

Case Study 1 (Compulsory) (Incomplete)

An UN portable tank container is to be used to transport 20,000L of Hydrogen peroxide, aqueous solution, stabilized containing 65% hydrogen peroxide from a chemical plant in Dusseldorf, Germany to Cork, Ireland. The tank will be transported by road to the nearest rail freight hub, where it will be transferred to a railway wagon for carriage to a channel port. It will then be shipped to Dublin and on arrival in Ireland will be picked up by a road haulier for transport to the final destination

- a) What is the UN number and packing group applicable to this substance?

Ref

- b) What is the applicable tank instruction and what type of vehicle is required to carry this tank?

Ref

- c) With respect to the requirements for the tank

- i) What is the minimum test pressure?
- ii) What is the minimum thickness of the shell?
- iii) Is there a requirement to protect the pressure relief valve with a frangible (bursting) disc?
- iv) Are openings below the level of the liquid allowed?
- v) What is the maximum degree of filling allowed?

Ref

- d) i) How must the goods be identified on the transport document
- ii) What language(s) must be used on the transport document?
- iii) When empty the tank will be returned to the consignor by the consignee. What is the easiest available option for meeting the requirements for a transport document for the return?

Ref

- e) Considering the intended routing of the consignment how should the tank and carrying vehicle be placarded and plated? Explain your answer providing all applicable details and dimensions.

Ref:

- f) Will the driver collecting the tank from Dublin port be able to use the Dublin Tunnel which is rated as a Category C tunnel?

Ref:

- g) After encountering a traffic delay on the M50 due to a major accident, the driver realises that due to available Tacograph hours he will have to stop overnight on his way to Cork. What options are available to him in terms of where he can park the vehicle? It is not a sleeper cab and there are no supervised vehicle parks on the route.

Ref:

Case Study 2

800 kg of Explosive, Blasting Type B with the classification code 1.5D is to be shipped from England to Ireland packed in non-woven plastic bags

- a) i) Explain the meaning of the classification code 1.5D?
1.5

D

- ii) What UN number applies to this material?

Ref

- b) i) Do the bags need to be UN certified?

- ii) Are inner packagings required?

Ref

- c) What marks and labels need to be displayed on the bags?

Ref

- d) i) Can the shipment be carried on an EX II vehicle?

- ii) As regards requirements for electrical equipment for new vehicles what distinguishes an EX II and EX III vehicle?

Ref

- e) Will the driver be able to use the Dublin Port tunnel which is a category C tunnel?

Ref

f) Under what conditions may the goods be unloaded in a public place?

Ref

g) What is the duration of the additional specialised training that the driver must have completed?

Ref

h) i) What placards and plates that must be displayed on the carrying vehicle? Provide all relevant dimensions.

ii) Who is responsible for displaying the orange plates?

Ref

i) The transporting vehicle has a maximum permissible gross mass of 6 ton

i) What is the minimum total capacity of fire extinguishant required for the vehicle?

ii) what is the minimum number of extinguishers required?

Ref

Case Study 3

A shipment of UN 2309 in 12 x 1100L IBC (31A) is to be transported on an articulated vehicle from Italy to Ireland

a) (i) Are these IBCs allowed? Explain your answer. 7

(ii) What danger marks and labels should be applied to the IBCs? Be specific in your answer. Note. The material is not an environmentally hazardous substance

Reference(s):

b) Can a flat-bed vehicle be used to carry the consignment? Explain your answer 3

Reference

c) (i) Indicate how the dangerous goods information should be shown in the transport document 7

(ii) What language(s) should the transport document be prepared in?

(iii) The empty uncleaned IBCs are to be returned to the consignor. Can the transport document for the full IBCs be reused for the return journey? Explain your answer.

Reference:

d) During the journey the driver needs to leave the vehicle unattended and rest overnight, but does not have access to a secure depot or secure factory premises or a supervised vehicle park. What other options are available to the driver? 5

Reference

e) An Irish driver collects the trailer when it arrives off the ferry, but requires a copy of the instructions in writing in English. Who is responsible for providing him with the instructions in writing? 2

Reference:

f) Describe the orange plates that must be displayed on the transport unit when carrying the load. 2

Reference:

g) Is it necessary to carry an emergency escape mask? 2

Reference:

h) i) After unloading it is noticed that some liquid has leaked onto the floor of the trailer. Explain what actions should be taken next. 4

ii) At what point would it be necessary to submit an incident report to the national competent authority?

Reference:

i) Does the carrier need a written security plan? 3

Reference: