



Economic Commission for Europe**Inland Transport Committee****Working Party on the Transport of Dangerous Goods****Joint Meeting of the RID Committee of Experts and the
Working Party on the Transport of Dangerous Goods**

Bern, 10-11 September 2020 and Geneva, 14-18 September

Item 5 (a) of the provisional agenda

Proposals for amendments to RID/ADR/ADN**pending issues****Carriage of polymerizing substances as waste****Transmitted by the Government of Germany^{*,**}****Introduction**

1. A key aspect in the carriage of polymerizing substances is sufficient stabilisation by means of chemical stabilisation or temperature control or by a combination of both. This presupposes that the Self-accelerating polymerization temperature (SAPT) is determined in relation to the packages, as a SAPT below 50 °C (packagings) or 45 °C (tanks) requires the application of temperature control provisions. On the basis of the SAPT, the control and emergency temperatures have to be determined for this purpose and have to be indicated in the transport document, see ADR 5.4.1.2.3.1. When chemical stabilization is employed, it must be ensured that the level of chemical stabilization is sufficient to prevent dangerous polymerization of the substance, including at a mean loading temperature of 50 °C or 45 °C. In this case, different factors are to be taken into account, for example the duration of transport or the effectiveness and properties of the stabilizer. This information is in particular available from the manufacturer of such substances, i.e. at the beginning of the transport chain. The consignor has to make sure of the classification and provide the data required for the transport document.

2. A large amount of polymerizing substances is also carried as waste. Here, the information required for complying with the provisions is often not available. Usually, the substances to be transported are not new products to be placed on the market, but substances to be disposed of because their properties have changed, because the substance has been stored for too long or because a partial polymerization has already taken place.

The evaluation of these wastes results in the following difficulties:

a) the wastes come from waste producers that (no longer) have information on the substance (e.g. from closed down businesses, site clearings, insolvency estates);

* 2020 (A/74/6 (Sect.20) and Supplementary, Subprogramme 2).

** Circulated by the Intergovernmental Organisation for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2020/51.

- b) changes in the chemical composition cannot be ascertained;
 - c) the effectiveness of a potential stabilizer cannot be ascertained, except that there are no measurable reactions or physical changes;
 - d) emergency and control temperatures are unknown;
 - e) safety data sheets are not available; and/or
 - f) the wastes are stored in containers that are no longer permissible.
3. However, without more information, it cannot simply be assumed that there is sufficient chemical stabilization. In addition, without knowledge of the SAPT and the control and emergency temperatures derived from it, it is not possible to comply with the temperature control provisions described in ADR 7.1.7.3 and 7.1.7.4.
4. Therefore, discussions have been held with the waste disposal sector on approaches for ensuring that also for the transport of wastes, dangerous polymerization cannot take place during transport to the disposal facility.
5. There must always be consideration of the individual case, including actually available information on the substance, type and size of the containment as well as the circumstances under which the transport operation is effected.
6. Germany submitted a corresponding proposal on this to the Joint Meeting in March 2019 (document OTIF/RID/RC/2019/8 – ECE/TRANS/WP.15/AC.1/2019/8), the aim of which was to allow exceptions to the information in the transport document and the specific temperature control measures, for which the SAPT and chemical stabilization need to be known. The document was referred to the informal working group on the carriage of dangerous wastes led by the European Federation of Waste Management and Environmental Services (FEAD) (see also report OTIF/RID/RC/2019-A – ECE/TRANS/WP.15/AC.1/154, paragraph 35) and was discussed at the second session of the informal working group on 3 and 4 March 2020. As a result of the discussion, the proposed special provision was modified.

Proposal

7. In order to enable polymerizing substances to be carried as waste in accordance with the regulations, an appropriate legal basis for special procedures for such carriage should be established. As a rule, the requirements of special provision 386 – in ADR in conjunction with 7.1.7.3 and 7.1.7.4 and 5.4.1.2.3.1 – cannot be complied with. To this end, another special provision, as follows, could be assigned to substances to which special provision 386 is assigned:

"~~6xx~~ For substances carried for disposal or recycling, the provisions of special provision 386 <(ADR:), in conjunction with 7.1.7.3, 7.1.7.4 and 5.4.1.2.3.1,> need not be applied, provided suitable measures are taken to prevent dangerous polymerization. These include:

- a) the addition of inhibitors;
- b) loading is only permitted if an examination has shown that there is no significant deviation between the outside temperature of the package and the ambient temperature;
- c) the packages have to be protected from direct sunlight and from the impact of other sources of heat (e.g. additional loads that are being transported above ambient temperature) during transport;
- d) transport may only take place at ambient temperatures below 45 °C;
- e) wagons/vehicles and containers have to be adequately ventilated;
- f) transport has to be effected within 24 hours;
- g) transport is only permitted in packages with a maximum capacity of 1000 litres. Transport in tanks is not permitted."