DNV·GL

Germanischer Lloyd Prüflabor GmbH • Südstr. 59 • 44625 Herne

Gauke Healthcare(Hubei) Co., Ltd Gauke Industrial Park TuanFeng County, Hubei Province, 438800 China DNV GL Oil & Gas Materials and Failure Analysis Südstr. 59 44625 Herne

Tel: 02325 96838-0 Fax: 02325 96838-30

www.dnvgl.com

Herne, 27th January 2014

CERTIFICATE

The examined first-aid kits of the company Gauke heathcare(Hubei) Co., Ltd. fulfil the requirements of the German standard DIN 13164:2014-01 in all points.

During the testing in our laboratory in January 2014 there were no objections. Examinations cover the following points:

- Size variation
- Safety requirements
- · Examination of the content
- · Examination of painting and marking
- · Resistance to thermal shocks
- Leakage test
- Drop test

The whole test results are summarized in the test report no: 14010182HE.

Germanischer Lloyd Prüflabor GmbH

M.Sc. Eric Uhle

DNV-GL

Germanischer Lloyd Prüflabor GmbH • Südstr. 59 • 44625 Herne

Gauke Healthcare(Hubei) Co., Ltd Gauke Industrial Park TuanFeng County, Hubei Province, 438800 China

Date:

Our reference:

Your reference:

2014-01-27

14010182HE rev.1

DNV GL Oil & Gas

Materials and Failure Analysis

Südstr. 59 44625 Herne

Tel: 02325 96838-0 Fax: 02325 96838-30

www.dnvgl.com

page 1 / 4

EXAMINATION ON FIRST-AID KITS

Client:

Gauke Healthcare(Hubei) Co., Ltd

Object:

first-aid kits

Reporting:

M.Sc. Eric Uhle, Germanischer Lloyd Prüflabor GmbH

EXAMINATION OF FIRST-AID KITS ACCORDING DIN 13164:2014

1. Object of the examination

The client provided twelve first-aid kits for examinations according to DIN 13164:2014. Six boxes were red and six were green. Only six boxes were filled with first-aid material. The delivery conditions are shown in **Fig. 1** to **Fig. 4**.



Fig.1: delivery condition red box



Fig.2: delivery condition red box



Fig.3: delivery condition green box



Fig.4: delivery condition green box

2. Results

2.1 Size variation

The values of the external dimension of the box (base area) are shown in **Tab. 1**. The determined values fulfil the requirements according to DIN 13164.

	Width [mm]	Length [mm]	Height [mm]	Wall thickness [mm]
Target values	166 ± 2	255 ± 2	80 ± 2	< 3
Measured values	167,8	256,9	79,1	1,7
Appraisal	passed	passed	passed	passed

Tab. 1: Dimension values

2.2 Safty Requirements

The used material does not affect the content of the first-aid box. The container is resistant against gasoline and diesel fuel, the boxes show no deformation, decolouration, cracks or expansions. There are no sharp edges on any part of the box. The content of the first-aid kit does not slip out of the box at an angle of 30 degrees.

2.3 Examination of the contents

The content of the first-aid kit meet the requirements stated in Table 1 of DIN 13164:2014 in all points.

2.4 Examination of the painting and marking

The marking of the first-aid kit fulfil the requirements of the DIN 13164:2014. After jerky removal of the PVC-strip, no separations of the marking adhere to the strip.

2.5 Resistance to thermal shocks

The examination of the boxes after thermal shocks between -25 °C and 80 °C show no indications for any damage. No impact on the usability is observed.

2.6 Leakage Test

The leakage test as required by DIN 13164:2014 according to DIN VDE 0470-1 passed without any objection.

2.7 Drop test

The drop tests, performed with load of 1,5 kg PE-granulate at room temperature at three uncooled and three cooled specimens show no indications for damages. The usability of the boxes is still guaranteed.

SUMMARY AND CONCLUSION

The first-aid kits of the customer fulfil all requirements of the standard DIN 13164:2014 as shown in **Tab. 2**.

Test	Passed	Failed
Dimensions	X	
Resistant to fuel	x	
Test of the Painting and Marking	x	
Resistant to thermal shocks	Х	
Leakage Test	X	
Drop Test	Х	

Tab. 2: Overview of the tests an appraisal

Germanischer Lloyd Prüflabor GmbH

M.Sc. Eric Uhle