



# SINGAPORE STANDARD Code of practice for the transportation and storage of pesticides

[Formerly CP 32]



Published by



**SS 615 : 2016** (ICS 55.220; 65.100)

# SINGAPORE STANDARD

# Code of practice for the transportation and storage of pesticides

All rights reserved. Unless otherwise specified, no part of this Singapore Standard may be reproduced or utilised in any form or by any means, electronic or mechanical, including photocopying and microfilming, without permission in writing from Enterprise Singapore. Request for permission can be sent to: standards@enterprisesg.gov.sg.

This Singapore Standard was approved by the Chemical Standards Committee on behalf of the Singapore Standards Council on 31 August 2016.

First published as CP 32, 1985

First revision and re-designated as SS 615, 2016

The Chemical Standards Committee, appointed by the Standards Council, consists of the following members:

		Name	Capacity	
Chairman	:	Dr Keith Carpenter	Member, Standards Council	
Deputy Chairman	:	Dr Tay Kin Bee	Individual Capacity	
Secretary 1	:	Ms Elane Ng	Standards Development Organisation@Singapore Chemical Industry Council	
Secretary 2	:	Ms Jillian Chin	Standards Development Organisation @Singapore Chemical Industry Council	
Members	:	Mr Goh Tiak Boon	Individual Capacity	
		Mr Khong Beng Wee	Individual Capacity	
		Mr Terence Koh	Singapore Chemical Industry Council Limited	
		Prof Lee Hian Kee	National University of Singapore	
		Ms Lee Hiok Hoong	SPRING Singapore	
		Dr Lee Tong Kooi	Chemical Metrology Division, Health Sciences Authority	
		Dr Leong Kwai Yin	Individual Capacity	
		Prof Leung Pak Hing	Nanyang Technological University	
		Mr Lim Eng Kiat	Individual Capacity	
		Mr Lim Kian Chye / Mr Ng Eng Fu	Housing & Development Board	
		Dr Lim Mong Hoo	Individual Capacity	
		Dr Jerry Liu Jian Lin	Singapore Water Association	
		Dr Loh Wah Sing	Individual Capacity	
		Dr Ng Sek Yeo	Singapore Polytechnic	
		Dr Parry Oei	Maritime and Port Authority of Singapore	
		Ms Pamela Phua	Singapore Paint Industry Association	
		Mr Seah Khen Hee	Individual Capacity	
		Mr Tan Nguan Sen / Dr Lim Mong Hoo	PUB, the National Water Agency	
		Ms Suzanna Yap	National Environment Agency	
Co-opted Members	:	Assoc Prof Thomas Liew	Individual Capacity	
		Mr Nee Pai How	Individual Capacity	
		Mr Pitt Kuan Wah	Individual Capacity	

The Technical Committee on Chemistry, appointed by the Chemical Standards Committee and responsible for the preparation of this standard, consists of representatives from the following organisations:

	Name	Capacity	
:	Dr Leong Kwai Yin	Individual capacity	
:	Ms Jillian Chin	Standards Development Organisation @Singapore Chemical Industry Council	
:	Mr Cheah Sin Moh	Singapore Polytechnic	
	Ms Veronica Chow	Ministry of Manpower	
	Dr Goh Chee Keong	Singapore National Institute of Chemistry	
	Mr Aaron Kalaichelvan	Industrial Gases Association of Singapore	
	Ms Khaw Xinhui	Singapore Chemical Industry Council Limited	
	Prof Lee Jim Yang	National University of Singapore	
	Mr Lei Zhi Pei	Setsco Services Pte Ltd	
	Mr Collin Lim	Chemical Industries (Far East) Limited	
	MAJ Lo Wai Mun	Singapore Civil Defence Force	
	Mr New Chee Wee / Mr Lee Jian Ming	Maritime and Port Authority of Singapore	
	Ms Ong Kah Kee	Eastman Chemical Singapore Pte Ltd	
	Dr Richard Yee Cheong Shin Koy Sien	Health Sciences Authority	
	Mr Teah Choon Lee	SPCI Pte Ltd	
	Mr Leendert van Dijk	Singapore Chemical Industry Council Limited	
	Ms Suzanna Yap	National Environment Agency	
	: :	<ul> <li>: Dr Leong Kwai Yin</li> <li>: Ms Jillian Chin</li> <li>: Mr Cheah Sin Moh</li></ul>	

The Working Group, appointed by the Technical Committee to assist in the preparation of this standard, comprises the following experts who contribute in their *individual capacity*:

#### Name

Convenor : Mr Heng YiweiSecretary : Ms Jillian ChinMembers : Ms Sharon Kee

Ms Lim Minhui Dr Lin Jianhua Ms Low Bee Leng LTC Ng Geok Meng Ms Tracy Toh

The organisations in which the experts of the Working Group are involved are:

Agri-Food & Veterinary Authority of Singapore
Agro Technic Pte Ltd
Horsburgh Engineering (F.E.) Pte Ltd
National Environment Agency
Rentokil Initial (S) Pte Ltd
Singapore Civil Defence Force
TUV SUD PSB Pte Ltd

# **Contents**

		Page
Fore	6	
1	Scope and application	7
2	Normative references	
3	Terms and definitions	7
4	Training for operational and personnel safety	8
5	Transportation of pesticides	11
6	Storage of pesticides	12
7	Safe disposal of pesticides	14
8	Emergency management	15
Anne	ex	
Α	Current acts and regulations in Singapore	18

#### **Foreword**

This Singapore Standard was prepared by the Working Group appointed by the Technical Committee on Chemistry under the direction of the Chemical Standards Committee.

This standard is a revision of CP 32: 1985 and has been re-designated as SS 615: 2016. The revision includes new sections on emergency management and training for operational and personnel safety.

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

Malaysia Standard Packaging and storage of pesticides - Code of practice (First revision)

MS 409: 2012

Malavsia Standard The safe handling of agricultural pesticides - Code of

recommended practice (First revision) MS 479: 2012

Australian Standard The storage and handling of agricultural and veterinary chemicals

AS 2507: 1998

Code of practice – Safe use and storage of chemicals (including pesticides and herbicides) in agriculture, 2006, WorkCover NSW

Joint FAO/WHO Guidelines on Good Labelling Practice for Pesticides, 2015

(http://www.fao.org/3/a-i4854e.pdf)

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

At the time of publication, this standard is expected to be used by pest management companies, manufacturers, suppliers, users and transporters of pesticides as well as related government agencies.

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

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

# Code of practice for the transportation and storage of pesticides

# 1 Scope and application

# 1.1 Scope

This Singapore Standard outlines the requirements for the transportation and storage of pesticides.

#### 1.2 Application

This Singapore Standard applies to the transportation of pesticides and the storage of pesticides in depots, warehouses and stores. It is not intended to apply to areas where materials are displayed and advertised on shelves for sale to the public such as in the retail section of supermarkets, hardware stores and home garden outlets. This Singapore Standard does not apply to ready-to-use spray solutions and formulated products for household use. This Singapore Standard also does not cover application of pesticides.

#### 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.

SS 586 Specification for hazard communication for hazardous chemicals and dangerous goods

Part 3: Preparation of Safety data sheets (SDS)

SS 603 Code of Practice for hazardous waste management