Chapter 6.10 ADR
Subclause 6.10.3.9

Submitted by Germany

Summary:
Operational requirements are missing for the safety valve with proceeding bursting disc required in subclause 6.10.3.9. For protection against an explosion or a heavy chemical reaction an explosion proof design of the tank is at least equivalent to a safety valve.

Further action:
Amendment of subclause 6.10.3.9

Reference documents:
none

Introduction:
With introduction of annex B.1e into ADR the equipment of tanks with suction and pressure (ich kenne den offiziellen ADR-Ausdruck nicht) with a safety disc with proceeding bursting disc was required. But there is no specification of purpose and flow rate of the safety disc so that it can be assumed that the tank shall be protected against a heavy chemical reaction in the tank. Due to pressure vessel codes alternative measures as e.g. explosion proof design of the tank are allowed as an alternative.

Proposal:
Amendment of subclause 6.10.3.9 as follows: “This is not necessary if the tank is

Justification:
For the safety valves with proceeding bursting disc there are no requirements for which purpose the safety valve shall be suitable. As can be assumed only a protection against pressurization due to unintentional chemical reaction or decomposition is meant. The pressurization due to this possible incidents can be secured by an explosion proof design of the tank as an alternative to safety valves. Such alternatives are allowed due to the most pressure vessel codes.
An alternative possibility of protection of the tank is necessary because due to the experience of German operators of such tanks the necessary proceeding bursting does not withstand the stresses resulting from the need of extreme corrosion protection and the alternating stresses from over- and underpressure for more than a few days.