

SINGAPORE STANDARD

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

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

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hazardous chemicals and dangerous goods**

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

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This Singapore Standard was approved by the Chemical Standards Committee on behalf of the Standards Council of Singapore on 9 September 2008.

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Maritime and Port Authority of Singapore
Ministry of Manpower
National Environment Agency
Singapore Chemical Industry Council Limited
Singapore Civil Defence Force
Singapore Police Force

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Foreword

This Singapore Standard was prepared by the Working Group appointed by the Technical Committee on Chemistry under the purview of the Chemical Standards Committee. The SS 586 series of standards is the result of the revision of SS 286 : 1984, 'Caution labelling for hazardous substances' (5 parts) and CP 98 : 2003, 'Preparation and use of Material Safety Data Sheets (MSDS)'.

The Specification for hazard communication for hazardous chemicals and dangerous goods comprises 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 by the types of hazards they present. It also provides information on standard hazard communication 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. 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.

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 Safety Data Sheets in Singapore. 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, 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.

*As amended
Feb 14*

In preparing this part of the Singapore Standard, reference was made to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS Purple Book, revision 4) published by the United Nations. The GHS document may be obtained by:

- a) Purchasing directly from the United Nations (<https://unp.un.org/>) as a book or a CD. (http://www.unece.org/trans/danger/publi/ghs/ghs_pubdet.html)
- b) Downloading from the internet as pdf files (<http://www.unece.org/?id=25985>).

Annex A – Confidential Business Information is adapted from Part B – Lexicon guide for establishing the alternative designations (generic names) of Annex VI – Confidentiality for the Chemical Identity of a Substance, of Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999, with permission from the Office for Official Publications of the European Communities.

Annex C – Example of a GHS Safety Data Sheet is adapted from the training materials provided by The Association for Overseas Technical Scholarship (AOTS) Japan.

This standard is expected to be used by chemical manufacturers, importers, suppliers, users, and supply chain service providers. The national competent authorities such as the Agri-Food and Veterinary Authority of Singapore (AVA), Health Sciences Authority (HSA), Ministry of Health (MOH), Ministry of Manpower (MOM), National Environment Agency (NEA), Singapore Civil Defence Force (SCDF) and Singapore Police Force (SPF) may use this standard to supplement their regulations and / or guidelines.

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.*
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 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.*
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 3 : Preparation of Safety Data Sheets (SDS)

Chapter One – General

1 Scope and purpose

1.1 Scope

This Singapore Standard gives recommendations for the preparation, review, reissue and use of SDS. It covers the responsibility of the suppliers and manufacturers of chemical substances and preparations in the compilation and completion of an SDS. Users of chemicals can make use of the information in the SDS to prevent exposure to chemicals in the workplace and community.

This standard does not cover the use of pharmaceutical substances and preparations by medical physicians and veterinarians in the management of the health of a person or an animal, but applies to the production and use of these substances and preparations in an industrial process.

The SDS provides comprehensive information about a chemical substance or mixture for use in workplace chemical control regulatory frameworks. Both employers and employees use it as a source of information about chemical hazards, and their safety precautions. The information acts as a reference source for the management of hazardous chemicals in the workplace. The SDS is product-related and usually, does not provide specific information that is relevant to any given workplace where the product may be used. However, where products have specialised end uses, the SDS information may be more workplace-specific. The information therefore enables the employer to develop an active programme for employee protection measures, including training, which is specific to the individual workplace; and to consider any measures which may be necessary to protect the environment.

In addition, the SDS provides an important source of information for other target audiences in the GHS. So certain elements of information may be used by those involved with the transport of dangerous goods, emergency responders (including poison centres), and those involved in the professional use of pesticides, and consumers. However, these audiences receive additional information from a variety of other sources such as the UN Recommendations on the Transport of Dangerous Goods, Model Regulations document and package inserts for consumers, and will continue to do so. The introduction of a harmonised labelling system therefore, is not intended to affect the primary use of the SDS which is for workplace users.

1.2 Purpose

The purpose of this standard is to provide guidance on the compilation of SDS according to a standard format and to ensure the SDS contains adequate and accurate health and safety information that will help to safeguard the life and health of the users. The standard contains requirements recommended by national competent authorities.

SDS for a substance or preparation should cover all users.

An SDS only constitutes part of the information necessary to establish a health, safety and environmental programme. Certain information should be made available upon request. Hence, it should not be used as a substitute for expert advice on the use of a substance or preparation. Expert advice may include the development of better control measures such as engineering controls and safe handling practices.