

OTIF



**ORGANISATION INTERGOUVERNEMENTALE POUR
LES TRANSPORTS INTERNATIONAUX FERROVIAIRES**

**ZWISCHENSTAATLICHE ORGANISATION FÜR DEN
INTERNATIONALEN EISENBAHNVERKEHR**

**INTERGOVERNMENTAL ORGANISATION FOR INTER-
NATIONAL CARRIAGE BY RAIL**

OTIF/RID/CE/GT/2009/1

11 May 2009

Original: French

RID: 10th Meeting of the Working Group on Tank and Vehicle Technology
(Brussels, 11 and 12 June 2009)

Subject: Notification of occurrence in accordance with RID 1.8.5

Information transmitted by Belgium

SUMMARY

Accident report in accordance with 1.8.5 – derailment of 3 RID tank-wagons (empty, uncleaned) – minor leakage of product – 23/1032.

Attached at annex are:

- the report in accordance with 1.8.5;
- some photos of the accident.

Observations

Derailment of a train of 30 wagons (14 wagons loaded – 9 wagons empty – 7 wagons loaded) at the exit from a marshalling yard when crossing a set of points (estimated train speed 15 km/h).

3 wagons (19th, 20th and 21st position) derailed.

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The 3 wagons were empty, uncleaned and had contained dangerous goods:
19th wagon: empty, uncleaned, had contained trimethylamine, anhydrous (23/1083)
20th wagon: empty, uncleaned, had contained dimethylamine, anhydrous (23/1032)
21st wagon: empty, uncleaned, had contained trimethylamine anhydrous (23/1083).

The cause of the derailment was located at the exit of an S curve following deceleration. The 20th wagon left the rails first and continued rolling with the 1st axle and then the 1st bogie derailed, for a distance of 865 metres and caused the wagons next to it to derail when it went over a set of points.

Causes of the derailment

A combination of the following factors led to the derailment:

- The driver applied the brakes when leaving the curve.
- The curve had a slight counter-cant and slight subsidence (although this was within the accepted margin of tolerance).
- The train did not brake uniformly because:
 - The position of the braking method levers on wagons 19 and 20 was “P”, while the entire train was braked in braking method “G”.
However, it should be noted that the regulations allow a maximum of 3 wagons to be present in braking method “P” in a train-set in braking method “G”. In this case therefore, the composition of the train was in conformity with the rules in force.
 - The brake switch on the 25th wagon (i.e. 3 wagons behind those that derailed) was in the “empty” position even though it was loaded.

Consequence of the derailment

Relatively major damage to track, sleepers and points.

19th wagon: rear bogie derailed.

20th wagon: both bogies of this wagon derailed and it tipped over $\pm 45^\circ$. There was major damage to the bogies and damage to the discharge device. The pipes for the liquid and gas phases were crushed between the bottom valves and the discharge valves. As a result, there was slight leakage (10 drops per minute) at the back of the discharge valve. The emergency services emptied the rest of the product present in the pipe and tightened all the bolts. No leakage was observed after this had been done.

21st wagon: one bogie derailed.

1. Mode	
<input checked="" type="checkbox"/> Rail Wagon number (optional): 33 80 7912 6813 (empty, uncleaned tank-wagon)	<input type="checkbox"/> Road Vehicle registration (optional):
2. Date and location of occurrence	
Year: 2008 Month: July Day: 9 Time: 10.55	
<input checked="" type="checkbox"/> Station Montzen – Borough of Plombières <input type="checkbox"/> Shunting/marshalling yard <input type="checkbox"/> Loading/unloading/transshipment site Location / Country: Borough of Plombières – Belgium or <input type="checkbox"/> Open line Description of line: Kilometres:	<input type="checkbox"/> Road <input type="checkbox"/> Built-up area <input type="checkbox"/> Loading/unloading/transshipment site <input type="checkbox"/> Open road Location / Country:
3. Topography	
<input type="checkbox"/> Gradient/incline <input type="checkbox"/> Tunnel <input type="checkbox"/> Bridge/Underpass <input type="checkbox"/> Crossing	
4. Particular weather conditions	
<input type="checkbox"/> Rain <input type="checkbox"/> Snow <input type="checkbox"/> Ice <input type="checkbox"/> Fog <input type="checkbox"/> Thunderstorm <input type="checkbox"/> Storm Temperature: ... °C	
5. Description of occurrence	
<input checked="" type="checkbox"/> Derailment/Leaving the road <input type="checkbox"/> Collision <input type="checkbox"/> Overturning/Rolling over <input type="checkbox"/> Fire <input type="checkbox"/> Explosion <input checked="" type="checkbox"/> Loss <input type="checkbox"/> Technical fault Additional description of occurrence: Wagon No. 33 80 7912 6813 derailed. A suspicious odour was noticed near the top of the wagon. The wagon, two of whose bogies derailed, lost an axle on the front bogie and the discharge device was damaged. It was noticed that a small amount of the load was leaking from the discharge device.	

6. Dangerous goods involved						
UN Num-ber ⁽¹⁾	Class	Packing Group	Estimated quantity of loss of products (kg or l) ⁽²⁾	Means of contain-ment ⁽³⁾	Means of con-tainment mate-rial	Type of failure of means of con-tainment ⁽⁴⁾
1032	2		< 333 l	7		1
(1) For dangerous goods assigned to collective entries to which special provision 274 applies, also the technical name shall be indicated.				(2) For Class 7, indicate values according to the criteria in 1.8.5.3.		
(3) Indicate the appropriate number 1 Packaging 2 IBC 3 Large packaging 4 Small container 5 Wagon 6 Vehicle 7 Tank-wagon 8 Tank-vehicle 9 Battery-wagon 10 Battery-vehicle 11 Wagon with demountable tanks 12 Demountable tank 13 Large container 14 Tank-container 15 MEGC 16 Portable tank				(4) Indicate the appropriate number 1 Loss 2 Fire 3 Explosion 4 Structural failure		

7. Cause of occurrence (if clearly known)
<input type="checkbox"/> Technical fault <input type="checkbox"/> Faulty load securing <input type="checkbox"/> Operational cause (rail operation) <input type="checkbox"/> Other:

8. Consequences of occurrence
<u>Personal injury in connection with the dangerous goods involved:</u> <input type="checkbox"/> Deaths (number:) <input type="checkbox"/> Injured (number:) <u>Loss of product:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Imminent risk of loss of product <u>Material/Environmental damage:</u> <input type="checkbox"/> Estimated level of damage ≤ 50,000 Euros <input type="checkbox"/> Estimated level of damage > 50,000 Euros <u>Involvement of authorities:</u> <input type="checkbox"/> Yes → <input type="checkbox"/> Evacuation of persons for a duration of at least three hours caused by the dangerous goods involved <input type="checkbox"/> Closure of public traffic routes for a duration of at least three hours caused by the dangerous goods involved <input checked="" type="checkbox"/> No

If necessary, the competent authority may request further relevant information.





Montzen – 09.07.2008



Loss of product