



**Economic and Social
Council**

Distr.
GENERAL

ECE/TRANS/WP.15/AC.2/2009/12
21 April 2009

ENGLISH
Original: FRENCH

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on the Transport of Dangerous Goods

Joint Meeting of Experts on the Regulations annexed to the
European Agreement concerning the International Carriage
of Dangerous Goods by Inland Waterways (ADN)
(ADN Safety Committee)

Fifteenth session
Geneva, 24-28 August 2009
Item 5 of the provisional agenda

CATALOGUE OF QUESTIONS

General objectives 1, 2, 4, 5

**Transmitted by the Central Commission for the
Navigation of the Rhine (CCNR)¹**

1. At its fourteenth session, the ADN Safety Committee, recalling that, under 8.2.2.7.2.3 of the Regulations annexed to ADN, the ADN Administrative Committee was required to prepare a catalogue of questions for the ADN examination, decided that the item should be put on the agenda for future sessions, in order to enable lists of questions to be translated and adopted progressively (ECE/TRANS/WP.15/AC.2/30, paras. 38 and 40).

¹ Distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR/ZKR/ADN/WP.15/AC.2/2009/12.

2. This document contains the lists of questions proposed by CCNR in respect of general knowledge and for the following objectives:

- Examination objective 1: General
- Examination objective 2: Construction and equipment
- Examination objective 4: Measurement techniques
- Examination objective 5: Knowledge of products

GENERAL
Examination objective 1: General

Number	Source	Correct answer
G 1001	1.2.1	B
<p>What is the abbreviation for the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways?</p>		
<p>A AITMD B ADN C ADR D RID</p>		
G 1002	1.1.2.1	D
<p>What does ADN govern?</p>		
<p>A Transport of all goods by vessel B Transport of dangerous goods by inland navigation routes for which carriage by rail or road is prohibited C Transport of dangerous goods only by tank vessels in inland navigation D The conditions in which dangerous goods may be transported on inland waterways</p>		
G 1003	2.1.1.1	D
<p>The list of classes of dangerous goods appears under which number in ADN?</p>		
<p>A 4.1 B 3.1.1 C 1.1.1.1 D 2.1.1.1</p>		
G 1004	3.2.3	A
<p>Where can you read which goods are authorized for transport in tank vessels?</p>		
<p>A In 3.2, Tables A and C B In the ship's certificate C In 3.2.2, Table B D In the definitions under 1.2.1</p>		

GENERAL
Examination objective 1: General

Number	Source	Correct answer
G 1005	8.1.2.1, 8.1.2.2 (a)	A
	Under ADN, which of the texts listed below must be on board a vessel transporting dangerous goods?	
	A ADN	
	B Only Part 7 of ADN	
	C Only Part 8 of ADN	
	D ADN, and if the shipment is taken up from rail, road or sea transport, or if at the end of the inland navigation it is transferred to such modes of transport, the corresponding texts relating to the transport of dangerous goods, i.e., RID, ADR and the IMDG Code	
G 1006	7.1.3	B
	During the transport of dangerous goods in dry cargo vessels, general service requirements apply. What numbers of ADN do such requirements appear under?	
	A 2.1.1 to 2.1.4	
	B 7.1.3.1 to 7.1.3.99	
	C 2.2.43.1 to 2.2.43.3	
	D 7.2.3.1 to 7.2.3.99	
G 1007	7.2.3	D
	During the transport of dangerous goods in tank vessels, general service requirements apply. What numbers of ADN do such requirements appear under?	
	A 2.1.1 to 2.1.4	
	B 7.1.3.1 to 7.1.3.99	
	C 2.2.43.1 to 2.2.43.3	
	D 7.2.3.1 to 7.2.3.99	
G 1008	deleted (07.06.2005) - new DC 6063	

GENERAL
Examination objective 1: General

Number	Source	Correct answer
G 1009	8.2.1, 8.6.2	C
	How do you understand the meaning of “expert” in ADN?	
	A The consignor’s safety adviser. As he or she knows the product best, that person is considered to be the expert under ADN	
	B Because of their function, members of the river police are experts under ADN	
	C A person who has a special knowledge of ADN and who can prove it by means of a certificate from a competent authority	
	D Because of their training and general knowledge, boatmasters are experts under ADN	
G 1010	8.6	C
	Where in ADN can you find models for the certificate of approval and the provisional certificate of approval?	
	A Part 1	
	B Part 2	
	C Part 8	
	D Part 9	
G 1011	8.2.1.2	C
	Who is an expert under ADN in the meaning of 8.2.1.2?	
	A The boatmaster	
	B A holder of a boatmaster’s licence	
	C A member of the crew or another person able to prove his or her knowledge by means of a certificate from a competent authority	
	D The person responsible for the cargo transfer station	
G 1012	8.2.1.4, 8.2.2.8	B
	What is the validity period of a certificate of special knowledge under ADN?	
	A 1 year	
	B 5 years	
	C 10 years	
	D Unlimited	

GENERAL
Examination objective 1: General

Number	Source	Correct answer
G 1013	1.1.2.1	C
	What is the purpose of the ADN rules?	
	A ADN contains the rules for protection of waterways against pollution	
	B ADN is exclusively for ensuring the specific safety of transport in tank vessels	
	C ADN specifies the conditions in which dangerous goods may be transported by inland navigation	
	D ADN is intended to ensure special safety for the transport of dangerous goods by road, rail or air	
G 1014	Part 9, 9.3.3	A
	Where can you find construction requirements for type N tank vessels?	
	A Part 9, in 9.3.3	
	B Part 9, in 9.1	
	C Part 9, in 9.2	
	D Part 9, in 9.1.3	
G 1015	Part 9, 9.1.3	B
	Where can you find construction requirements for the construction of dry cargo vessels?	
	A Part 9, in 9.3.3	
	B Part 9, in 9.1	
	C Part 9, in 9.2	
	D Part 9, in 9.1.3	

GENERAL**Examination objective 2: Construction and equipment**

Number	Source	Correct answer
G 2001	7.1.3.31, 7.2.3.31	C
	A vessel is loaded with dangerous goods.	
	What is the flash point of the fuel authorized for use in the on-board motors?	
	A < 23° C	
	B < 55° C	
	C ≥ 55° C	
	D ≥ 23° C	
G 2002	8.1.5.3	B
	A toximeter is required under Chapter 3.2, Table A. Must the toximeter also be on board pushed barges with no accommodation?	
	A Yes. There are no exceptions	
	B No, it is enough if the pusher tug or the vessel propelling the side-by-side formation is equipped with such equipment	
	C Yes, if the pusher tug has an engine room	
	D No, it is sufficient if the owner of the pusher tug designates a responsible person, that the person in question has such equipment and that he or she can be called quickly in case of need	
G 2003	7.1.3.31, 7.2.3.31, 9.1.0.31, 9.2.0.31, 9.3.1.31, 9.3.2.31, 9.3.3.31	A
	Which fuel is prohibited for use on board for motors?	
	A Fuel having a flash-point < 55° C	
	B Fuel having a flash-point < 65° C	
	C Fuel having a flash-point < 75° C	
	D Fuel having a flash-point < 100° C	
G 2004	9.1.0.31.2, 9.3.1.31.2, 9.3.2.31.2, 9.3.3.31.2	D
	What distance must there be from the protected area or the cargo area to the air intakes of the engines?	
	A At least 3.00 m	
	B They must be located in the protected area	
	C At least 2.50 m	
	D At least 2.00 m	

GENERAL**Examination objective 2: Construction and equipment**

Number	Source	Correct answer
G 2005	9.1.0.31.1, 9.3.1.31.1, 9.3.2.31.1, 9.3.3.31.1	C
	What is the lowest authorized temperature for the flash point of internal combustion engine fuels used on board vessels transporting dangerous goods?	
	<p>A 45° C</p> <p>B 50° C</p> <p>C 55° C</p> <p>D 60° C</p>	
G 2006	9.1.0.34.2, 9.3.1.34.2, 9.3.2.34.2, 9.3.3.34.2	C
	A vessel is subject to ADN.	
	Which of the devices below must be in the exhaust pipes?	
	<p>A A fire detector</p> <p>B A non-return valve</p> <p>C A spark arrester</p> <p>D A goose neck</p>	
G 2007	9.1.0.34.1, 9.3.1.34.1, 9.3.2.34.1, 9.3.3.34.1	A
	What is the minimum distance from the exhaust pipes to the protected area or the cargo area?	
	<p>A 2.00 m</p> <p>B 3.00 m</p> <p>C 4.00 m</p> <p>D 5.00 m</p>	
G 2008	7.1.3.41.3, 7.2.3.41.3	D
	A boiler in the engine room is fuelled with liquid fuel. What fuel is authorized?	
	<p>A Fuel with a flash point $\geq 100^\circ \text{C}$</p> <p>B Fuel with a flash point $< 100^\circ \text{C}$</p> <p>C Fuel with a flash point $< 55^\circ \text{C}$</p> <p>D Fuel with a flash point $\geq 55^\circ \text{C}$</p>	

GENERAL
Examination objective 2: Construction and equipment

Number	Source	Correct answer
G 2009	9.1.0.34.1, 9.3.1.34.1, 9.3.2.34.1, 9.3.3.34.1	A
	<p>What is the minimum distance that there must be between the engine exhaust pipes and the tank openings and cargo area?</p> <p>2.00 m 2.50 m 3.00 m 1.00 m</p>	
G 2010	9.1.0.32.1, 9.3.1.32.1, 9.3.2.32.1, 9.3.3.32.1	B
	<p>You would like to arrange an oil fuel tank in the double bottom within the hold area or in a hold space. What is the minimum depth of the tank?</p> <p>A 0.80 m B 0.60 m C 1.00 m D 0.50 m</p>	
G 2011	9.1.0.88, 9.2.0.88, 9.3.1.8, 9.3.2.8, 9.3.3.8	B
	<p>Under ADN certain vessels must be built under survey of a recognized classification society and classed by it in its highest class.</p> <p>Which vessels?</p> <p>A All vessels transporting dangerous goods B Certain double-hull vessels and all tank vessels transporting dangerous goods C All vessels transporting dangerous goods except seagoing vessels covered by chapter 9.2 D Only vessels used for the transport of chemicals</p>	
G 2012	7.1.2.5, 7.2.2.5	D
	<p>The instructions for the use of on-board devices must be in which language?</p> <p>A At least in English B In Dutch, English, German and French C In the languages of the countries where the vessel sails during the voyage D In German, French or English and, if necessary, in the language normally spoken on board</p>	

GENERAL**Examination objective 2: Construction and equipment**

Number	Source	Correct answer
G 2013	8.1.6.3	A
	Who is responsible for checking and inspecting the special equipment required by ADN?	
	A The manufacturer or a person authorized for this purpose by the authority	
	B The manufacturer, as it alone knows how the device should be checked	
	C A company or person authorized by the competent authority	
	D An independent company authorized by the manufacturer	
G 2014	8.1.5.3	B
	The special equipment required by ADN for pushed convoys or side-by-side formations must be located where?	
	A On board the vessel or the pusher tug where the dangerous goods are loaded	
	B On board the pusher tug or the vessel propelling the formation	
	C On board each unit comprising the assembly of vessels	
	D On board a pusher tug with accommodation that is part of the assembly of vessels	
G 2015	deleted (03.12.2008)	
G 2016	9.3.1.52.2, 9.3.2.52.2, 9.3.3.52.2	D
	Can accumulators be located in the protected area or the cargo area?	
	A Yes	
	B Yes, but only if they are in specially designed casings	
	C Yes, but only if they are in specially designed casings fitted with ventilation grids protected against explosions	
	D No, it is not allowed	
G 2017	1.2.1	B
	What is the meaning of a rescue winch in ADN?	
	A A portable stripping pump to make it possible to pump water out of the vessel in the event of a leak	
	B A device for hoisting persons from closed spaces such as cargo tanks	
	C A stretcher for carrying an accident victim from the vessel to land	
	D A second stripping pump permanently fixed in the engine room, capable independently of pumping water out of the vessel in the event of a leak	

GENERAL
Examination objective 2: Construction and equipment

Number	Source	Correct answer
G 2018	1.2.1	A
	ADN includes the concept of a protected area.	
	What kinds of vessels have protected areas?	
	A Dry cargo vessels	
	B Dry cargo vessels and tank vessels	
	C Pusher tugs with a certificate of approval	
	D Tank vessels	
G 2019	7.1.2.5, 7.2.2.5	D
	The instructions for the use of devices and equipment required by ADN must be on board. What language or languages must they be in?	
	A Dutch, German, English and French	
	B Dutch, German, French and Spanish	
	C Dutch and German	
	D German, French or English, and if necessary in the language normally spoken on board	
G 2020	1.2.1	D
	ADN includes the concept of a zone 0 (zero).	
	What vessels have a zone 0?	
	A Dry cargo vessels	
	B Both dry cargo vessels and tank vessels	
	C Pusher tugs that may push tank barges	
	D Tank vessels	
G 2021	1.2.1	C
	What is the meaning in ADN of a suitable escape device?	
	A A mask protecting the user's respiratory organs for escape from a danger area	
	B A mask protecting the user's eyes and ears for escape from a danger area	
	C A respiratory protection device which can be easily put on, covering the wearer's mouth, nose and eyes and for escape from a danger area	
	D A rowing boat for escape from a danger area	

GENERAL**Examination objective 2: Construction and equipment**

Number	Source	Correct answer
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G 2022 9.1.0.52, 9.3.1.52, 9.3.2.52, 9.3.3.52 A

Under ADN, where may accumulators be located?

- A On board tank vessels and dry cargo vessels, outside the cargo area and the protected area
- B On board tank vessels outside the cargo area, and on board dry cargo vessels, also in the protected area
- C On board tank vessels and dry cargo vessels, outside the cargo area and the protected area, provided they are placed in a special casing
- D On both tank vessels and dry cargo vessels, only in a special casing located directly behind the wheelhouse, on the roof of the accommodation

GENERAL
Examination objective 4: Measurement techniques

Number	Source	Correct answer
G 4001	8.1.5.1 Gas detectors and toximeters must have what documentation? A A certificate of origin B A standardized test certificate C Instructions for their use D A copy of the invoice	C
G 4002	1.2.1 On the vessel, how can you know if dangerous concentrations of toxic gases are emitted by the cargo? A With a gas detector B With a toximeter C With an oxygen meter D With daily checks	B
G 4003	8.1.6.3 Who is responsible for checking the gas detection system (explosimeter)? A The system must be checked by an ADN expert, in accordance with the manufacturer's instructions B The system does not need to be checked; it does however have to be replaced after each use C The system must be checked in accordance with the instructions of the manufacturer by the manufacturer itself or by persons authorized to do so by the competent authority D The system must be checked for proper functioning at least once a year. The check can be done by the crew	C
G 4004	Basic general knowledge How is the explosive range of a substance established? A Between the upper explosive limit and 100% in volume B Between the lower explosive limit and 10% in volume C Between the lower and upper explosive limits D Between 0% in volume and the upper explosive limit	C

GENERAL
Examination objective 4: Measurement techniques

Number	Source	Correct answer
G 4005	Basic general knowledge	A
	The explosive range of a flammable liquid is:	
	A Between the lower and upper explosive limits	
	B Above the upper explosive limit	
	C Under the lower explosive limit	
	D At the lower explosive limit	
G 4006	8.1.6.3	B
	When and by whom should the equipment referred to in 8.1.5.1 be checked?	
	A Once a year, by the manufacturer	
	B In accordance with the instructions of the manufacturer, by the manufacturer itself or by persons authorized to do so by the competent authority	
	C Once every two years, by a safety adviser	
	D Before each departure by a person who has undergone ADN training	
G 4007	deleted (01.03.2009)	
G 4008	deleted (01.03.2009)	
G 4009	Basic general knowledge	A
	What does 1 ppm mean?	
	A 1 part per million parts	
	B 1 part per mass	
	C 1 part per metric tonne	
	D 1 part per milligram	
G 4010	Basic general knowledge	A
	What happens when a gas concentration is ignited between the lower explosive limit and the upper explosive limit?	
	A An explosion	
	B Nothing at all	
	C No explosion, as the mixture is too rich	
	D No explosion, as the mixture is too lean	

GENERAL
Examination objective 4: Measurement techniques

Number	Source	Correct answer
G 4011	Basic general knowledge Following a breakage in an oxygen pipe, the oxygen concentration in a space is 30% by volume. What applies in this situation? A The situation presents no danger at all B There is a high risk of fire C The situation may be considered to be normal D The situation is highly toxic	B
G 4012	Basic general knowledge What is meant by a “lean” mixture when speaking of a risk of explosion? A There is little outside air B There is little nitrogen C There is little flammable substance D There is little oxygen	C
G 4013	Basic general knowledge A person must enter a space that has been closed for an extended period. What is the greatest danger faced by such a person? A Too many noble gases B Too little nitrogen C Too much oxygen D Too little oxygen	D
G 4014	Basic general knowledge What is the normal oxygen concentration in the ambient air? A 21% by volume B 19% by volume C 17% by volume D 15% by volume	A

GENERAL
Examination objective 4: Measurement techniques

Number	Source	Correct answer
G 4015	Basic general knowledge, 7.1.3.1.6, 7.2.3.1.6	D
	<p>It is possible to enter holds, cargo tanks and double-hull spaces safely and without a self-contained breathing apparatus when there are no dangerous goods. In such a case, what is the minimum measured oxygen level required?</p> <p>A 15%</p> <p>B 16%</p> <p>C 17%</p> <p>D 21%</p>	
G 4016	1.2.1	B
	<p>What measurement tool is used to measure toxic substances?</p> <p>A A gas detector</p> <p>B A toximeter</p> <p>C An ohmmeter</p> <p>D An oxygen meter</p>	
G 4017	1.2.1	B
	<p>Which tool is used to determine whether there is a risk of explosion?</p> <p>A A nitrogen meter</p> <p>B A flammable gas detector</p> <p>C A toximeter</p> <p>D An oxygen meter</p>	
G 4018	Basic general knowledge	C
	<p>What does the abbreviation ppm mean?</p> <p>A Per person measured</p> <p>B Propane propene measured</p> <p>C Parts per million</p> <p>D Polypropylene methyl</p>	

GENERAL**Examination objective 4: Measurement techniques**

Number	Source	Correct answer
G 4019	Basic general knowledge Certain gas samplers have a tube placed in front of them. What purpose does the tube serve? A To read the value of the maximum acceptable concentration at the work station B To read the ppm value C To collect humidity and impurities D To verify reliability	C
G 4020	Basic general knowledge How can you ensure that a sampler is still reliable? A By seeing if there has been a colour change B By seeing if it has humidity inside C By testing it D By checking whether the expiry date has passed	D
G 4021	Basic general knowledge In what unit of measurement is the risk of explosion measured? A In ppm B In percentage of volume C In micrograms D In threshold limit value at the work station	B

GENERAL
Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5001	2.1.1.1, 2.2.2 Class 2 covers which dangerous goods? A Gases B Flammable liquids C Organic peroxides D Explosive substances	A
G 5002	2.1.1.1, 2.2.2 In what class are gases? A Class 1 B Class 5.2 C Class 2 D Class 3	C
G 5003	2.1.1.1, 2.2.3 In what class are flammable liquids? A Class 6.1 B Class 3 C Class 2 D Class 8	B
G 5004	2.1.1.1, 2.2.3 What dangerous goods are in class 3? A Gases B Flammable liquids C Organic peroxides D Explosive substances	B
G 5005	2.1.1.1, 2.2.8 What is the main risk associated with a dangerous liquid of class 8? A Pressure B Flammability C Toxicity D Corrosiveness	D

GENERAL
Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5006	2.1.1.1, 2.2.52	C
	Organic peroxides are in which class?	
	A Class 4.2	
	B Class 5.1	
	C Class 5.2	
	D Class 6.2	
G 5007	2.1.1.1, 2.2.8	A
	What dangerous goods are in class 8?	
	A Corrosive substances	
	B Radioactive material	
	C Substances liable to spontaneous combustion	
	D Infectious substances	
G 5008	2.1.1.1, 2.2.62	B
	What dangerous goods are in class 6.2?	
	A Radioactive material	
	B Infectious substances	
	C Substances liable to spontaneous combustion	
	D Substances which, in contact with water, emit flammable gases	
G 5009	2.1.1.1, 2.2.3	B
	What is the main risk associated with a dangerous liquid of class 3?	
	A Pressure	
	B Flammability	
	C Toxicity	
	D Radioactivity	

GENERAL
Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5010	2.1.1.1, 2.2.61	B
	What is the main risk of a flammable liquid of class 6.1?	
	A Flammability	
	B Toxicity	
	C Corrosiveness	
	D Radioactivity	
G 5011	2.1.2.1, Table A	B
	Under ADN, can dangerous goods present several different risks?	
	A No	
	B Yes	
	C No, there are no goods with several risks in ADN	
	D No, ADN always cites only the main risk	
G 5012	1.2.1	B
	What is the self-ignition temperature?	
	A The temperature of a liquid at which a mixture of gases above the liquid can be lit	
	B The temperature of a hot surface at which a vapour/air mixture ignites	
	C The temperature at which a substance explodes	
	D The lowest temperature at which a substance may be ignited when supplied with a great deal of oxygen	
G 5013	1.2.1	A
	What is the flash point?	
	A The lowest temperature at which a flammable liquid forms so much flammable vapour that it can be ignited by a flame	
	B The temperature at which a substance ignites on its own	
	C The temperature at which a substance explodes	
	D The lowest temperature at which a substance ignites on its own when supplied with a great deal of oxygen	

GENERAL
Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5014	3.3.1, special provision 598	B
	<p>You are ordered to take a load of old automobile batteries; they are empty, but not cleaned. Are these dangerous goods?</p> <p>A No, batteries are not dangerous goods B Yes, empty <u>unc</u>cleaned batteries are dangerous goods C No, empty <u>unc</u>cleaned batteries are not dangerous goods D No, when empty <u>unc</u>cleaned batteries are packed in special containers, they are <u>not</u> dangerous goods</p>	
G 5015	Basic general knowledge	B
	<p>Why is flammable dust particularly dangerous?</p> <p>A Mainly because of its toxicity B Because if stirred, it may produce a dust explosion C The dust can cause a breakdown in the air conditioning D Dust acts like any other flammable substance</p>	
G 5016	Basic general knowledge	D
	<p>What does toxicity mean?</p> <p>A Ignition of a substance B Combustion of a substance C The maximum amount of a substance that can be inhaled per hour D Toxicity of a substance</p>	
G 5017	Basic general knowledge	C
	<p>How does UN No. 1203, PETROL, act when heated?</p> <p>A It solidifies B Heating does not change the liquid's volume C It expands D It concentrates</p>	

GENERAL
Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5018	2.2.2.1.3	C
	<p>In class 2, what is the meaning of the letters TF after a number (for example, UN No. 1053, HYDROGEN SULPHIDE, class 2, 2 TF)?</p> <p>A Chemically unstable, toxic B Not flammable, toxic C Toxic, flammable D No special meaning</p>	
G 5019	2.2.61.1.4	A
	<p>What is the degree of danger of a substance of class 6.1, packing group II?</p> <p>A Toxic B Harmful to health C Highly toxic D Corrosive</p>	
G 5020	2.2.3.1.3	C
	<p>What do packing groups I, II and III mean for substances of class 3?</p> <p>A They indicate the miscibility with water B They provide information on the required danger labels C They indicate the degree of danger D They provide information on the appropriate means with which to extinguish a fire</p>	
G 5021	1.2.1, 2.2.3.1.3	D
	<p>What is the meaning of packing group I for substances of class 3?</p> <p>A Substance without subsidiary risk B Substance presenting low danger C Substance presenting medium danger D Substance presenting high danger</p>	

GENERAL
Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5022	1.2.1, 2.2.8.1.3	A
	What is the meaning of packing group III for substances of class 8?	
	A Slightly corrosive substance	
	B Substance without subsidiary risk	
	C Corrosive substance	
	D Highly corrosive substance	
G 5023	Basic general knowledge	B
	What danger is produced by a leak of the following gases when they are heavily cooled and liquefied: helium, nitrogen, carbon dioxide?	
	A Production of gaseous mixtures with a risk of spontaneous combustion	
	B Danger of asphyxia for humans and animals	
	C Increase of the risk of fire	
	D Production of flammable gases through the effect of cooling	
G 5024	3.2, Table A	C
	Which of the following gases is flammable?	
	A UN No. 1066, NITROGEN, class 2, 1A	
	B UN No. 1006, ARGON, class 2, 1A	
	C UN No. 1978, PROPANE, class 2, 2F	
	D UN No. 2451, NITROGEN TRIFLUORIDE, class 2, 2TO	
G 5025	2.1.1.1, 2.2.51	D
	What is the main danger posed by a hazardous substance of class 5.1?	
	A Danger of radiation	
	B Danger of self-ignition	
	C Danger of intoxication	
	D Oxidizing substances	

GENERAL
Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5026	Basic general knowledge	A
	What is the significant characteristic of PROPANE, ARGON and CARBON DIOXIDE?	
	A Heavier than air	
	B Toxic	
	C Heavier than water	
	D Readily flammable	
G 5027	2.1.1.1, 2.2.8	B
	What is the main risk associated with a dangerous liquid of class 8?	
	A Flammability	
	B Corrosiveness	
	C Toxicity	
	D Explosiveness	
G 5028	2.1.1.1, 2.2.61	A
	Which ADN class contains substances whose main risk is toxicity?	
	A Class 6.1	
	B Class 2	
	C Class 3	
	D Class 5.1	
G 5029	2.1.1.1, 2.2.51	B
	Which ADN class contains substances whose main risk is oxidization?	
	A Class 2	
	B Class 5.1	
	C Class 3	
	D Class 4.2	
G 5030	2.1.1.1, 2.2.9	C
	Which dangerous goods are in class 9?	
	A Radioactive material	
	B Gases	
	C Miscellaneous dangerous substances and articles	
	D Organic peroxides	

GENERAL
Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5031	2.1.1.1, 2.2.8 Which dangerous goods are in class 8? A Corrosive substances B Toxic substances C Oxidizing substances D Radioactive material	A
G 5032	2.1.1.1, 2.2.7 Which dangerous goods are in class 7? A Organic peroxides B Radioactive material C Explosive substances D Infectious substances	B
G 5033	2.1.1.1, 2.2.62 Which dangerous goods are in class 6.2? A Flammable liquids B Toxic substances C Infectious substances D Corrosive substances	C
G 5034	2.1.1.1, 2.2.61 Which dangerous goods are in class 6.1? A Gases B Flammable liquids C Corrosive substances D Toxic substances	D
G 5035	2.1.1.1, 2.2.52 Which dangerous goods are in class 5.2? A Organic peroxides B Miscellaneous dangerous substances and articles C Gases D Corrosive substances	A

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Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5036	2.1.1.1, 2.2.51	B
	Which dangerous goods are in class 5.1?	
	A Substances liable to spontaneous combustion	
	B Oxidizing substances	
	C Flammable solids	
	D Flammable liquids	
G 5037	2.1.1.1, 2.2.43	C
	Which dangerous goods are in class 4.3?	
	A Organic peroxides	
	B Corrosive substances	
	C Substances which, in contact with water, emit flammable gases	
	D Gases	
G 5038	2.1.1.1, 2.2.42	B
	Which dangerous goods are in class 4.2?	
	A Radioactive material	
	B Substances liable to spontaneous combustion	
	C Flammable solids	
	D Flammable liquids	
G 5039	2.1.1.1, 2.2.41	D
	Which dangerous goods are in class 4.1?	
	A Substances liable to spontaneous combustion	
	B Flammable liquids	
	C Oxidizing substances	
	D Flammable solids	

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Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5040	2.1.1.1, 2.2.2	B
	Which dangerous goods are in class 2?	
	A Miscellaneous dangerous substances and articles	
	B Gases	
	C Radioactive material	
	D Organic peroxides	
G 5041	2.1.1.1, 2.2.3	C
	Which dangerous goods are in class 3?	
	A Substances liable to spontaneous combustion	
	B Flammable solids	
	C Flammable liquids	
	D Oxidizing substances	
G 5042	2.1.1.1, 2.2.3	A
	Flammable liquids should be assigned to which class?	
	A Class 3	
	B Class 4.1	
	C Class 6.1	
	D Class 8	
G 5043	2.1.1.1, 2.2.7	C
	Radioactive material should be assigned to which class?	
	A Class 6.1	
	B Class 8	
	C Class 7	
	D Class 9	
G 5044	2.1.1.1, 2.2.8	B
	Bases and acids should be assigned to which class?	
	A Class 9	
	B Class 8	
	C Class 5.2	
	D Class 4.3	

GENERAL
Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5045	3.2, table A or C UN No. 1134, CHOLOROBENZENE, is a dangerous substance of A Class 3 B Class 6.1 C Class 7 D Class 8	A
G 5046	Basic general knowledge Compared with the density of air, the density of liquid vapours is most often A The same B Higher C Lower D None of the above answers is correct	B
G 5047	Basic general knowledge What is the latin name of oxygen? A Ferrum B Hydrogenium C Nitrogenium D Oxygenium	D
G 5048	Basic general knowledge What is the meaning of "N" in chemical formulas? A Carbon B Nitrogen C Hydrogen D Oxygen	B
G 5049	Basic general knowledge What is the symbol of carbon? A C B H C K D O	A

GENERAL
Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5050	Basic general knowledge	C
	What is the meaning of the boiling point of a liquid?	
	A The pressure of the liquid at 100° C	
	B The quantity of liquid that has reached the boiling point	
	C The temperature at which, at atmospheric pressure, the liquid passes entirely to the vapour state	
	D The temperature of a liquid at which a flammable mixture may form at its surface	
G 5051	Basic general knowledge	C
	The state (solid, liquid, gas) of a substance depends on what?	
	A Density	
	B Composition	
	C Pressure and temperature	
	D Viscosity	
G 5052	Basic general knowledge	C
	What is the meaning of the boiling point of a liquid?	
	A The pressure of the liquid at 100° C	
	B The quantity of liquid that has reached the boiling point	
	C The temperature at which, at a pressure of 100 kPa (1 bar), the liquid passes to the vapour state	
	D The volume of the liquid at a temperature of 100° C and a pressure of 100 kPa (1 bar)	
G 5053	Basic general knowledge	D
	The passage from a liquid to a gaseous form is known as:	
	A Condensation	
	B Fusion	
	C Sublimation	
	D Evaporation	

GENERAL
Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5054	Basic general knowledge What does oxidize mean? A Combination of a substance with oxygen B Combination of a substance with nitrogen C Addition of oxygen D Addition of nitrogen	A
G 5055	Basic general knowledge What often provokes polymerization? A An inhibitor B An excess of nitrogen C An increase in temperature D A decrease in temperature	C
G 5056	Basic general knowledge When, in a tank, the vapour over a liquid is in a state of equilibrium with the liquid, the vapour is said to be saturated. What happens when the temperature decreases? A Part of the vapour condenses B Part of the vapour solidifies C Part of the vapour freezes D Part of the vapour evaporates	A
G 5057	Basic general knowledge Flammable liquids are categorized in particular by their flashpoints. Substances in which flashpoint group are the most readily flammable? A Under 23° C B From 23° C to 60° C C From 60° C to 100° C D Over 100° C	A

GENERAL
Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5058	Basic general knowledge, 1.2.1 How is the flashpoint indicated? A In °C B In g C In m ³ D In %	A
G 5059	Basic general knowledge What is the meaning of the coefficient of cubic expansion of a liquid? A Value of volume expansion of the liquid per °C B Value of the increase in weight of the liquid C Increase in vapour pressure of the liquid D Amount of vapour over the liquid	A
G 5060	Basic general knowledge Where does the evaporation of a liquid occur? A Directly on the surface of the liquid B 20 cm over the surface of the liquid C 30 cm over the surface of the liquid D 40 cm over the surface of the liquid	A
G 5061	Basic general knowledge What is the meaning of the term “viscosity” of a liquid? A Density B Colour C Miscibility D Internal friction	D
G 5062	Basic general knowledge What is the internal friction of a liquid called? A Density B Elasticity C Homogeneity D Viscosity	D

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Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5063	Basic general knowledge	C
	What generally happens when the temperature of a substance increases?	
	A The speed of the molecules decreases	
	B The speed of the molecules remains the same	
	C The speed of the molecules increases	
	D The speed of the molecules constantly varies between fast and slow	
G 5064	Basic general knowledge	A
	At what temperature is the kinetic energy of the molecules at zero?	
	A -273° C	
	B 212 K	
	C 273 K	
	D -100° C	
G 5065	Basic general knowledge	B
	To avoid polymerization of certain goods, a substance is added. What is the substance?	
	A A base	
	B An inhibitor	
	C A catalyser	
	D A peroxide	
G 5066	Basic general knowledge	B
	What is the mass of 1 m ³ of pure water at 4° C?	
	A 900 kg	
	B 1,000 kg	
	C 1,100 kg	
	D 1,200 kg	

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Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5067	Basic general knowledge At what temperature does 1m ³ of pure water have a mass of 1,000 kg? A 0° C B 4° C C 15° C D 20° C	B
G 5068	Basic general knowledge Why is nitrogen a problematic gas? A Because it is flammable B Because it is light C Because it is odourless D Because it is corrosive	C
G 5069	Basic general knowledge Why should gas clouds initially be avoided? A Because they always contain an explosive mixture B Because they lower the oxygen content C Because they are always flammable D Because they are always toxic	B
G 5070	Basic general knowledge Which of the substances below may be absorbed by the body through the skin and pose a health risk? A Benzene B Butane C Castor oil D Water	A

GENERAL
Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5071	Basic general knowledge	D
	When skin enters into contact with one of the substances below, serious injuries result. Which substance?	
	A Diesel fuel	
	B Motor spirit or gasoline or petrol	
	C Toluene	
	D Sulphuric acid	
G 5072	Basic general knowledge	C
	Which of the substances below is an inert gas?	
	A Ozone	
	B Air	
	C Nitrogen	
	D Oxygen	
G 5073	Basic general knowledge	A
	To avoid polymerization, what should be added?	
	A An inhibitor	
	B A catalyser	
	C A peroxide	
	D Heat and light	
G 5074	Basic general knowledge	A
	A strong acid would have which pH?	
	A 0 to 3	
	B 7	
	C 8 to 10	
	D 4 to 6	
G 5075	2.1.1.1	B
	What substances are in class 5.1?	
	A Radioactive materials	
	B Oxidizing substances	
	C Corrosive substances	
	D Infectious substances	

GENERAL
Examination objective 5: Knowledge of products

Number	Source	Correct answer
G 5076	Basic general knowledge What is polymerization? A A kind of polyester B A physical reaction C A chemical reaction D A catalyser	C
G 5077	3.2, table A UN No. 1230, METHANOL, is flammable, but also poses a subsidiary risk. The subsidiary risk is under which class? A Class 5.2 B Class 6.1 C Class 6.2 D Class 8	B
G 5078	2.1.1.1, 2.2.1 Explosive substances and articles are in which class? A Class 1 B Class 4.1 C Class 5.2 D Class 6.1	A
