|  |  |  |
| --- | --- | --- |
|  | **INF.10** | |
| **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)**  **Thirtieth session**  Geneva, 23–27 January 2017 Item 4 (d) of the provisional agenda  **Implementation of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN):**  **training of experts** | | English  10 January 2017 |

Summary document for the catalogue of questions "Gas"

Transmitted by the Central Commission for the Navigation of the Rhine

1. The informal working group on the training of experts was mandated by the ADN Safety Committee to revise and adapt the catalogue of questions to the 2017 edition of ADN. At the end of this work, a catalogue of questions in three parts "General", "Gas" and "Chemicals" has been prepared, which can be found respectively in documents ECE/TRANS/WP.15/AC.2/2017/1, ECE/TRANS/WP.15/AC.2/2017/2 and ECE/TRANS/WP.15/AC.2/2017/3

2. In order to document these changes, the informal working group provides in the annex to the present document a summary of the status of work on the catalogue of questions.

3. These summaries present the correct response to each question, the reference in the ADN (source) and the date that the question was deleted or added.

4. The informal working group on the training of experts

(a) Invites the ADN Safety Committee to take note of the summaries concerning the status of work on the catalogue of questions and

(b) Recommends that they be published on the websites of the UNECE and CCNR.

| Number | Source | Response | Remarks | Dealt with on |
| --- | --- | --- | --- | --- |
| **Knowledge of physics and chemistry** |  |  |  |  |
|  |  |  |  |  |
| **Objective 1.1** |  |  |  |  |
|  |  |  |  |  |
| 231 01.1-01 | Boyle-Mariotte law: *pV*=constant | C |  | 28.09.2016 |
| 231 01.1-02 | Boyle-Mariotte law: *pV*=constant | C |  | 28.09.2016 |
| 231 01.1-03 | Boyle-Mariotte law: *pV*=constant | B |  | 28.09.2016 |
| 231 01.1-04 | Boyle-Mariotte law: *pV*=constant | A |  | 28.09.2016 |
| 231 01.1-05 | Boyle-Mariotte law: *pV*=constant | B |  | 28.09.2016 |
| 231 01.1-06 | Gay-Lussac law: p/T=constant | C |  | 28.09.2016 |
| 231 01.1-07 | Gay-Lussac law: p/T=constant | D |  | 28.09.2016 |
| 231 01.1-08 | Gay-Lussac law: p/T=constant | B |  | 28.09.2016 |
| 231 01.1-09 | Gay-Lussac law: p/T=constant | C |  | 28.09.2016 |
| 231 01.1-10 | Gay-Lussac law: p/T=constant | B |  | 28.09.2016 |
|  |  |  |  |  |
| **Objective 1.2** |  |  |  |  |
|  |  |  |  |  |
| 231 01.2-01 | Fundamental law of gases: *pV/T*=constant | A |  | 28.09.2016 |
| 231 01.2-02 | Fundamental law of gases: *pV/T*=constant | B |  | 28.09.2016 |
| 231 01.2-03 | Fundamental law of gases: *pV/T*=constant | D |  | 28.09.2016 |
| 231 01.2-04 | Fundamental law of gases: *pV/T*=constant | C |  | 28.09.2016 |
| 231 01.2-05 | Fundamental law of gases: *pV/T*=constant | D |  | 28.09.2016 |
| 231 01.2-06 | Fundamental law of gases: *pV/T*=constant | B |  | 28.09.2016 |
| 231 01.2-07 | Fundamental law of gases: *pV/T*=constant | A |  | 28.09.2016 |
| 231 01.2-08 | Fundamental law of gases: *pV/T*=constant | B |  | 28.09.2016 |
| 231 01.2-09 | Fundamental law of gases: *pV/T*=constant | A |  | 28.09.2016 |
| 231 01.2-10 | Fundamental law of gases: *pV/T*=constant | C |  | 28.09.2016 |
|  |  |  |  |  |
| **Objective 2.1** |  |  |  |  |
|  |  |  |  |  |
| 231 02.1-01 | Partial pressure – definitions | B |  | 28.09.2016 |
| 231 02.1-02 | Partial pressure – definitions | C |  | 28.09.2016 |
| 231 02.1-03 | *ptot = ∑pi and Vol.-%  = pi x 100/ ptot* | D |  | 28.09.2016 |
| 231 02.1-04 | *ptot = ∑pi and Vol.-%  = pi x 100/ ptot* | C |  | 28.09.2016 |
| 231 02.1-05 | *ptot = ∑pi and Vol.-%  = pi x 100/ ptot* | B |  | 28.09.2016 |
| 231 02.1-06 |  |  | deleted | 06.06.2011 |
| 231 02-1-07 | *ptot = ∑pi and Vol.-%  = pi x 100/ ptot* | B |  | 28.09.2016 |
| 231 02.1-08 | *ptot = ∑pi and Vol.-%  = pi x 100/ ptot* | C |  | 28.09.2016 |
| 231 02.1-09 | *ptot = ∑pi and Vol.-%  = pi x 100/ ptot* | D |  | 28.09.2016 |
|  |  |  |  |  |
| **Objective 2.2** |  |  |  |  |
|  |  |  |  |  |
| 231 02.2-01 | *ptot = ∑pi and Vol.-%  = pi x 100/ ptot and p \* V  = constant* | B |  | 28.09.2016 |
| 231 02.2-02 | *ptot = ∑pi and Vol.-%  = pi x 100/ ptot and p \* V  = constant* | D |  | 28.09.2016 |
| 231 02.2-03 | *ptot = ∑pi and Vol.-%  = pi x 100/ ptot and p \* V  = constant* | B |  | 28.09.2016 |
| 231 02.2-04 | *ptot = ∑pi and Vol.-%  = pi x 100/ ptot and p \* V  = constant* | D |  | 28.09.2016 |
| 231 02.2-05 | *ptot = ∑pi and Vol.-%  = pi x 100/ ptot and p \* V  = constant* | A |  | 28.09.2016 |
| 231 02.2-06 | *ptot = ∑pi and Vol.-%  = pi x 100/ ptot and p \* V  = constant* | C |  | 28.09.2016 |
| 231 02.2-07 | *ptot = ∑pi and Vol.-%  = pi x 100/ ptot and p \* V  = constant* | C |  | 28.09.2016 |
| 231 02.2-08 | Characteristics of substances | D |  | 28.09.2016 |
|  |  |  |  |  |
| **Objective 3.1** |  |  |  |  |
|  |  |  |  |  |
| 231 03.1-01 | 1 kmol ideal gas = 24 m3 at 100 kPa and 25 °C, quantity of substance = M \*mass [kg] | B |  | 28.09.2016 |
| 231 03.1-02 | 1 kmol ideal gas = 24 m3 at 100 kPa and 25 °C, quantity of substance = M \*mass [kg] | A |  | 28.09.2016 |
| 231 03.1-03 | 1 kmol ideal gas = 24 m3 at 100 kPa and 25 °C, quantity of substance = M \*mass [kg] | B |  | 28.09.2016 |
| 231 03.1-04 | 1 kmol ideal gas = 24 m3 at 100 kPa and 25 °C, quantity of substance = M \*mass [kg] | A |  | 28.09.2016 |
| 231 03.1-05 | 1 kmol ideal gas = 24 m3 at 100 kPa and 25 °C, quantity of substance = M \*mass [kg] | B |  | 28.09.2016 |
| 231 03.1-06 | 1 kmol ideal gas = 24 m3 at 100 kPa and 25 °C, quantity of substance = M \*mass [kg] | C |  | 28.09.2016 |
| 231 03.1-07 | 1 kmol ideal gas = 24 m3 at 100 kPa and 25 °C, quantity of substance = M \*mass [kg] | B |  | 28.09.2016 |
| 231 03.1-08 | 1 kmol ideal gas = 24 m3 at 100 kPa and 25 °C, quantity of substance = M \*mass [kg] | D |  | 28.09.2016 |
| 231 03.1-09 | 1 kmol ideal gas = 24 m3 at 100 kPa and 25 °C, quantity of substance = M \*mass [kg] | C |  | 28.09.2016 |
| 231 03.1-10 | 1 kmol ideal gas = 24 m3 at 100 kPa and 25 °C, quantity of substance = M \*mass [kg] | C |  | 28.09.2016 |
|  |  |  |  |  |
| **Objective 3.2** |  |  |  |  |
|  |  |  |  |  |
| 231 03.2-01 | *m = 0,12 \* p \* M \* V / T* | B |  | 28.09.2016 |
| 231 03.2-02 | *m = 0,12 \* p \* M \* V / T* | A |  | 28.09.2016 |
| 231 03.2-03 | *m = 0,12 \* p \* M \* V / T* | B |  | 28.09.2016 |
| 231 03.2-04 | *m = 0,12 \* p \* M \* V / T* | C |  | 28.09.2016 |
| 231 03.2-05 | *m = 0,12 \* p \* M \* V / T* | A |  | 28.09.2016 |
| 231 03.2-06 | *m* = 0,12 *\* p \* M \* V / T* or *p = m \* T / ( 0,12 \* M \* V )* | D |  | 28.09.2016 |
| 231 03.2-07 | *m* = 0,12 *\* p \* M \* V / T* or *p = m \* T / ( 0,12 \* M \* V )* | D |  | 28.09.2016 |
| 231 03.2-08 | *m* = 0,12 *\* p \* M \* V / T* or *p = m \* T / ( 0,12 \* M \* V )* | C |  | 28.09.2016 |
| 231 03.2-09 | *m* = 0,12 *\* p \* M \* V / T* or *p = m \* T / ( 0,12 \* M \* V )* | D |  | 28.09.2016 |
| 231 03.2-10 | *m* = 0,12 *\* p \* M \* V / T* or *p = m \* T / ( 0,12 \* M \* V )* | D |  | 28.09.2016 |
|  |  |  |  |  |
| **Objective 4.1** |  |  |  |  |
|  |  |  |  |  |
| 231 04.1-01 | *m = ρt1 \* Vt1 = ρt2 \* Vt2 (with tables)* | C |  | 06.06.2011 |
| 231 04.1-02 | *m = ρt1 \* Vt1 = ρt2 \* Vt2 (with tables)* | B |  | 06.06.2011 |
| 231 04.1-03 | *m = ρt1 \* Vt1 = ρt2 \* Vt2 (with tables)* | C |  | 06.06.2011 |
| 231 04.1-04 | *m = ρt1 \* Vt1 = ρt2 \* Vt2 (with tables)* | B |  | 06.06.2011 |
| 231 04.1-05 | *m = ρt1 \* Vt1 = ρt2 \* Vt2 (with tables)* | B |  | 06.06.2011 |
| 231 04.1-06 | *m = ρt1 \* Vt1 = ρt2 \* Vt2 (with tables)* | C |  | 06.06.2011 |
| 231 04.1-07 | *m = ρt1 \* Vt1 = ρt2 \* Vt2 (with tables)* | C |  | 06.06.2011 |
| 231 04.1-08 | *m = ρt1 \* Vt1 = ρt2 \* Vt2 (with tables)* | B |  | 06.06.2011 |
| 231 04.1-09 | *m = ρt1 \* Vt1 = ρt2 \* Vt2 (with tables)* | C |  | 06.06.2011 |
| 231 04.1-10 | *m = ρt1 \* Vt1 = ρt2 \* Vt2 (with tables)* | B |  | 06.06.2011 |
|  |  |  |  |  |
| **Objective 4.2** |  |  |  |  |
|  |  |  |  |  |
| 231 04.2-01 |  |  | deleted (2011) | 06.06.2011 |
| 231 04.2-02 |  |  | deleted (2011) | 06.06.2011 |
| 231 04.2-03 |  |  | deleted (2011) | 06.06.2011 |
| 231 04.2-04 |  |  | deleted (2011) | 06.06.2011 |
| 231 04.2-05 |  |  | deleted (2011) | 06.06.2011 |
| 231 04.2-06 |  |  | deleted (2011) | 06.06.2011 |
| 231 04.2-07 |  |  | deleted (2011) | 06.06.2011 |
| 231 04.2-08 |  |  | deleted (2011) | 06.06.2011 |
| 231 04.2-10 |  |  | deleted (2011) | 06.06.2011 |
| 231 04.2-09 |  |  | deleted (2011) | 06.06.2011 |
|  |  |  |  |  |
| **Objective 5** |  |  |  |  |
|  |  |  |  |  |
| 231 05.0-01 | Critical pressure and temperature | A |  | 28.09.2016 |
| 231 05.0-02 | Critical pressure and temperature | C |  | 28.09.2016 |
| 231 05.0-03 | Critical pressure and temperature | B |  | 28.09.2016 |
| 231 05.0-04 | Critical pressure and temperature | A |  | 28.09.2016 |
|  |  |  |  |  |
| **Objective 6.1** |  |  |  |  |
|  |  |  |  |  |
| 231 06.1-01 | Polymerization | C |  | 06.06.2011 |
| 231 06.1-02 | Polymerization | A |  | 30.09.2014 |
| 231 06.1-03 | Polymerization | B |  | 06.06.2011 |
| 231 06.1-04 | Polymerization | B |  | 30.09.2014 |
| 231 06.1-05 | Polymerization | D |  | 30.09.2014 |
|  |  |  |  |  |
| **Objective 6.2** |  |  |  |  |
|  |  |  |  |  |
| 231 06.2-01 | 3.2.3.2, Table C | C |  | 30.09.2014 |
| 231 06.2-02 | Polymerization | C |  | 30.09.2014 |
| 231 06.2-03 | Polymerization | D |  | 28.09.2016 |
| 231 06.2-04 | Polymerization | A |  | 06.06.2011 |
| 231 06.2-05 | 3.2.3.2, Table C | A |  | 30.09.2014 |
| 231 06.2-06 | 3.2.3.2, Table C | D |  | 28.09.2016 |
| 231 06.2-07 | Polymerization | B |  | 30.09.2014 |
| 231 06.2-08 |  |  | deleted (2007) | 06.06.2011 |
| 231 06.2-09 | Polymerization | C |  | 06.06.2011 |
|  |  |  |  |  |
| **Objective 7.1** |  |  |  |  |
|  |  |  |  |  |
| 231 07.1-01 | Vapour pressure | A |  | 06.06.2011 |
| 231 07.1-02 | Vapour pressure | B |  | 30.09.2014 |
| 231 07.1-03 | Vapour pressure | C |  | 30.09.2014 |
| 231 07.1-04 | Vapour pressure | D |  | 06.06.2011 |
| 231 07.1-05 | Vapour pressure | A |  | 06.06.2011 |
| 231 07.1-06 | Vapour pressure | B |  | 06.06.2011 |
| 231 07.1-07 | Vapour pressure | C |  | 06.06.2011 |
| 231 07.1-08 | Vapour pressure | D |  | 06.06.2011 |
| 231 07.1-09 | Vapour pressure | A |  | 06.06.2011 |
| 231 07.1-10 | Vapour pressure | B |  | 28.09.2016 |
| 231 07.1-11 | Influence on the cargo of an increase in temperature | B |  | 28.09.2016 |
| 231 07.1-12 | Change in cargo temperature, general knowledge | B |  | 28.09.2016 |
| 231 07.1-13 | Characteristics of substances, 1.2.1 | A |  | 30.09.2014 |
| 231 07.1-14 | Characteristics of substances | B |  | 30.09.2014 |
|  |  |  |  |  |
| **Objective 7.2** |  |  |  |  |
|  |  |  |  |  |
| 231 07.2-01 |  |  | deleted (2007) | 06.06.2011 |
| 231 07.2-02 |  |  | deleted (2007) | 06.06.2011 |
| 231 07.2-03 | Increase in temperature in the cargo tank | C |  | 28.09.2016 |
| 231 07.2-04 | Pressure in the cargo tank | D |  | 28.09.2016 |
| 231 07.2-05 | Behaviour of pressure in the cargo tank | C |  | 28.09.2016 |
| 231 07.2-06 | Behaviour of pressure in the cargo tank | D |  | 28.09.2016 |
| 231 07.2-07 |  |  | deleted (2007) | 06.06.2011 |
| 231 07.2-08 | Vapour saturation pressure | B |  | 28.09.2016 |
| 231 07.2-09 | Liquefying of gas | A |  | 28.09.2016 |
|  |  |  |  |  |
| **Objective 8.1** |  |  |  |  |
|  |  |  |  |  |
| 231 08.1-01 | Saturation vapour pressure, depending on composition | B |  | 06.06.2011 |
| 231 08.1-02 | Saturation vapour pressure, depending on composition | C |  | 06.06.2011 |
| 231 08.1-03 | Saturation vapour pressure, depending on composition | A |  | 06.06.2011 |
| 231 08.1-06 |  |  | deleted (2007) | 06.06.2011 |
| 231 08.1-04 |  |  | deleted (2007) | 06.06.2011 |
| 231 08.1-05 |  |  | deleted (2007) | 06.06.2011 |
|  |  |  |  |  |
| **Objective 8.2** |  |  |  |  |
|  |  |  |  |  |
| 231 08.2-01 | Health risks | C |  | 06.06.2011 |
| 231 08.2-02 | Health risks | B |  | 06.06.2011 |
| 231 08.2-03 | Health risks | B |  | 06.06.2011 |
| 231 08.2-04 | Health risks | C |  | 06.06.2011 |
| 231 08.2-05 | Health risks | A |  | 13.09.2012 |
| 231 08.2-06 | Hazard characteristics | C |  | 13.09.2012 |
| 231 08.2-07 | Hazard characteristics | C |  | 30.09.2014 |
| 231 08.2-08 | Hazard characteristics | C |  | 30.09.2014 |
| 231 08.2-09 | Characteristics of substances | D |  | 30.09.2014 |
| 231 08.2-10 | Characteristics of substances | C |  | 30.09.2014 |
| 231 08.2-11 | Characteristics of substances | A |  | 28.09.2016 |
|  |  |  |  |  |
| **Objective 9** |  |  |  |  |
|  |  |  |  |  |
| 231 09.0-01 | Polymerization | A |  | 06.06.2011 |
| 231 09.0-02 | Molecular mass | D |  | 30.09.2014 |
| 231 09.0-03 | Molecular mass | C |  | 30.09.2014 |
| 231 09.0-04 | Molecular mass | B |  | 30.09.2014 |
| 231 09.0-05 | Molecular mass | A |  | 30.09.2014 |
| 231 09.0-06 |  |  | deleted (2007) | 06.06.2011 |
| 231 09.0-07 |  |  | deleted (2007) | 06.06.2011 |
| 231 09.0-08 | Molecular mass | A |  | 30.09.2014 |
|  |  |  |  |  |
| **Practice** |  |  |  |  |
|  |  |  |  |  |
| **Objective 1.1** |  |  |  |  |
|  |  |  |  |  |
| 232 01.1-01 | Flushing in the event of a change of cargo | C |  | 28.09.2016 |
| 232 01.1-02 | Flushing in the event of a change of cargo | C |  | 28.09.2016 |
| 232 01.1-03 | Flushing in the event of a change of cargo | A |  | 28.09.2016 |
| 232 01.1-04 | Flushing in the event of a change of cargo | A |  | 28.09.2016 |
| 232 01.1-05 | Flushing in the event of a change of cargo | D |  | 28.09.2016 |
| 232 01.0-06 | 9.3.1.21.12 | C |  | 28.09.2016 |
|  |  |  |  |  |
| **Objective 1.2** |  |  |  |  |
|  |  |  |  |  |
| 232 01.2-01 | Addition of air to the cargo | D |  | 06.06.2011 |
| 232 01.2-02 | Addition of air to the cargo | C |  | 28.09.2016 |
| 232 01.2-03 | Addition of air to the cargo | B |  | 06.06.2011 |
| 232 01.2-04 | Addition of air to the cargo | B |  | 28.09.2016 |
| 232 01.2-05 | Addition of air to the cargo | C |  | 28.09.2016 |
|  |  |  |  |  |
| **Objective 1.3** |  |  |  |  |
|  |  |  |  |  |
| 232 01.3-01 | Methods for flushing (degassing) | D |  | 28.09.2016 |
| 232 01.3-02 | Methods for flushing (degassing) | D |  | 28.09.2016 |
| 232 01.3-03 | Methods for flushing (degassing) | C |  | 06.06.2011 |
| 232 01.3-04 | Methods for flushing (degassing) | A |  | 06.06.2011 |
| 232 01.3-05 | Flushing (degassing) at the same time as repairs | B |  | 06.06.2011 |
| 232 01.3-06 | Flushing (degassing) in connection with repair work | C |  | 06.06.2011 |
| 232 01.3-07 | Flushing (degassing) in connection with entry into the cargo tanks | B |  | 06.06.2011 |
| 232 01.3-08 | Longitudinal flushing | C |  | 06.06.2011 |
| 232 01.3-09 |  |  | deleted (2007) | 06.06.2011 |
|  |  |  |  |  |
| **Objective 2** |  |  |  |  |
|  |  |  |  |  |
| 232 02.0-01 |  |  | deleted (2010) | 06.06.2011 |
| 232 02.0-02 |  |  | deleted (2010) | 06.06.2011 |
| 232 02.0-03 | Flushing/rinsing of test tubes | D |  | 06.06.2011 |
| 232 02.0-04 | Flushing/rinsing of test tubes | A |  | 06.06.2011 |
| 232 02.0-05 | Sampling during longitudinal flushing | C |  | 06.06.2011 |
| 232 02.0-06 |  |  | deleted (2007) | 06.06.2011 |
| 232 02.0-07 | 7.2.4.1.1 Storage of samples in test tubes | A |  | 30.09.2014 |
| 232 02.0-08 | Flushing of the cargo tanks | C |  | 06.06.2011 |
| 232 02.0-09 |  |  | deleted (2007) | 06.06.2011 |
| 232 02.0-10 | Taking of samples | B |  | 06.06.2011 |
|  |  |  |  |  |
| **Objective 3** |  |  |  |  |
|  |  |  |  |  |
| 232 03.0-01 | Definition of explosive limit | A |  | 06.06.2011 |
| 232 03.0-02 | Definition of explosive limit | C |  | 28.09.2016 |
| 232 03.0-03 | Definition of explosive limit | D |  | 06.06.2011 |
| 232 03.0-04 | Definition of explosive limit | D |  | 28.09.2016 |
| 232 03.0-05 | Definition of explosive limit | A |  | 06.06.2011 |
| 232 03.0-06 | Critical dilution rate | B |  | 30.09.2014 |
| 232 03.0-07 | Critical dilution rate | C |  | 30.09.2014 |
| 232 03.0-08 | Risk of explosion | B |  | 06.06.2011 |
| 232 03.0-09 | Explosive limit and static electricity | D |  | 06.06.2011 |
|  |  |  |  |  |
| **Objective 4** |  |  |  |  |
|  |  |  |  |  |
| 232 04.0-01 | Imminent hazards | A |  | 06.06.2011 |
| 232 04.0-02 | Delayed effect | B |  | 06.06.2011 |
| 232 04.0-03 | Anaesthetizing effect | D |  | 06.06.2011 |
| 232 04.0-04 | Definition of the maximum workplace concentration | C |  | 06.06.2011 |
| 232 04.0-05 | Definition of the maximum workplace concentration | C |  | 06.06.2011 |
| 232 04.0-06 | Exceeding the maximum workplace concentration | B |  | 06.06.2011 |
| 232 04.0-07 | Maximum workplace concentration – odour threshold | A |  | 06.06.2011 |
| 232 04.0-08 |  |  | deleted (2007) | 06.06.2011 |
| 232 04.0-09 | Asphyxiation | C |  | 06.06.2011 |
|  |  |  |  |  |
| **Objective 5.1** |  |  |  |  |
|  |  |  |  |  |
| 232 05.1-01 | Measuring gas concentration | D |  | 06.06.2011 |
| 232 05.1-02 | Measuring gas concentration | A |  | 06.06.2011 |
| 232 05.1-03 | Measuring gas concentration | B |  | 06.06.2011 |
| 232 05.1-04 | Measuring gas concentration | C |  | 06.06.2011 |
| 232 05.1-05 | Measuring gas concentration | D |  | 13.09.2012 |
| 232 05.1-06 | Measuring gas concentration | A |  | 06.06.2011 |
| 232 05.1-07 | Measuring gas concentration | B |  | 28.09.2016 |
| 232 05.1-08 | Measuring gas concentration | C |  | 28.09.2016 |
| 232 05.1-09 | Measuring gas concentration | B |  | 28.09.2016 |
| 232 05.1-10 | Measuring gas concentration | D |  | 13.09.2012 |
|  |  |  |  |  |
| **Objective 5.2** |  |  |  |  |
|  |  |  |  |  |
| 232 05.2-01 | Measuring gas concentration | A |  | 28.09.2016 |
| 232 05.2-02 | Measuring gas concentration | D |  | 06.06.2011 |
| 232 05.2-03 | Measuring gas concentration | A |  | 06.06.2011 |
| 232 05.2-04 | Measuring gas concentration | D |  | 06.06.2011 |
| 232 05.2-05 | Measuring gas concentration | A |  | 06.06.2011 |
| 232 05.2-06 | Measuring gas concentration | D |  | 13.09.2012 |
| 232 05.2-07 | Measuring gas concentration | A |  | 06.06.2011 |
| 232 05.2-08 | Measuring gas concentration | A |  | 30.09.2014 |
| 232 05.2-09 | Measuring gas concentration | B |  | 06.06.2011 |
| 232 05.2-10 |  |  | deleted (2007) | 06.06.2011 |
|  |  |  |  |  |
| **Objective 6** |  |  |  |  |
|  |  |  |  |  |
| 232 06.0-01 | Measuring gas concentration | B |  | 06.06.2011 |
| 232 06.0-02 | Measuring gas concentration | A |  | 13.09.2012 |
| 232 06.0-03 |  |  | deleted (2007) | 06.06.2011 |
| 232 06.0-04 | Measuring gas concentration | C |  | 30.09.2014 |
| 232 06.0-05 | Measuring gas concentration | A |  | 30.09.2014 |
| 232 06.0-06 | 7.2.3.1.6 | D |  | 13.09.2012 |
| 232 06.0-07 | Measuring gas concentration | D |  | 28.09.2016 |
| 232 06.0-08 | 7.2.3.1.6 | C |  | 06.06.2011 |
| 232 06.0-09 | Measuring gas concentration | C |  | 13.09.2012 |
| 232 06.0-10 | Loading and unloading, 3.2.3, Table C | D | deleted (2016) | 28.09.2016 |
|  |  |  |  |  |
| **Objective 7** |  |  |  |  |
|  |  |  |  |  |
| 232 07.0-01 | Measuring gas concentration | B |  | 30.09.2014 |
| 232 07.0-02 | Measuring gas concentration | B |  | 13.09.2012 |
| 232 07.0-03 | 8.3.5 | C |  | 28.09.2016 |
| 232 07.0-04 | 8.3.5 | A |  | 13.09.2012 |
| 232 07.0-05 | 8.3.5 | D |  | 13.09.2012 |
| 232 07.0-06 | 8.3.5 | A |  | 13.09.2012 |
| 232 07.0-07 | 7.2.3.1.5 | A |  | 13.09.2012 |
| 232 07.0-08 | 8.3.5 | A |  | 13.09.2012 |
| 232 07.0-09 | 8.3.5 | C |  | 13.09.2012 |
| 232 07.0-10 | 8.3.5 | D |  | 13.09.2012 |
|  |  |  |  |  |
| **Objective 8** |  |  |  |  |
|  |  |  |  |  |
| 232 08.0-01 | 1.2.1 | C |  | 06.06.2011 |
| 232 08.0-02 | Degree of filling | D |  | 06.06.2011 |
| 232 08.0-03 | Degree of filling | C |  | 06.06.2011 |
| 232 08.0-04 | Degree of filling | A |  | 06.06.2011 |
| 232 08.0-05 | Degree of filling | B |  | 06.06.2011 |
| 232 08.0-06 | Degree of filling | A |  | 30.09.2014 |
| 232 08.0-07 | Overfilling | C |  | 06.06.2011 |
| 232 08.0-08 | 9.3.1.21.1 | D |  | 28.09.2016 |
| 232 08.0-09 | 9.3.1.21.1 | A |  | 06.06.2011 |
| 232 08.0-10 | Degree of filling | B |  | 06.06.2011 |
| 232 08.0-11 | 7.2.4.16.16 | B |  | 28.09.2016 |
| 232 08.0-12 | 7.2.4.16.17 | A |  | 28.09.2016 |
| 232 08.0-13 | 7.2.4.16.17 | C |  | 28.09.2016 |
|  |  |  |  |  |
| **Objective 9** |  |  |  |  |
|  |  |  |  |  |
| 232 09.0-01 | Safety against bursts in the piping | A |  | 13.09.2012 |
| 232 09.0-02 | Safety against bursts in the piping | C |  | 06.06.2011 |
| 232 09.0-03 | Safety against bursts in the piping | D |  | 06.06.2011 |
| 232 09.0-04 | Safety against bursts in the piping | B |  | 06.06.2011 |
| 232 09.0-05 | Safety against bursts in the piping | A |  | 06.06.2011 |
| 232 09.0-06 | 9.3.1.21.9 | A |  | 06.06.2011 |
| 232 09.0-07 | 7.2.2.21 | B |  | 06.06.2011 |
| 232 09.0-08 | 7.2.2.21 | C |  | 13.09.2012 |
| 232 09.0-09 | Rapid closing system | D |  | 13.09.2012 |
| 232 09.0-10 | Rapid closing system | A |  | 13.09.2012 |
| 232 09.0-11 | 9.3.1.21.11 | D |  | 28.09.2016 |
| 232 09.0-12 | Treatment of the cargo, 9.3.1.24.1 (b) | B |  | 30.09.2014 |
|  |  |  |  |  |
| **Objective 10** |  |  |  |  |
|  |  |  |  |  |
| 232 10.0-01 | Unloading of the cargo | C |  | 06.06.2011 |
| 232 10.0-02 | Unloading of the cargo | D |  | 06.06.2011 |
| 232 10.0-03 | Unloading of the cargo | A |  | 06.06.2011 |
| 232 10.0-04 | Deck pumps | B |  | 06.06.2011 |
| 232 10.0-05 | Compressors | C |  | 06.06.2011 |
| 232 10.0-06 | Compressors | D |  | 06.06.2011 |
| 232 10.0-07 | Deck pumps | A |  | 06.06.2011 |
| 232 10.0-08 | Compressors | C |  | 06.06.2011 |
| 232 10.0-09 | Compressors | B |  | 06.06.2011 |
|  |  |  |  |  |
| **Emergency measures** |  |  |  |  |
|  |  |  |  |  |
| **Objective 1.1** |  |  |  |  |
|  |  |  |  |  |
| 233 01.1-01 | Liquefied gas on skin | B |  | 06.06.2011 |
| 233 01.1-02 | Liquefied gas on skin | A |  | 06.06.2011 |
| 233 01.1-03 | Liquefied gas on skin | C |  | 06.06.2011 |
| 233 01.1-04 | Liquefied gas on skin | D |  | 06.06.2011 |
|  |  |  |  |  |
| **Objective 1.2** |  |  |  |  |
|  |  |  |  |  |
| 233 01.2-01 | Breathing in gas | C |  | 06.06.2011 |
| 233 01.2-02 | Breathing in gas | D |  | 06.06.2011 |
| 233 01.2-03 | Breathing in gas | A |  | 06.06.2011 |
| 233 01.2-04 | Breathing in gas | B |  | 06.06.2011 |
| 233 01.2-05 | Breathing in gas | B |  | 06.06.2011 |
|  |  |  |  |  |
| **Objective 1.3** |  |  |  |  |
|  |  |  |  |  |
| 233 01.3-01 | Emergency assistance, general | A |  | 06.06.2011 |
| 233 01.3-02 | Emergency assistance, general | C |  | 06.06.2011 |
| 233 01.3-03 | Emergency assistance, general | C |  | 06.06.2011 |
| 233 01.3-04 | Emergency assistance, general | D |  | 06.06.2011 |
|  |  |  |  |  |
| **Objective 2.1** |  |  |  |  |
|  |  |  |  |  |
| 233 02.1-01 | Leak in a connection | A |  | 06.06.2011 |
| 233 02.1-02 | Leak in a connection | B |  | 06.06.2011 |
| 233 02.1-03 | Leak in a connection | C |  | 06.06.2011 |
|  |  |  |  |  |
| **Objective 2.2** |  |  |  |  |
|  |  |  |  |  |
| 233 02.2-01 | Fire in the engine room | C |  | 30.09.2014 |
| 233 02.2-02 | Fire in the engine room | A |  | 06.06.2011 |
| 233 02.2-03 | Fire in the engine room | C |  | 30.09.2014 |
|  |  |  |  |  |
| **Objective 2.3** |  |  |  |  |
|  |  |  |  |  |
| 233 02.3-01 | Hazards in the vicinity of the vessel | B |  | 06.06.2011 |
| 233 02.3-02 | Hazards in the vicinity of the vessel | A |  | 30.09.2014 |
| 233 02.3-03 | Hazards in the vicinity of the vessel | B |  | 30.09.2014 |
| 233 02.3-04 | Safety requirements, 7.2.4.16.17 | A |  | 30.09.2014 |
|  |  |  |  |  |
| **Objective 2.4** |  |  |  |  |
|  |  |  |  |  |
| 233 02.4-01 | Over-filling | A |  | 06.06.2011 |
| 233 02.4-02 | Over-filling | A |  | 06.06.2011 |
| 233 02.4-03 | Over-filling | D |  | 06.06.2011 |
|  |  |  |  |  |
| **Objective 2.5** |  |  |  |  |
|  |  |  |  |  |
| 233 02.5-01 | Polymerization | C |  | 06.06.2011 |
| 233 02.5-02 | Polymerization | B |  | 06.06.2011 |
| 233 02.5-03 | Polymerization | D |  | 06.06.2011 |