

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

Sub-Committee of Experts on the Transport of Dangerous Goods

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Transport of gases:

Global recognition of United Nations

and non-United Nations pressure receptacles

Acetylene Cylinder Marking

Submitted by European Industrial Gases Association (EIGA)

I. Introduction

1. In the twenty-second revised edition of the *Model Regulations*, the marking scheme for acetylene cylinders was changed under 6.2.2.7.3 (k) and (l), introducing new indents (ii) and (iii).
2. In informal document INF.14, submitted to the November 2021 session of the Sub-Committee of Experts on the Transport of Dangerous Goods, EIGA proposed transitional provisions concerning this marking to allow continued use of acetylene cylinders despite their marking not complying with the adopted changes.
3. At the time, it was deemed sufficient to allow a transitional period until the next periodic inspection of the cylinders, where the new marks would then have to be applied.
4. The proposed transitional provisions were adopted in a note under 6.2.2.7.3 and came into force in the twenty-third revised edition of the *Model Regulations*.
5. In document ECE/TRANS/WP.15/AC.1/2021/24/Add.1, submitted to the September 2021 Joint Meeting, the Ad Hoc Working Group on the Harmonization of RID/ADR/ADN with the United Nations *Recommendations on the Transport of Dangerous Goods*, the new marking scheme was also proposed for entry into RID/ADR/ADN and was subsequently adopted, making it applicable to non-UN acetylene cylinders in accordance with RID/ADR/ADN as well.
6. After the new marking provisions came into force, at first periodic inspections of non-UN acetylene cylinders, it became apparent that for some types of non-UN acetylene cylinders manufactured before the entry into force of the twenty-second revised edition of the *Model Regulations*, it was impossible to apply the newly required marks.
7. A large number of such cylinders do not have the space required for this additional marking, due to their design. The entire available shoulder space may have been used for the marking layout, which was done during the manufacture of the cylinder and subsequent periodic inspections. Either the space on the shoulder, welded plate or other reinforced areas of the designated steel plates or neck rings are too small for an additional marking.
8. Marking on the cylinder shell is not allowed since this can either cause damage to the porous material inside the cylinder or reduce the strength of the cylinder shell.
9. EIGA submitted document ECE/TRANS/WP.15/AC.1/2024/4 to the March 2024 Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods, requesting an allowance in RID/ADR/ADN to keep using non-UN acetylene cylinders in accordance with the marking scheme applicable before mentioned changes came into force.

10. While there was broad support for the proposal, it was argued that, to avoid inconsistency between RID/ADR/ADN and the *Model Regulations*, this allowance should be sought for adoption in the *Model Regulations* first, making them applicable also to pressure receptacles approved according to the *Model Regulations*. Afterwards, the harmonisation process could lead to the changes to RID/ADR/ADN for UN and non-UN pressure receptacles.

11. Therefore, EIGA would like to propose new provisions for the marking of acetylene cylinders.

II. Proposal

12. EIGA proposes to revise the existing note under 6.2.2.7.3 as follows (deleted text is stricken through):

“NOTE: Acetylene cylinders constructed in accordance with the twenty-first revised edition of the Model Regulations which are not marked in accordance with 6.2.2.7.3 (k) or (l) applicable in the twenty-second revised edition of the Model Regulations, may continue to be used ~~until the next periodic inspection and test two years after the coming into force of the twenty-third revised edition of the Model Regulation where they have to be marked according to the twenty-third revised edition of the Model Regulations or be taken out of operation.~~”

III. Justification

13. The change proposed has no negative safety implications.

14. Safety risks due to improper marking on the shells of acetylene cylinders would be avoided.

15. Additional marking on cylinder shoulders, plates or neck rings, of cylinders manufactured before the entry into force of the twenty-second revised edition of the *Model Regulations*, may lead to confusion during filling, if the existing layout does not allow marks in the appropriate position and hence forces marking in inappropriate positions.
