BELGISCH VERPAKKINGSINSTITUUT

B.V.I.

DATUM: Brussels, 20th of June 1995.

RAPPORT Nr.:

SVD/hv/G-95.106/0615

VOORWERP:

Tests on wooden boxes (4D) intended to be used for the transport of dangerous goods of

the packaging group II and III.

AANVRAGER:

CLIP-LOK FORESCO N.V.

Diksmuidestraat 64

2300 TURNHOUT

The use of the boxes is submitted to the autorisation of the competent authority. (ADR-RID, IMDG, ICAO)

ing. M. WITTEBOLLE Technical Director

Sabine VAN DAEL Dangerous Goods Department

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BELGISCH VERPAKKINGSINSTITUUT

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96.14

MINISTRY OF TRANSPORT AND INFRASTRUCTURE CO-ORDINATION COMMISSION FOR THE TRANSPORT OF DANGEROUS GOODS

CERTIFICATE OF APPROVAL

The packaging of type 4D wooden box manufactured by CLIP-LOK FORESCO N.V.- TURNHOUT (B) and described in report nº G-95.106 issued by IBE-BVI is accepted for the transport by land (road and rail), by sea and by air of dangerous goods mentioned in following annex, within the limits prescribed in that annex.

Type-series packagings shall in every way be in conformity with the approved design type described in the above mentioned report and successfully pass all the tests specified in :

- the IMDG-Code, Annex I the European ADR-Agreement, appendix A5
- the International RID-Regulation, appendix V
- the ICAO Technical Instructions, part 7.

These packagings shall bear the following identification marking:



The identification marking shall be indelible and prefarably inscribed on one of the lateral sides of the packaging. The affixing of the marking shall not weaken the strength of the packaging.

^(*) The two last digits of the year of manufacture. Packagings of types 1H and 3H shall also be appropriately marked with the month of manufacture; this may be marked on the packaging in a different place from the remainder of the marking.

Association same feet increase

Vereniging zonder winstgevend doel

Report G-95.106/2

REPORT G-95.106

I. Presented packages

<u>Typ of box</u>: Multiplex wooden box conform the description (4D) as mentioned in the different regulations.

Description of the samples :

Multiplex wooden boxes (dimensions : 966 x 871 x 967 mm), manufactured following the plan m CLF5027B.

The boxes are foreseen with 28 plastic boxes (dimensions: 395 x 295 x 145 mm). Content of the plastic boxes: 50 pieces of 25mm cartridges.

The cartridges describe a short track number 280 (see drawing 217143), are placed in polystyrene and belong to class 1 Y3° 1.4G 0425.

Each box is closed by means of 24 clips of the type "Clip-Lok" (see specifications) and marked with the logo.

Total weight : 240 kg

Total weight of the sample : 240 kg

Number of received samples :

8 packagings ready for shipment

Association sans but lugratif

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II. Test programme

Performance tests for wooden boxes (4D) prescribed by : __

- UN Part 9

- IMDG Annex I paragraph 8 ICAO Part 7 chapter 4 ADR-RID Appendix V (A5)

1. Drop test

Filling material : see point I (inner packaging)
Number of tested packagings : 5

Drop height : 1,2 m

Drop orientation :

first drop : flat on the top second drop : flat on the bottom

third drop: flat on the longest side fourth drop: flat on the shortest side fifth drop: on a corner

Criterion

No important deterioration of the box, no loss of the contents.

2. Stacking test

Filling material : see point I (inner packaging)

Number of tested samples : 3

Stacking height : 3 m

Duration of the test : 24 hours

Stacking load :

(3000/967) - 1) x 240 = 505 kg

Criterion

No deteriorations which could adversely affect transport safety,

No distortion liable to reduce the strength of the box or to cause unstability in a stack of packages.

Association sans but lucratif

Report G-95.106/4

III. Results of the tests

1. Drop test

No important deterioration of the box, no loss of the contents.

2. Stacking test

No test sample shows any deterioration which could adversely affect transport safety. No distortion liable to reduce the strength of the box or to cause unstability in a stack of packages.

V. Conclusions

The presented packagings have successfully met the performance tests prescribed for the transport of dangerous goods of the packaging groups II and III and may be used in connection with the following conditions :

maximal stacking height : 3 m
 maximal total weight : 240 kg

All other conditions of use are not covered by this report.

The packagings may only be used for the transport of dangerous goods by road, rail, sea or air with the agreement of the concerned competent authority.

Sabine VAN DAEL

Dangerous Goods Department

Report G-95.106/5

Brussels, the 20th of June 1995.

REPORT G-95.106

The use of the UN mark hereafter, is still submitted to the authorization of the competent authority.

The hereafter mentioned packagings :

- wooden boxes (4D)

that are the subject of report:

- G-95.106 of the 20th of June 1995

may obtain the hereafter mentioned UN mark:

u 4D/Y 240/S/* *: B/CLIE - ** **:

year of manufacture

registration number to be delivered by the authority

as far as the use of the above mentioned packagings in the IMDG, ICAO and ADR-RID prescriptions is provided for.

The stacking test was effectuated for a stacking height of 3 m.

Gross weight: 240 kg

Firm:

CLIP-LOK FORESCO N.V.

Diksmuidestraat 64

2300 TURNHOUT

Sabine VAN DAEL

Dangerous Goods Department

The closing devices of the approved packagings shall be in accordance with those described in the report and bear the following identification mark:

If the closing devices are manufactured by subcontractors, the manufacturer to whom the certificate of approval was assigned remains directly responsible for the conformity of the whole packaging.

Any alteration of the above mentioned packaging (including the closing devices) or of it operating conditions implies the automatic cancellation of this certificate.

The Commission reserves at any time the right to invalidate this certificate.

Special requirements:

ter packaging and cushioning material must be at least as efficient as those described in the report.

Annex: 3 pages

Brussels, 26th of July, 1995.

For the Administration of Transport,

Chief of District of the Maritime Inspectorate,

for the Civil Aviation Administration,

Ir. Cl. RENARD

Ir. M. BROUCKE

Ing. P. LECOMTE

Adresses:

CLIP-LOK INTERNATIONAL

Central Office

Europlaza Hoogoorddreef 54 E

NL-1101 BE AMSTERDAM ZO

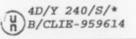
Ministère des Communications Commission de coordination des transports

de marchandises dangereuses

Ministerie van Verkaerswezen Coordinatiecommissie voor het vervoer van gevaarlijke goederen 96.14

UN marking

Road and rail transport



Substances accepted for carriage and

conditions for packing

class 3, 4.1, 4.2, 4.3, 5.1, 5.2, 6.1, 8 and 9

2300 to $2312,\ 2400$ to $2412,\ 2430$ to $2442,\ 2470$ to $2482,\ 2500$ to $2512,\ 2550$ to $2559,\ 2600$ to $2612,\ 2800$ to $2812,\ 2900$ to 2912 (ADR)

see marginal

300 to $312,\ 400$ to $412,\ 430$ to $442,\ 470$ to $482,\ 500$ to $512,\ 550$ to $559,\ 600$ to $612,\ 800$ to $812,\ 900$ to 912 (RID)

Substances are allowed if the following conditions are fulfilled :

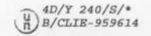
Classification under the letters	max. relative density	max. vapour pressure at 50° C (kPa)	max. gross mass (kg)
a			
b			240
c			240

Other class

See ADR or RID



ANNEX TO THE CERTIFICATE OF APPROVAL



FOR SEATRANSPORT

General conditions

- This packaging may only be used for the products for which this packaging is allowed in the IMDG-code and under the conditions specified in that code.
- The product may not attack the packaging (nor the closing devices).
- For products of class 1, the packaging shall also be approved by the "Ministry of Economic Affaires, Administration of the Mines, Belgian service of Explosives, J.A. de Motstraat 30, 1040 Brussels".
- The manufacturer must inform the user of the packaging and all persons, responsable for the loading and the stowing of the ship, of the conditions specified in this certificate.
- All accidents or events that may influence the security adversely during loading, during the voyage or during the unloading of the ship, shall reported to the Belgian Maritime Inspectorate.





AUTHORIZED GOODS AND PRESCRIPTIONS FOR THE TRANSPORT BY AIR

 Combination packagings (outer packagings with inner packagings) and single packagings to be used for the transport of solids:

Classes 1*, 2, 3, 4, 5, 8 and 9: Division 6.1

All the products authorized for transport by air according to table 2-14 of the ICAO Technical Instructions and for the maximum net quantities indicated in that table. The type of packaging covered by the certificate of approval (1A2, 4C1 and so on ...) must conform to the appropriate packaging instructions detailled in Part 3 of the ICAO Technical Instructions.

See part 3, Chapter 1 and Part 4, Chapters 2 and 3 of the ICAO Technical Instructions about the general packaging instructions, the marking and label specifications.

- products classified in the packing group(s) II and III
- gross mass authorized per package <=240 kg
- For this class, the package must also be approved by the : Ministry of Economic Affairs Bestuur van het Mijnwezen/Administration des Mines Service des Explosifs/Dienst der Springstoffen rue J.A. de Motstraat 30 1040 - BRUSSELS
- 2. Single packagings to be used for the transport of liquids

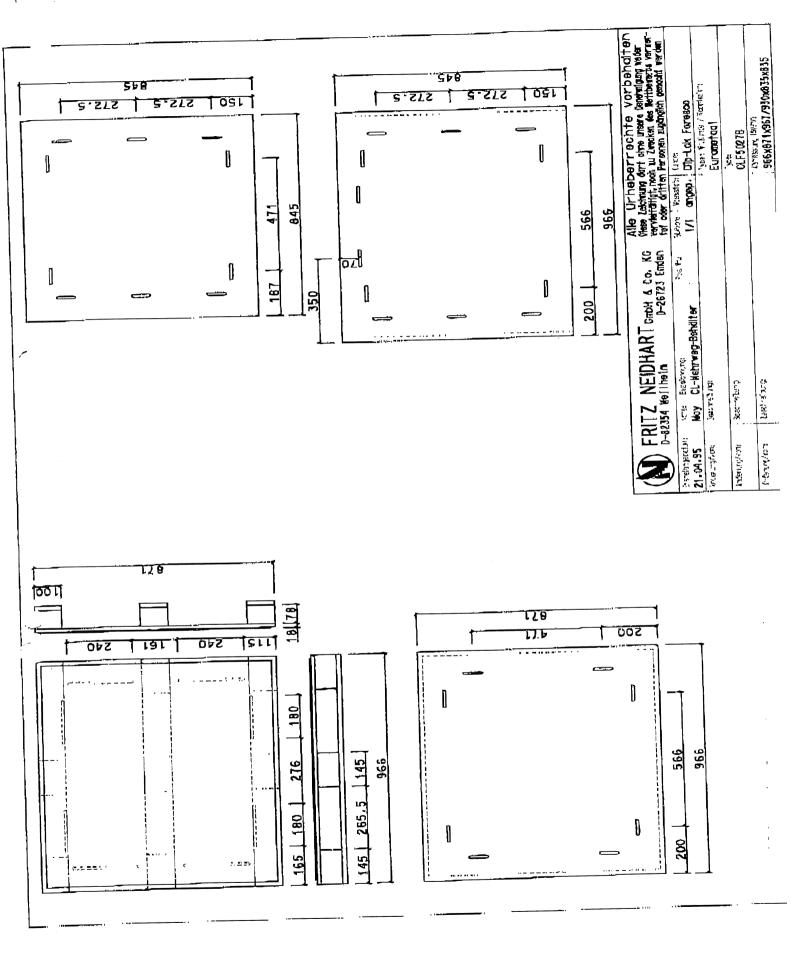
Classes 3, 8 and 9, divisions 4,3, 5.1 and 6,1

All the products authorized for transport by air according to table 2-14 of the ICAO Technical Instructions and for the maximum net quantities indicated in that table. The type of packaging covered by the certificate of approval (1A1, 3A1, 1H1 and so on ...) must conform to the appropriate packaging instructions detailed in Part 3 of the ICAO Technical Instructions.

See part 3, Chapter 1 and Part 4, Chapters 2 and 3 of the ICAO Technical Instructions about the general packaging instructions, the marking and label specifications.

- products classified in the packing group(s) with a corresponding relative density <=
- vapour pressure at 50° C <=





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