



中国认可  
国际互认  
检测  
TESTING  
CNAS L9334



微谱  
WEIPU

# 检测报告/Test Report

报告编号/ Report No.: SHA52-23054233-JC-03CnEn

样品来源/Sample Origin: 客户送样/ Customer Sample Delivery

江苏择善精密机械有限公司

客户名称/Client: Jiangsu Zeshan Precision Machinery Co., Ltd

睢宁县李集镇工业集中区 186 号（北外环路）

No. 186 North Outer Ring Road, Industrial  
Concentration Zone, Liji Town, Suining County,

地 址/Address: Xuzhou City, Jiangsu Province

上海微谱检测科技集团股份有限公司

Shanghai WEIPU Testing Technology Group Co., LTD.



# 检测报告/Test Report

下列样品及样品信息由委托方提供及确认/The following sample(s) was/were submitted and identified on behalf of the applicant:

样品名称/Sample Name: 三元乙丙/EPDM

样品描述/Sample Description: /

样品规格/Specification: /

型号/批号/Type/ Batch number: /

其他信息/Other Information: 商标/Trademark: ZESAHN; 生产厂家/Manufacturer: 江苏择善精密机械有限公司/Jiangsu Zeshan Precision Machinery Co., Ltd; 生产批号/ Batch number: 2023-4-30

## 检测信息/Testing information:

接样日期/Date of Sample Received: 2023-05-18

检测周期/ Testing Period: 2023-05-18~ 2023-06-01

检测要求/Test Item(s): 根据客户要求进行检测/Selected test (s) as requested by client.

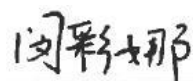
检测依据/Test Criterion: 请参见下一页/Please refer to next page(s).

检测结果/Test Result: 请参见下一页/Please refer to next page(s).

编制/Complied by:



批准/ Approved by:



签发日期/ Issued Date:

2023-06-01

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**1.检测项目/ Test item(s): 热老化测试/ Thermal aging test\***

检测依据/ Test standard(s): 依客户要求/ According to customer requirements

检测设备/ Testing equipment:

烘箱, 型号: FD56/ Oven, model: FD56

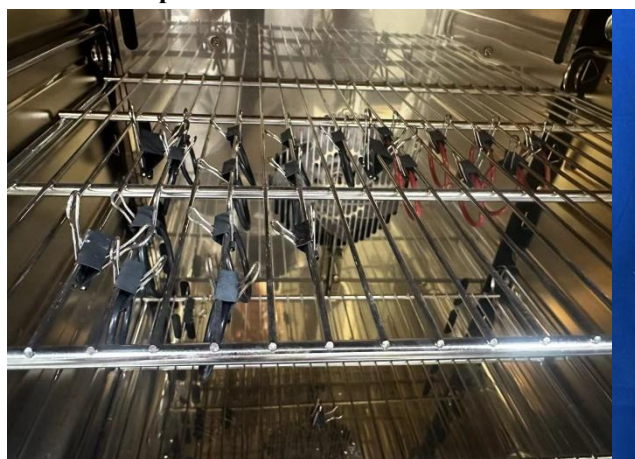
检测条件/ Test conditions:

125 °C, 70 h

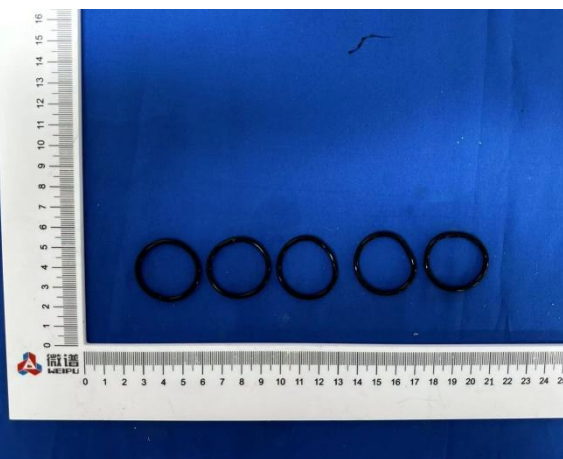
检测结果/ Test result(s):

样品编号 Sample NO.	样品描述 Description	检测项目 Test Item	检测结果 Test Result
2305004355-3	/	热老化测试 Thermal aging test	外观无可视变化 No visible changes in appearance

**代表性附件/ Representative attachments:**



试验中 During test



试验后 After test

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## 2.检测项目/ Test item(s): 耐水体积变化/ Water resistant volume change\*

检测依据/ Test standard(s): 依客户要求/ According to customer requirements

检测设备/ Testing equipment:

烘箱, 型号: FD56/ Oven, model: FD56

检测条件/ Test conditions:

100 °C, 70 h, 三级水/ Tertiary water

检测结果/ Test result(s):

样品编号 Sample NO.	样品描述 Description	检测项目 Test Item	检测结果 Test Result
2305004355-3	/	耐水体积变化 Water resistant volume change	4.55 %

代表性附件/ Representative attachments:



试验中 During test



试验后 After test

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### 3.检测项目/ Test item(s): 耐油体积变化/ Oil resistant volume change\*

检测依据/ Test standard(s): 依客户要求/ According to customer requirements

检测设备/ Testing equipment:

烘箱, 型号: FD56/ Oven, model: FD56

检测条件/ Test conditions:

(100±2) °C, 24 h, 液压油/ Hydraulic oil

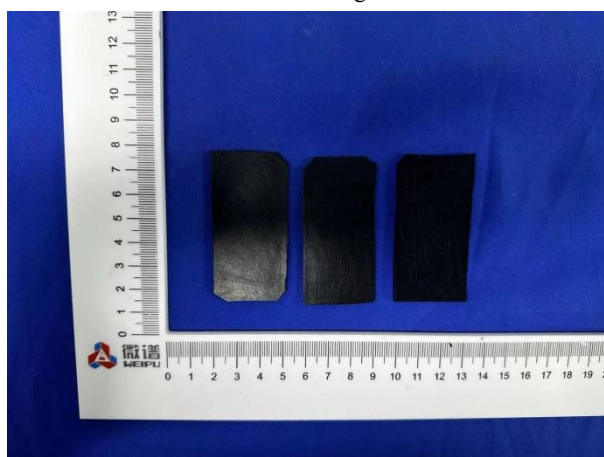
检测结果/ Test result(s):

样品编号 Sample NO.	样品描述 Description	检测项目 Test Item	检测结果 Test Result
2305004355-3	/	耐油体积变化 Oil resistant volume change	112 %

代表性附件/ Representative attachments:



试验中 During test



试验后 After test



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**4.检测项目/ Test item(s):** 耐油性体积变化、质量变化/ Oil resistance volume change, mass change\*

检测依据/ Test standard(s): GB/T 1690-2010 & HB 5236-83

检测设备/ Testing equipment:

烘箱, 型号: FD56/ Oven, model: FD56

高精度固液两用电子比重计, 型号: DH-120T/ High precision solid-liquid dual purpose electronic hydrometer, model: DH-120T

检测条件/ Test conditions:

(100±2) °C, 在 120#汽油中浸泡 24 h/ Soak in 120 # gasoline for 24 hours

检测结果/ Test result(s):

样品编号 Sample NO.	样品描述 Description	检测项目 Test Item	体积变化 Volume change	质量变化 Quality changes
2305004355-3	/	耐油性体积变化、质量变化 Oil resistance volume change, mass change	76.6 %	43.5 %

代表性附件/ Representative attachments:



试验中 During test



试验后 After test

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**5.检测项目/ Test item(s): 耐油性体积变化/ Oil resistance volume change\***

检测依据/ Test standard(s): GB/T 1690-2010 &amp; HB 5236-83

检测设备/ Testing equipment:

烘箱, 型号: FD56/ Oven, model: FD56

高精度固液两用电子比重计, 型号: DH-120T/ High precision solid-liquid dual purpose electronic hydrometer, model: DH-120T

检测条件/ Test conditions:

(100±2) °C, 在 20#机油中浸泡 24 h/ Soak in 20 # engine oil for 24 hours

检测结果/ Test result(s):

样品编号 Sample NO.	样品描述 Description	检测项目 Test Item	检测结果 Test Result
2305004355-3	/	耐油性体积变化 Oil resistance volume change	76.5 %

代表性附件/ Representative attachments:



试验中 During test



试验后 After test

**6.检测项目/ Test item(s): 邵氏硬度\*/ Shore hardness\***

检测依据/ Test standard(s): GB/T 531.1-2008

检测设备/ Testing equipment:

邵氏硬度计 A, 型号: LX-D/ Shore hardness tester D, model: LX-A

台式百分测厚仪, 型号: CH-20/ Desktop percentage thickness gauge, model: CH-20

检测条件/ Test conditions:

叠加层数/ Stacked layers: 1

读数时间/ Reading time: 3 s

检测结果/ Test result(s):

样品编号 Sample NO.	样品描述 Description	检测项目 Test Item	检测结果 Test Result
2305004355-3	/	邵氏硬度 Shore hardness	60 ShoreA,3 s

备注/Note: 常态, 样品为 O 型圈/Normal, the sample is an O-ring

样品编号 Sample NO.	样品描述 Description	检测项目 Test Item	检测结果 Test Result
2305004355-3	/	邵氏硬度 Shore hardness	70 ShoreA,3 s
		硬度变化 Hardness	+10

备注/Note: 100 °C × 70 水老化后, 样品为 O 型圈/100 °C × After 70 hours of water aging, the sample is an O-ring

样品编号 Sample NO.	样品描述 Description	检测项目 Test Item	检测结果 Test Result
2305004355-3	/	邵氏硬度 Shore hardness	72 ShoreA,3 s
		硬度变化 Hardness	+12

备注/Note: 125 °C × 70 h 老化后, 样品为 O 型圈/100 °C × After 70 hours of aging, the sample is an O-ring

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**7.检测项目/ Test item(s):** 撕裂强度/ Tear strength

检测依据/ Test standard(s): GB/T 529-2008 方法 B/ Method B

检测设备/ Testing equipment:

万能材料试验机, 型号: 34TM-30/ Universal material testing machine, model: 34TM-30

台式百分测厚仪, 型号: CH-20/ Desktop percentage thickness gauge, model: CH-20

检测条件/ Test conditions:

试样类型/ Sample type: 直角型/ Right angle type

速度/ Speed: 500 mm/min

检测结果/ Test result(s):

样品编号 Sample NO.	样品描述 Description	检测项目 Test Item	序号 Serial number	检测结果 Test Result (kN/m)
2305004355-3	/	撕裂强度 Tear strength	1	48.60
			2	53.07
			3	50.54
			4	48.63
			5	47.30
			中值 Median	48.63
			结果表示 Result	49

备注/Note: 常态/Normal

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**8.检测项目/ Test item(s):** 拉伸性能/ Tensile property

检测依据/ Test standard(s): GB/T 528-2009

检测设备/ Testing equipment:

万能材料试验机, 型号: 34TM-30/ Universal material testing machine, model: 34TM-30

台式百分测厚仪, 型号: CH-20/ Desktop percentage thickness gauge, model: CH-20

检测条件/ Test conditions:

试样规格/ Sample specification: 1 型

标距/ Gauge length: 25 mm

速度/ Speed: 500 mm/min

检测结果/ Test result(s):

样品编号 Sample NO.	样品描述 Description	检测项目 Test Item	序号 Serial number	检测结果 Test Result (%)
2305004355-3	/	拉断永久变形 Set after break	1	15.607
			2	18.164
			3	18.677
			中值 Median	18.164
			结果表示 Result	18.2

备注/Note: 常态/Normal

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**9.检测项目/ Test item(s):** 拉伸性能\*/ Tensile property\*

检测依据/ Test standard(s): GB/T 528-2009

检测设备/ Testing equipment:

万能材料试验机, 型号: 34TM-30/ Universal material testing machine, model: 34TM-30

台式百分测厚仪, 型号: CH-20/ Desktop percentage thickness gauge, model: CH-20

检测条件/ Test conditions:

试样规格/ Sample specification: O 型圈/ O-ring

标距/ Gauge length: 20 mm

速度/ Speed: 500 mm/min

检测结果/ Test result(s):

样品编号 Sample NO.	样品描述 Description	序号 Serial number	拉伸强度 Tensile strength (MPa)	断裂伸长率 Elongation at break (%)	100%定伸应力 100% constant elongation stress (%)
2305004355-3	/	1	12.620	531.93	2.194
		2	12.435	559.87	2.063
		3	12.980	595.08	1.968
		中值 Median	12.620	559.87	2.063
		结果表示 Result	12.6	$5.6 \times 10^2$	2.06

备注/Note: 常态/Normal

样品编号 Sample NO.	样品描述 Description	序号 Serial number	拉伸强度 Tensile strength (MPa)	断裂伸长率 Elongation at break (%)
2305004355-3	/	1	12.226	225.92
		2	11.992	225.72
		3	13.084	252.13
		中值 Median	12.226	225.92
		结果表示 Result	12.2	$2.3 \times 10^2$
		变化率 Rate of change	-3.1 %	-59.6 %

备注/Note: 100 °C × 70 h 水老化后/100 °C × After 70 hours of water aging

样品编号 Sample NO.	样品描述 Description	序号 Serial number	拉伸强度 Tensile strength (MPa)	断裂伸长率 Elongation at break (%)
2305004355-3	/	1	14.838	218.79
		2	14.845	208.97
		3	15.032	216.69
		中值 Median	14.845	216.69
		结果表示 Result	14.8	$2.2 \times 10^2$
		变化率 Rate of change	+17.6 %	-61.3 %

备注/Note: 125 °C × 70 h 老化后/100 °C × After 70 hours of aging

#### 10.检测项目/ Test item(s): 低温脆性温度/ Low temperature brittleness temperature\*

检测依据/ Test standard(s): GB/T 1682-2014 程序 B/ Program B

检测设备/ Testing equipment:

橡塑低温脆性测定仪/ Rubber and plastic low-temperature brittleness tester, 型号/ Model: MZ-4068

检测条件/ Test conditions:

试样规格/ Sample specification: (25×6×2) mm

冷冻温度/ Refrigeration temperature: -40 °C

冷冻时间/ Freezing time: 3 min

传热介质/ Heat transfer medium: 乙醇/Ethanol

制冷方式/ Refrigeration mode: 压缩机制冷/Compressor refrigeration

检测结果/ Test result(s):

样品编号 Sample NO.	样品描述 Description	检测项目 Test Item	检测结果 Test Result
2305004355-3	/	低温脆性温度 Low temperature brittleness temperature	无破坏 No damage

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**11.检测项目/ Test item(s):** 压缩永久变形/ Compression set

检测依据/ Test standard(s): GB/T 7759.1-2015 方法 A/ Method A

检测设备/ Testing equipment:

压缩永久变形仪, 型号: MYS-1/ Compression permanent deformation tester, model: MYS-1

台式百分测厚仪, 型号: CH-20/ Desktop percentage thickness gauge, model: CH-20

烘箱, 型号: FD56/ Oven, model: FD56

检测条件/ Test conditions:

试样类型/ Sample type: B 型:  $\Phi (13 \pm 0.5) \text{ mm} \times 4.0 \text{ mm}$ 

测试温度/ Test temperature: 100 °C

测试时间/ Test time: 24 h

压缩率/ Compression rate: 25 % (&lt;80IRHD)

恢复条件/ Recovery conditions: 方法 A/ Method A

检测结果/ Test result(s):

样品编号 Sample NO.	样品描述 Description	检测项目 Test Item	检测结果 Test Result
2305004355-3	/	压缩永久变形 Compression set	79 %

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**12.检测项目/ Test item(s):** 压缩永久变形/ Compression set

检测依据/ Test standard(s): GB/T 7759.1-2015 方法 A/ Method A

检测设备/ Testing equipment:

压缩永久变形仪, 型号: MYS-1/ Compression permanent deformation tester, model: MYS-1

台式百分测厚仪, 型号: CH-20/ Desktop percentage thickness gauge, model: CH-20

烘箱, 型号: FD56/ Oven, model: FD56

检测条件/ Test conditions:

试样类型/ Sample type: B 型:  $\Phi (13 \pm 0.5) \text{ mm} \times 4.0 \text{ mm}$ 

测试温度/ Test temperature: 100 °C

测试时间/ Test time: 70 h

压缩率/ Compression rate: 25 % (&lt;80IRHD)

恢复条件/ Recovery conditions: 方法 A/ Method A

检测结果/ Test result(s):

样品编号 Sample NO.	样品描述 Description	检测项目 Test Item	检测结果 Test Result
2305004355-3	/	压缩永久变形 Compression set	78 %

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**13.检测项目/ Test item(s):** 压缩永久变形/ Compression set

检测依据/ Test standard(s): GB/T 7759.1-2015 方法 A/ Method A

检测设备/ Testing equipment:

压缩永久变形仪, 型号: MYS-1/ Compression permanent deformation tester, model: MYS-1

台式百分测厚仪, 型号: CH-20/ Desktop percentage thickness gauge, model: CH-20

烘箱, 型号: FD56/ Oven, model: FD56

检测条件/ Test conditions:

试样类型/ Sample type: B 型:  $\Phi (13 \pm 0.5) \text{ mm} \times 4.0 \text{ mm}$ 

测试温度/ Test temperature: 125 °C

测试时间/ Test time: 22 h

压缩率/ Compression rate: 25 % (&lt;80IRHD)

恢复条件/ Recovery conditions: 方法 A/ Method A

检测结果/ Test result(s):

样品编号 Sample NO.	样品描述 Description	检测项目 Test Item	检测结果 Test Result
2305004355-3	/	压缩永久变形 Compression set	90 %

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**14.检测项目/ Test item(s):** 压缩永久变形/ Compression set

检测依据/ Test standard(s): GB/T 7759.1-2015 方法 A/ Method A

检测设备/ Testing equipment:

压缩永久变形仪, 型号: MYS-1/ Compression permanent deformation tester, model: MYS-1

台式百分测厚仪, 型号: CH-20/ Desktop percentage thickness gauge, model: CH-20

电热鼓风干燥箱, 型号: DHG-9075A/ Electric blast drying oven, model: DHG-9075A

检测条件/ Test conditions:

试样类型/ Sample type: B 型:  $\Phi (13 \pm 0.5) \text{ mm} \times 4.0 \text{ mm}$ 

测试温度/ Test temperature: 150 °C

测试时间/ Test time: 22 h

压缩率/ Compression rate: 25 % (&lt;80IRHD)

恢复条件/ Recovery conditions: 方法 A/ Method A

检测结果/ Test result(s):

样品编号 Sample NO.	样品描述 Description	检测项目 Test Item	检测结果 Test Result
2305004355-3	/	压缩永久变形 Compression set	94 %

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**15.检测项目/ Test item(s):** 压缩永久变形/ Compression set

检测依据/ Test standard(s): GB/T 7759.1-2015 方法 A/ Method A

检测设备/ Testing equipment:

压缩永久变形仪, 型号: MYS-1/ Compression permanent deformation tester, model: MYS-1

台式百分测厚仪, 型号: CH-20/ Desktop percentage thickness gauge, model: CH-20

电热鼓风干燥箱, 型号: DHG-9075A/ Electric blast drying oven, model: DHG-9075A

检测条件/ Test conditions:

试样类型/ Sample type: B 型:  $\Phi (13 \pm 0.5) \text{ mm} \times 4.0 \text{ mm}$ 

测试温度/ Test temperature: 150 °C

测试时间/ Test time: 24 h

压缩率/ Compression rate: 25 % (&lt;80IRHD)

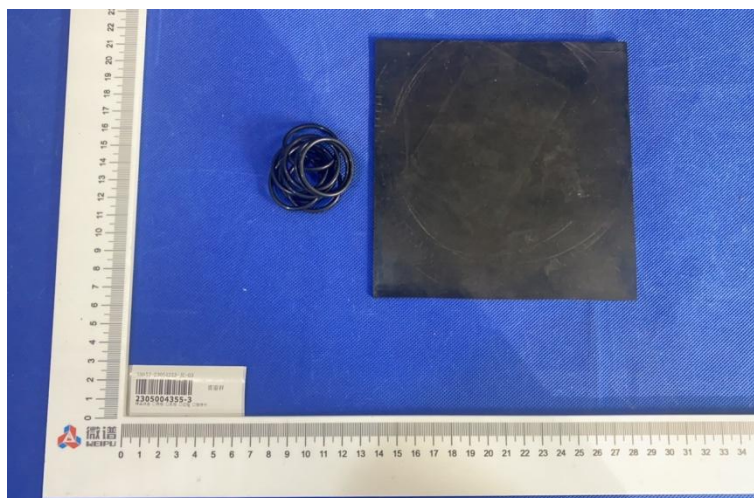
恢复条件/ Recovery conditions: 方法 A/ Method A

检测结果/ Test result(s):

样品编号 Sample NO.	样品描述 Description	检测项目 Test Item	检测结果 Test Result
2305004355-3	/	压缩永久变形 Compression set	89 %

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## 样品照片/Sample picture(s):



2305004355-3

备注：本报告带\*项目的检测依据不在 CNAS 认可范围内。

Note: The test basis of \* item in this report is not within the scope of CNAS approval.

\*\*\*报告结束 End of the Report\*\*\*

—— 声明/DECLARE ——

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4. 如对报告有疑问，请在收到报告后 15 个工作日内提出。  
Any queries on the report shall be presented to us within 15 working days after receipt of the report.
5. 本报告结果仅对本次受测样品负责。若报告未加盖 CMA 章，表示部分或全部检测方法不在 CMA 资质认定能力范围内，报告仅用于客户科研、教学、内部质量控制、产品研发等目的，供内部参考。  
The results described here in this report are based on the sample(s) tested. If the report is not stamped with CMA logo, it means that some or all of the test methods are not within the scope of CMA. The report is only used for customer scientific research, teaching, internal quality control, product development and other purposes for internal reference.
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