



## Safety recommendation no. 167

<b>Date of the publication</b>	31.08.2021
<b>Number of the final report</b>	2020101901
<b>Safety deficit</b>	<p>On 19 October 2020, a technical inspector at Basel SBB RB marshalling yard heard a hissing sound from a tank wagon and noticed steam escaping from an almost imperceptible hole. He complained of feeling unwell and was taken to hospital for a check-up. On 6 July 2021 in Lüsslingen, a driver noticed some blue smoke during a shunting movement. Upon inspection, he found that smoke and liquid were escaping from a small hole near the access opening of a tank wagon filled with hydrochloric acid. Within the space of nine months, two identical Zacns tank wagons in Switzerland experienced a leakage of hydrochloric acid, one at Basel SBB freight station and the other at Lüsslingen.</p> <p>The preliminary findings of the investigations indicate that the protective lining of the Zacns series N-310-02 tank wagon does not always provide an appropriate barrier between the steel shell and its hazardous contents, leaving the steel shell subject to damage by corrosion. The leakage of hazardous substances from a tank wagon poses a considerable risk to employees, passengers and the general public as well as to the environment.</p>
<b>Safety recommendation</b>	<p>In accordance with Article 26 paragraph 2 of Directive (EU) 2016/798 of the European Parliament and of the Council of 11 May 2016 on railway safety, the STSB recommends that the Federal Office of Transport (FOT) forward the following safety recommendation to the national safety authority of the member state in which the wagons are registered (NSA-NL) and to the national safety authority of the member state in which the responsible ECM is based (NSA-FR): The STSB recommends that all Zacns series N-310-02 tank wagons with the HAW-H94 protective lining be removed from service and that the protective lining be inspected by an independent body. At the same time and in consideration of the inspection results, the STSB recommends clarifying whether other tank wagons with comparable protective linings may be affected and, if so, that appropriate measures be taken.</p>
<b>Addressees</b>	Bundesamt für Verkehr
<b>Stage of the implementation</b>	Partially implemented. The Federal Office of Transport (FOT) confirms that it has forwarded the interim report to the supervisory authorities concerned in NL, FR, DE and SK. It has also drawn up a range of measures to ascertain the status of the protective linings of tank wagons and to establish possible improvements thereto.
<b>Investigation report concerning the safety recommendation</b>	<u>Zwischenbericht</u> <u>Vorbericht</u> <u>Schlussbericht</u>