

Multilateral Agreement M352 concerning the carriage of UN 1965 in fixed tanks (tank-vehicles)

Dear Madam, Dear Sir,

On the territories of the ADR Contracting Parties signatory to M320, fixed tanks (tank-vehicles) with a minimum test pressure of 23 bar meeting the criteria for UN 1978 PROPANE, are still in service for the carriage of UN 1965 mixture C. As the need for carriage of "propane" increase and the industry are facing challenges having new tanks constructed and delivered in time, it is necessary to extend the derogation in M320.

M320, and M278 before that, was initiated by the competent authority of Norway following the introduction of special provision 667 in chapter 3.3 in ADR 2013. Oil refineries and other gas processing plants reclassified their products under the trade name "propane" from UN 1978 PROPANE to UN 1965 HYDROKARBON GAS MIXTURE, LIQUEFIED, N.O.S (Mixture C) with the consequence that the tanks used for these products didn't meet the minimum test pressure of 27 bar (25 bar for isolated tanks) that is the requirement for UN 1965 (Mixture C). ADR provided no transitional measure for the amendment in ADR.

To prevent decommissioning and scraping of the tanks in question, an assessment was performed in 2014 for continued use of these tanks provided that the safety was not compromised. Considering the fact this problem is affecting Scandinavian countries with modest ambient temperatures, a reference temperature of 50 °C instead of 65 °C was found acceptable for the calculated test pressure. Developed pressure was calculated for a "worst-case scenario" with results clearly below the test pressure of 23 bar.

For 2023 a substantial number of these tanks are still in service. The pandemic situation since 2019 and the war in Europe have given delays in constructing new tanks for UN 1965 (Mixture C). To ensure sufficient supply of LPG and a predictability for the industry when M320 expires in May 2024, Norway therefore now initiates M352 to replace and supersede M320 to provide for an additional transitional period. No accident or incident is recorded related to the derogations provided for by multilateral agreement M320.