



International standard

EUMOS40607-1

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Eumos qualified expert

In general cargo securing and transport packaging, minimum requirements

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1. Introduction

Cargo securing and transport packaging are very important aspects for the safety of cargo transport on European roads. Many standards deal with minimum requirements for the cargo securing system or minimum requirements for specific technical aspects of cargo securing or transport packaging.

Proper cargo securing and transport packaging can only be achieved if all people involved in the process of packing goods for transport, receive proper initial training and update training. This training is done by a training provider that should be a Eumos qualified expert. The evaluation of the theoretical and practical skills related to transport packaging and cargo securing of such training providers is done by Eumos.

The evaluation of packing goods for transport is not always straight forward. Evaluation requires theoretical and practical knowledge and experience and should be done by experts in the applicable domain. They should know the chain of transport and should be aware of the risks that might occur. Within the scope of this standard, experts capable of dealing with complex situations are called qualified experts.

This Eumos standard describes the minimum requirements to become a Eumos qualified expert. These minimum requirements are limited to scientific and technical knowledge and to practical experience; they do not include an evaluation of the quality management system the expert is using. Neither do the requirements include the evaluation of legal procedures in the country or countries involved. Eumos qualified experts can apply for further certification according to ISO/IEC 17024:2012 at an institution in their own country or another EU member state.

2. Scope

This standard is applicable for all individuals willing to become a Eumos qualified expert in general cargo securing and transport packaging.

General cargo securing is limited to cargo securing for normal road transport on vehicles with a maximum allowed mass between 3.5tonnes and 44tonnes, for transport on vessels on inland water ways and sea, for transport on trains. Exceptional road transport and transport by plane are not included.

Transport packaging is, within the scope of this standard limited to all methods of packaging of goods that are not transported under

- the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR);
- the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN);

- the Regulations concerning the International Carriage of Dangerous Goods by Rail (RID);
- the International Maritime Dangerous Goods Code (IMDG)

3. Minimum requirements

The minimum requirements to become a Eumos qualified expert are:

1. Give evidence of at least five years of practical experience in the logistics sector or at least two years of experience after the completion of an official bachelor training.
2. Pass the examination (cfr. paragraph 4 of this standard) on knowledge of standards related to cargo securing and transport packaging.
3. Pass the examination (cfr. paragraph 5 of this standard) on scientific, theoretical and practical knowledge related to general cargo securing and transport packaging.
4. Pass the examination (cfr. paragraph 6 of this standard) on practical skills related to general cargo securing and transport packaging.

The evidence required under point 1 above can be provided by a written declaration signed by the applicant and two references.

The three examinations are organised on a regular basis by Eumos. Dates and registration procedure are announced on the Eumos website. An applicant that passes the three examinations can become a Eumos qualified expert for a period of 3 years starting from the date of the examination on practical skills.

4. Examination on standards

- 4.1. The examination can be written, or oral, or mixed. If not specified in the announcement of the examination, the examination will be in writing. A written examination can include the use of a computer system. The applicant can request an oral examination for medical reasons. This should be requested at least two months beforehand.
- 4.2. The type of questions is not specified beforehand. It can be open questions, multiple choice, etc.
- 4.3. The address of the examinations is indicated in the announcement. If not stated otherwise, examinations take place in the Eumos registered offices in Brussels.
- 4.4. All applicants should arrive on the address of the examination on the time as indicated in the announcement. If not indicated, they should be there at 9.00AM. Applicants who arrive late can be refused participation.

- 4.5. All applicants should show an identity card or any other unique identification document and should provide evidence that the registration fee has been paid in order to be allowed to enter the examination premises.
- 4.6. The applicant can bring an official printed copy of the standards mentioned under point 4.11 to the examination and use this copy for reference.
- 4.7. The examination is in the English language unless stated otherwise in the announcement.
- 4.8. A written examination will not take more than four hours. The actual limit of the duration is communicated at the start of the examination.
- 4.9. Any consultation of other people or other documents than the copies of the standards and any attempt to do so, will be considered as fraud. At least one person appointed by Eumos will supervise the examination. In case the supervisor detects fraud, the examination of all candidates involved is stopped immediately, the candidates fail and are refused for three years. The decision of the supervisor cannot be discussed.
- 4.10. The examination is corrected by a jury appointed by Eumos. The minimum level to pass is 75%. Each applicant will receive a conclusion “passed” or “failed”. This conclusion cannot be discussed. However each applicant can participate an unlimited number of times.
- 4.11. The examination is on the contents, the interpretation and the practical application of the standards:
 - EN12195-1
 - EN12195-2
 - EN12195-3
 - EN12195-4
 - EN12640
 - EN12641-1 and 2
 - EN12642
 - Eumos 40509
 - Eumos 40511
 - ISO 1496

5. Examination on scientific, theoretical and practical knowledge

- 5.1 Paragraphs 4.1 to 4.10 also apply for the examination on scientific, theoretical and practical knowledge related to general cargo securing and transport packaging.
- 5.2 The scientific part of the examination will be on
 - the laws of Newton in mechanics
 - the basic principles of friction and friction measurement.

- packaging materials and methods

5.3 The theoretical and practical part will be a judgement on practical cases presented by a description, by pictures, by a video, in real life or a combination of these methods. Cases can include the three modes of transport (road, water, train) and can include all types of transport packaging including crates, IBC's, stretch film, shrink film, straps, interlayer sheets, ...

The aspects that might be important in these practical cases are

5.3.1 The vehicle structure

- Vehicle superstructure
- Curtains
- Lashing Points
- Poles
- Specific Equipment
- Containers and swap bodies

5.3.2 Transport packaging and load unit rigidity

- Packaging materials
- Packaging methods
- Stability testing methods

5.3.3 Securing equipment

- Friction enlarging equipment
- Lashing equipment
- Chains
- Cables and ropes
- Blocking bars
- Dunnage material
- Corner protections
- Nets and Covers
- Other equipment

5.3.4 Securing methods

- General principles
- Locking
- Local Blocking
- Overall Blocking
- Direct Lashing
- Top-over Lashing

- Combination of methods

5.3.5 Calculation of load securing

Calculations and number of lashings including friction forces, blocking forces, lashing forces and possible combinations

5.3.6 Check of Cargo securing

- Quick inspection
- Detailed inspection
- Certificates related to cargo securing and packaging

5.3.7 Good practices for specific cargo

- coils
- trees
- vehicles
- ...

5.4 The judgement on the cases presented should refer to the standards indicated under paragraph 4.11 and to requirements mentioned in the EU regulation 2014/47. Aspects in the presented cases that might cause safety risks should be included in the answers. The applicant should deal with missing data in a proper way.

5.5 Other requirements are:

- The judgement should be neutral. It should not be in favour of one of the parties involved in planning, packaging, preparing, loading, transporting, unloading or other.
- The judgement should be described in a consistent and professional way and refer to data and facts.

5.6 The examinations described in paragraph 4 and 5 can be combined on one single day.

6. Examination on practical skills

6.1 Applicants for this examination should have passed the examinations described under paragraphs 4 and 5.

6.2 Paragraphs 4.4, 4.5, 4.6 and 4.9 are also applicable for the examination on practical skills related to general cargo securing and transport packaging.

6.3 The examination is oral. The language of communication is English unless otherwise agreed upon beforehand.

6.4 The address of the examinations is agreed upon beforehand. In most cases the examination will be on the premises of a logistics services provider.

6.5 The duration of the oral examination will not be longer than 4 hours.

6.6 Applicants should wear clothing appropriate to secure cargo and they should bring personal safety protection such as safety glasses, safety shoes and gloves.

6.7 Applicants will not be allowed to drive forklift trucks, operate packaging machinery and similar. They will instruct a skilled operator to do so. The operator can refuse instructions if they include unacceptable safety risks. Applicants might have to position anti slip mats, apply lashings, corner protections, ... as a part of the examination.

6.8 All instructions and actions of the applicant are evaluated by at least one examiner. This examiner will evaluate the applicant and conclude "passed" or "failed". This conclusion cannot be discussed. However each applicant can participate an unlimited number of times.

7. Exclusion criteria

The Eumos qualified expert shall be

- Neutral
- Fair
- Professional
- Reliable

If not, he or she does no longer fulfil the requirements to be a Eumos qualified expert.

8. Consequences

All applicants that fulfil the minimum requirements described in paragraph 3, will receive a document stating they fulfil the requirements to be a Eumos qualified expert.

A Eumos qualified expert can apply to become a Eumos expert member as defined in the Eumos statutes.

A Eumos qualified expert is allowed to use the Eumos qualified Eumos logo and is allowed to call himself a Eumos qualified expert.

Eumos qualified experts will be listed on the Eumos website.