

## Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

7 June 2018

### Sub-Committee of Experts on the Transport of Dangerous Goods

#### Fifty-third session

Geneva, 25 June-4 July 2018

Item 3 of the provisional agenda

#### Listing, classification and packing

## Amendment of packing instruction P404

Transmitted by the European Chemical Industry Council (CEFIC)

### Introduction

1. Packing instruction P404 applies to pyrophoric solids assigned to the UN numbers 1383, 1854, 1855, 2005, 2008, 2441, 2545, 2546, 2846, 2881, 3200, 3391, 3393 and 3461. For combination packagings specific requirements on threaded closures for metal or glass receptacles to be used as inner packagings provide robust conditions of hermetically sealing during transport.

### Discussion

2. Practical experience shows that the packing provisions required by P404 ensure an adequate level of safety in transport. However, individual handling of authorized inner packagings reveals issues for occupational safety related to the threaded closures when resealing the receptacles after partial removal of product for supply and use. Small residues of the pyrophoric substance adhering to the threads may react critical on friction caused by screwing back of the closure.

3. Threaded closures are quite suitable to prevent back-off or loosening during transport. Requirements in packing instruction P601, P602 or P804 related to closures of inner packagings aim for the same protective goal. However, these provisions provide a more flexible approach for technical solutions of adequate closures less sensitive to effects of friction.

4. Therefore, CEFIC proposes to supplement the requirements of P404 on threaded closures for inner packagings and to authorize the possibility to apply alternative technical means capable of preventing back-off or loosening of the closure by impact or vibration during transport, as provided in P601, P602 or P804.

5. In accordance with the Sub-Committee's advice from the fifty-third session, CEFIC is willing to prepare a formal document for the next meeting based on the following proposal to amend P404, adopting language already proven to be reliable.

6. Thorough review of P404 also revealed a clerical mistake in paragraph (2), the listing of suitable metal packagings, where aluminium drums with removable head (1B2) seem to be forgotten. CEFIC proposes to correct the list accordingly.

### Proposal

7. Amend packing instruction P404 in 4.1.4.1 to read as follows (deleted text is struck through; new text is underlined):

<b>P404</b>	<b>PACKING INSTRUCTION</b>	<b>P404</b>
This instruction applies to pyrophoric solids: UN Nos.: 1383, 1854, 1855, 2008, 2441, 2545, 2546, 2846, 2881, 3200, 3391, 3393 and 3461.		
The following packagings are authorized, provided that the general provisions of 4.1.1 and 4.1.3 are met:		
<b>(1) Combination packagings</b>		
<b>Outer packagings:</b>	(1A1, 1A2, 1B1, 1B2, 1N1, 1N2, 1H1, 1H2, 1D, 1G, 4A, 4B, 4N, 4C1, 4C2, 4D, 4F, 4G or 4H2)	
<b>Inner packagings:</b>	Metal receptacles with a maximum net mass of 15 kg each. Inner packagings shall be hermetically sealed <del>and have threaded closures;</del>	
	Glass receptacles, with a maximum net mass of 1 kg each, having <del>threaded</del> closures with gaskets, cushioned on all sides and contained in hermetically sealed metal cans.	
	<u>Inner packagings shall have threaded closures or closures which shall be physically held in place by any means capable of preventing back-off or loosening of the closure by impact or vibration during transport.</u>	
	Outer packagings shall have a maximum net mass of 125 kg.	
<b>(2) Metal packagings:</b>	(1A1, 1A2, 1B1, <u>1B2</u> , 1N1, 1N2, 3A1, 3A2, 3B1 and 3B2). Maximum gross mass: 150 kg	
<b>(3) Composite packagings:</b>	Plastics receptacle in a steel or aluminium drum (6HA1 or 6HB1) Maximum gross mass: 150 kg	
<b>Pressure receptacles</b> , provided that the general provisions of 4.1.3.6 are met.		
<b>Special packing provision:</b>		
<b>PP86</b>	For UN Nos. 3391 and 3393, air shall be eliminated from the vapour space by nitrogen or other means.	