

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

14 November 2022

Sub-Committee of Experts on the Transport of Dangerous Goods

Sixty-first session

Geneva, 28 November - 6 December 2022

Item 3 of the provisional agenda

Listing, classification and packing

**Present and future products in the Liquefied Petroleum Gas
industry, proposal for a new UN Number - discussion**

Submitted by the World LPG Association and Liquid Gas Europe*

Summary

Executive summary:	Traditional/fossil LPG is partially being replaced by renewable LPG (rLPG) but also by blends of renewable DME (rDME) and LPG, at any blending ratio. These blends would normally at present be assigned to UN 3161 Liquefied Gas, Flammable, N.O.S. To aid however easier identification of the product being transported in the case of an emergency, it is proposed that a new UN Number is created for these blends as “DME, Propane and/or Butane Gas Mixtures, Liquefied, N.O.S”.
Action to be taken	Informal exchange of views on creating a new UN Number for DME/LPG blends, in preparation of a formal detailed proposal at the next session.
Related document(s):	ST/SG/AC.10/C.3/2022/53 containing some related background information

Background

1. Document ST/SG/AC.10/C.3/2022/53 contains the background information on the way that the LPG industry is changing and adapting to meet its renewable goals.

Proposal

2. Create a new UN Number “DME, Propane and/or Butane Gas Mixtures, Liquefied, N.O.S.”.
3. Add a new entry to the Dangerous Goods List in 3.2.2 as follows:

UN No.	Name and description	Class or division	Subsidiary hazard	UN packing group	Special provision	Limited and excepted quantities		Packagings and IBC's	
						(7a)	(7b)	Packing Instruction	Special packing provision
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)
XXXX	DME, PROPANE AND/OR BUTANE GAS MIXTURES, LIQUEFIED, N.O.S.	2.1			329	0	E0	P200	

Portable tanks and bulk containers	
Instructions	Special provisions
(10)	(11)
T50	

4. Add a new entry to 4.1.4.1 Packing Instruction P200 Table 2 as follows:

Table 2: LIQUEFIED GASES AND DISSOLVED GASES													
UN No.	Name and description	Class or Division	Subsidiary Hazard	LC ₅₀ (ml/m ³)	Cylinders	Tubes	Pressure Drums	Bundles of cylinders	MEGCs	Test period (years)	Test pressure (bar)	Filling ratio	Special packing provisions
XXXX	DME, PROPANE AND/OR BUTANE GAS MIXTURES, LIQUEFIED, N.O.S.	2.1			X	X	X	X	X	10			v, z

5. Add a new entry to 4.2.5.2.6 Portable tank instruction T50 as follows:

UN No.	Non-refrigerated liquefied gases	Max.allowable working pressure (bar) Small: Bare; Sunshield; Insulated: respectively ^a	Openings below liquid level	Pressure-relief requirements ^b (see 6.7.3.7)	Maximum filling ratio
XXXX	DME, Propane and/or Butane Gas Mixtures, Liquefied, N.O.S	See MAWP definition in 6.7.3.1	Allowed	Normal	See 4.2.2.7

Safety implications

6. No negative safety implications are foreseen from the proposal. Having a dedicated UN number for this product will enable easy identification by the emergency services without the need of checking the transport documentation and that will have a positive.