

**PRINCIPAL MARKER REPORT
ALL CLASSES IRELAND
NOVEMBER 2018**

CHARTERED INSTITUTE OF LOGISTICS AND TRANSPORT IN IRELAND

PRINCIPAL MARKER'S REPORT FORM

DANGEROUS GOODS SAFETY ADVISER EXAMINATION

SUBJECT: ALL CLASSES

PART TWO – COMMENTS MAY BE CIRCULATED

No Attempting Examination:	42
No Passing Examination:	34
% Pass Rate:	85.71%
Average Mark	40.74

A. General Comments

- The pass rate is similar to when papers with similar questions have been set in the past though the average mark improved by about 3 marks from previous occasions. No one quite achieved a 100% mark though 43% of candidates managed a score of 90% or more.
- Candidates are reminded that Packing Groups should always be written in Roman numerals and never in Arabic-style numbers.
- Candidates are reminded again that marks and labels in dangerous goods terminology are different and that they should use the correct term when describing marks and labels in their solutions. The sign for Limited Quantities, for example, is a “mark” and not a “label”.

B. Comments on Individual Questions

Please make comments as appropriate for each question.

- Q1. This was a two part question concerning the classification of solutions of caustic soda (sodium hydroxide solution). In the first part candidates were asked to classify a stronger solution of caustic soda based on the data provided. It should have been classified in Class 8, Packing Group (PG) II. As I have said many times, I always want clear evidence that candidates have used the data provided in questions. This is so that, for example, I can tell that the answer is more than a guess. 14% of candidates did not do this to my satisfaction. A similar 14% of candidates did not explain clearly why PG II applied whilst a few came up with PG III which was wrong.

In the second part, a weaker solution had no discernible effect on skin but did corrode metal, the alloy in question being stated in the question. The answer was that it now became a corrosive of Class 8, Packing Group III. Most worked this out though a few could not attempt this second part.

- Q2. This question was in three parts and concerned the Limited Quantities provisions. Candidates had to work out what was the upper limit for the capacity of the inner packagings which could be used for the substance in the question and then to state the maximum permitted gross mass for the package as a whole i.e. 30 kg. 24% of candidates failed to mention the 30 kg limit. One person thought it was 20 kg which is the limit when packed in trays.

The second part concerned the marks and labels requirements (if any) for the package. 24% of candidates did not state positively that no labels were required, only the Limited Quantities mark. Dimensions of the mark were required. 33% of candidates did not give me the minimum width of the border line linking the top and bottom parts of the Limited Quantity mark.

Perhaps more importantly, 12% of candidates did not tell me that the double-arrow orientation mark needed to be marked on opposite sides of the package as the substance was a liquid. I also expected candidates to demonstrate in their answers how they could tell that the substance was a liquid. The best way to do this from the ADR is to look at the applicable Classification Code.

- Q3. This was a three part question, the first part being based on the Mixed Packing Provisions of ADR. Most candidates identified the two substances to be packed together correctly together with the appropriate Mixed Packing Provisions (MP14 and MP15). One or two candidates mistakenly gave the wrong UN number to one of the substances i.e. UN 2949 instead of UN 2318. This led to a series of incorrect conclusions for the first and third parts of the question.

In the second short part, candidates were asked to give a further condition under which the mixed packing of the two substances is allowable. The answer is found in the Mixed Packing Provisions that “providing they do not react dangerously with each other”. For me this is a fundamental piece of health and safety, as I have remarked before when similar questions have been used. Many got it right but 19% of candidates gave some

alternative answer. A further 14% could not provide an answer, neither situation being acceptable.

Finally, candidates were asked to state the danger marks and labels to be affixed to the mixed package. 17% candidates omitted to tell me that both of the UN numbers for the substances concerned should appear on it. Most told me that two different labels were required, one for each substance but 19% of candidates did not tell me that the double-arrow orientation marks were required. What was also important for the answering of the third part of this question was that candidates should justify why the double-arrow orientation marks were needed from a close study of 5.2.1.10.1 and 5.2.1.10.2. They were needed because one of the two substances is a liquid. 62% of candidates did not provide this information.

Q4. In this question candidates were asked whether packs of button lithium ion batteries (i.e. rechargeable) could be transported as non-dangerous goods. It required candidates to discover Special Provision SP 188 and to work on what it says using data in the question, especially (a) in the SP. It provided little obstacle to most candidates though a few could not attempt it and one person thought that the question was to do with the small load exemptions of 1.1.6.3.

Q5. In the first part of this question, in two sub-parts, candidates were asked to identify a substance and then say whether it counted as High Consequence Dangerous Goods (HCDG) or not. Most identified the substance correctly but some got confused with the second part, not making the connection to the table in Chapter 1.10 listing the HCDGs and instead e.g. concluded that it must be HCDG just because the substance was in Packing Group I according to The Dangerous Goods List. I could not accept this approach. 14% of candidates could not attempt the second sub-part whilst a further 19% did not clearly state the substance was a HCDG because there is a “0” threshold for dangerous goods of the class concerned. I wanted this zero threshold to be specifically mentioned in answers.

In the second part a scenario was put forward by which candidates should recognise that an overpack had been formed by palletising the goods. A few missed the point of the question and wandered off down the tracks of what marking and labelling generally need to be put on dangerous goods packages.

The question invited candidates to “Explain your answer as fully as you can”. This would mean that they should certainly say the word “OVERPACK” should be displayed on the outside of the pallet. As part of explaining fully I would expect two further details to be stated:

- That the word OVERPACK must be written in the official language of the forwarding country and then, if that language is not one of the three official languages of the ADR, English, French or German, in one or other of these languages two. As the consignment originated in Italy, the first language it should be written in is Italian. If candidates did not actually name this language in their answers, then they were not answering the question fully and lost marks for not naming it. This criticism applies to 31% of candidates. I repeat one of my

longstanding remarks that candidates must not only be able to find the relevant provisions in the ADR but actually to apply whatever provision it actually is – after all this is what they will have to do in real life as a DGSA. 12%, incidentally, of candidates did not even say that the word “OVERPACK” should be displayed.

- The word “OVERPACK” now has to be written in letters at least 12 mm high. 40% of candidates did not state this new requirement which is no improvement on occasions when similar questions have been set.
 - Overpacks have to bear the same labels as are on the packages inside. In this case the substance concerned had a subsidiary danger of Class 3 but in the question only the primary danger label had been affixed on the outside. 45% of candidates overlooked the need for the additional subsidiary danger label.
 - The question should then have arisen in candidates’ minds as to whether the double-arrow orientation mark was also needed on the outside of the packages. As it happens, this was not necessary as the liquid dangerous good was in “single packagings” i.e. drums.
- Q6. This question concerned the Packing Instruction number for one of the Class 2 gases and then to work on that Packing Instruction to work out which of four possible containment systems, cylinders, tubes, pressure drums and bundles of cylinders could be used to transport the gas. It was well answered and seems to have posed little difficulty for most candidates.
- Q7. This was about an additional word “HOT” to be included as part of the Proper Shipping name when preparing the ADR road transport document. Most got it right but 21% of candidates thought it should be the control and emergency temperatures required for temperature controlled self-reactive substances of Class 4.1, temperature controlled organic peroxides of Class 5.2 and certain dangerous polymerizers which was incorrect in this case.
- Q8. This was a three part question about the provisions for substances of Class 6.2. In the first part candidates were asked to say what the Proper Shipping Name and UN number would be for a substance in which a Category B pathogen was present. Most got it right i.e. UN 3373 etc. but 14% went for the incorrect UN 2814. In the second part, candidates were given the name of a pathogen and to say what Category it would belong to in Class 6.2. Most also got this right.

Finally candidates were asked to state the Packing Instruction that would apply to, in effect, Category B pathogens which is P650. 26% of candidates could not do the question or gave the incorrect Packing Instruction P620.

C. Comments on Candidates' Performance (include identification of any gaps in knowledge\areas of weakness)

Any comments appear above.

D. Comments on the Marking Process