Paper 1 November 2021

Q1 Pasotti an Italian manufacturer produces a pesticide preparation which is classified under the WHO Recommended Classification of Pesticides as coumarin derivative pesticide, solid, toxic with the active ingredient Warfarin. 10 marks

When tested The LD_{50} oral of the 100% preparation was found to be 10 mg/kg

- (i) State the UN number of this preparation
- (ii) Does the proper shipping name need to be supplemented by a technical name? Justify your answer.
- (iii) What packing group should be assigned to the 100% preparation? Explain your answer.
- (iv) The manufacturer supplies it diluted in an inert diluent to give a concentration of 0.025%. The LD₅₀ of this solution is estimated at 8,000 mg/kg. Is this regulated for transport? Explain your answer.

Ref:

Q2A supplier in Dusseldorf, Germany wishes to ship 20,000 kg of Titanium powder, dry of
packing group III to a customer in Antwerp in Belgium.8 marks

- (i) The supplier wishes to ship in rigid plastic IBCs. Is this possible? Explain your answer.
- (ii) When preparing the to return the empty uncleaned IBCs to the supplier the customer notices that two of the IBCs have passed the due date for their next 2.5 year periodic inspection. May the customer return these IBCs to the supplier for disposal or recycling of the dangerous goods residues and if so under what restrictions?

(iii) How should this be acknowledged in the transport document?

Ref

Q3			4 marks
	(i)	May Ethyl oxalate UN2525 be transported in an ADR fixed tank?	
	(ii)	May Zinc phosphide UN1714 be carried in a UN portable tank?	
	(iii)	Who is responsible for ensuring that an exceptional check is made v the shell or equipment of a portable tank may have been impaired a	

Ref

following an accident?

Q4 What is the fixed payment penalty that may be levied in lieu of prosecution on an appointed DGSA who fails to perform their duties? 3 marks

Ref

Q5 As the appointed DGSA you are reviewing paperwork and come across the transport document (next page) from one of their suppliers. 5 marks

State 3 errors associated with the description of the goods as shown on the transport document.

		M	ULTIM	ODAL DANG	EROUS GOO	DS FORM
1. Shipper / Consignor / Sender	2. Transport document number					
Acme Chemicals			1234			
Industrial Zone		3		4. Shipper's reference		
Antwerp, Belgium			Page 1 of	l pages	01	
Dergrunn					5. Freight forwarder's	reference
6. Consignee		7. Carrier (t	to be completed by carrier))		
Chemical Distributors						
XL Industrial Estate, Dublin,						
Ireland						
nomin						
	SHIPPER'S DECLARATION I herby declare that the contents of this consignment are fully and accurately described below by the proper shipping name, and are classified, packaged, marked and labelled / placarded and are in all respects in proper condition for transport according to the applicable international and national governmental regulations.					
8. This shipment is within the limitations pre-	escribed for:	(Delete non applicable)	9. Additio	nal handling informatio	on	
PASSAGENER AND	CARGO	AIRCRAFT ONLY				
CARGO AIRCRAFT			-			
		ice of loading				
, , ,	Antwerp					
i ü	13. Destinati Dublin	on				
14. Shipping Marks	* Number ar	nd kind of packages; descr	iption of good	s Gross mass (kg)	Net mass	Cube (m3)
15. Container identification No./ 16. Seal Nu		al Number (s)	17. Container/vehicle size & type		18. Tare (kg)	19. Total gross
vehicle registration No.						mass (including
ABC123	S-40	1 Curtain		sider trailer	10,000	tare) (kg) 26,000
CONTAINER /VEHICLE PACKING CERTIFI	21. RECEIVING ORGANIZATION RECEIPT Received the above number of packages/containers/trailers in apparent good order and condition unless					
			RECEIVING ORGANIZATION REMARKS:			
20. Name of company Acme Chemicals	Haulier's name Vehicle reg. No.		22. Name of company (OF SHIPPER PREPARING THIS NOTE) Acme Chemiocals Name / status of declarant Pierre LeSaux, warehouse suprevisor			
Name / status of declarant Pierre Le Saux, warehouse sup						
Place and date Signature and Antwerp, 1 September 2021			Place and date Antwerp, 1 September 2021			
Signature of declarant DRI Dierre Le Saux		DRIVER'S SIGNATURE		Signature of declarant Dierre Le Saux		

FOR DANGEROUS GOODS: you must specify: UN No., proper shipping name, hazard class, packing group (where assigned) and any other element of information required under applicable national and international regulations

4 marks

(i) The driver of a dangerous goods vehicle asks their manager if they can have a helper to help with unloading.

Is this possible?

(ii) A colleague coming off shift asks the driver for a lift as he will be passing by his home as he makes the dangerous goods delivery. Is this allowed?

Ref

- Q7 Does a carrier require a written security plan if performing the following activities 5 marks
- (i) Carriage of 5,000 L of UN 1203 in a tank?
- (ii) Carriage of 5,000 L of UN 1202 in a tank?

Ref

- Q8 In the event of an emergency during carriage 4 marks
 - (i) what may the driver use their fire extinguishers for?
 - (ii) Can the extinguishers be use to tackle fires in the load compartment?
 - (iii) Why should the battery master switch be activated?

Ref

Q6

Q9 Flammable Aerosols are to be distributed on cardboard trays

5 marks

- (i) What is their classification code
- (ii) May they be distributed as Limited Quantities and if so under what conditions

Ref

Q10 What training is required for personnel who perform the duties of loader as defined in ADR 1.4? 2 marks

Ref