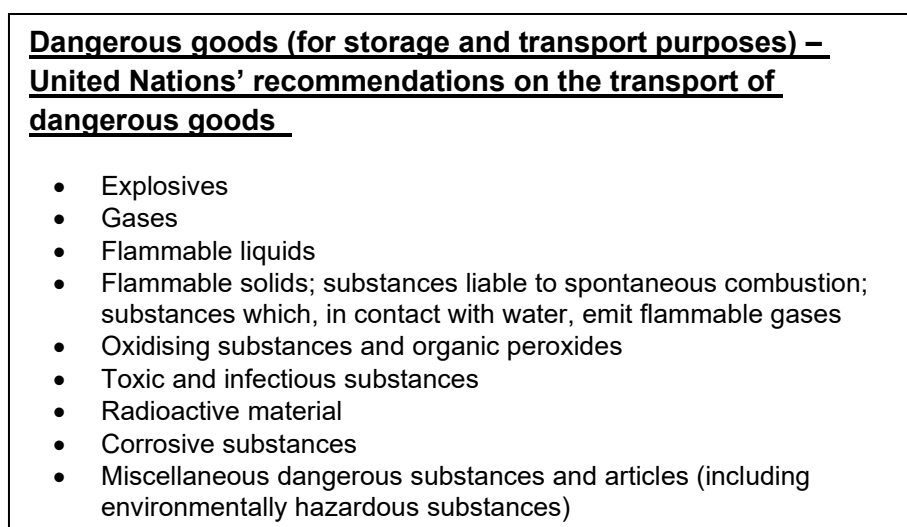


Figure 1 – Illustration of dangerous goods (for storage and transport purposes)

2 Normative references

The following referenced document is 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.

United Nations Recommendations on the Transport of Dangerous Goods

NOTE – Storage and transport placards for dangerous goods are provided in Annex A.