

**Test Report No.:** 178200608a 001

Page 1 of 7

**Client:****NINEBOT (CHANGZHOU) TECH CO., LTD.****Address:**16F-17F, Block A, Building 3, No.18, Changwu Mid Rd, Wujin Dist.,  
Changzhou, Jiangsu, P. R. China**Identification/**

Segway eKickScooter ZT3 Pro

**Model No(s):**

Tested models No.: 051801CN, 051801E, 051801U

Additional models No.:051801D, 051801A

**Sample obtaining method:**

Sending by customer

**Condition at delivery:**

Test item complete and undamaged.

**Sample Receiving date:**

2024-07-09

**Testing Period:**

2024-07-09 to 2024-07-12

**Place of testing:**

Chemical laboratory Qingdao

**Test specification:**

According to customer's requirement:

WEEE (Recast): 2012/19/EU

Article 11 Recovery and Recycling

Calculation of Theoretical Recovery and Recycling Rate

**Test result:**

PASS

**Other Information:**

Remark: (1)The assessment describes the theoretical recyclability. The assessment cannot predict the actual material output by the recycler as the recovery process may vary between recyclers.

(2) This report does not include the test of battery, adapter and power cord.

**For and on behalf of****TÜV Rheinland / CCIC (Qingdao) Co., Ltd**2024 - 08-05  
DateNina Yang / Senior Project Engineer  
Name/Position

*Sample information is provided by customer. Test result is drawn according to the kind and extent of tests performed.*

*This test report relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.*

*"Decision Rule" document announced in our website (<https://www.tuv.com/landingpage/en/qm-gcn/>) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report.*

## Contents

<b>1. General Remarks .....</b>	<b>3</b>
<b>1.1 Complementary Materials .....</b>	<b>3</b>
<b>2. General Product Information .....</b>	<b>3</b>
<b>2.1 Product Description .....</b>	<b>3</b>
<b>2.2 Submitted Documents .....</b>	<b>3</b>
<b>3. Assessment Description .....</b>	<b>4</b>
<b>3.1 Disassembly, Recovery and Recycling Flow .....</b>	<b>4</b>
<b>3.2 Parameters .....</b>	<b>4</b>
<b>3.3 Definition .....</b>	<b>4</b>
<b>4. Assessment Results .....</b>	<b>5</b>
<b>4.1 Assessment Summary .....</b>	<b>5</b>
<b>4.2 Product Derivative Table .....</b>	<b>6</b>
<b>4.3 Product Derivative Summary .....</b>	<b>7</b>
<b>4.4 Test Result .....</b>	<b>7</b>

## 1. General Remarks

### 1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix 1: Photo of tested sample

**Segway eKickScooter ZT3 Pro**



## 2. General Product Information

### 2.1 Product Description

The product is Segway eKickScooter ZT3 Pro. It is classified as Category 4 under Annex III of Directive 2012/19/EU.

### 2.2 Submitted Documents

BOM List

### 3. Assessment Description

#### 3.1 Disassembly, Recovery and Recycling Flow

The product is disassembled into different parts (clumps) and grouped by the type of material sharing common characteristic or physical relationship (waste fractions) primarily based on the treatment requirements as set out in the WEEE directive annex VII, followed by the current state of the art recycling and recovery technology available in Europe. Materials for which currently no recycling technology is available or where the recycling is economically not feasible, or which contain hazardous substances, are assumed to be shredded, incinerated or disposed of to landfill without further use.

Only bigger clumps that can be easily separated and that share a common characteristics or physical relationships are included in the recycling and reuse calculation. Other parts, respectively materials that cannot be separated by e.g. standard tools are classified as either unspecified materials or distributed to the relative waste fraction with highest content of waste is expected with reduced recovery rate.

#### 3.2 Parameters

The calculation is based on waste fractions consisting of a typical material or substance composition for typical materials. (e.g. a power cord consists of copper wire and PVC, whereas the PVC consists of a PVC, polyamide and polyester blend). For every waste fraction a theoretical recovery share for recycling and for incineration respectively waste disposal is assumed based on information provided by recycling companies. The recovery share may change over time as the recycling technology advances. The current recovery shares are available upon request.

#### 3.3 Definition

**3.3.1 Regular:** Reuse, Recycling and Recovery Rate: Applying commonly used recycling technology.

**3.3.2 Ideal:** Recycling Rate: Applying highest recycling technology.

##### 3.3.3 Recycling Classification

A class: Common recycling technology and high market need

B class: Recycling technology not popular and high market need

C class: Common recycling technology and low market need

D class: Recycling technology not popular and low market need

## 4. Assessment Results

### 4.1 Assessment Summary

Product Name	Segway eKickScooter ZT3 Pro	
		
Total Weight(g)	23656.34	
Connection Technique	Screw x 217	Cable x78
	Welding x 25	Combination x 10
	Glued x 7	Clip x 41
Connection Tools	Hands	Plier
	Philip Screwdriver (+)	Scissor
Disassembly Time, Sec	2676	
Derivative Summary	See 4.2 Product Derivative Table	
Derivative Rate	See 4.3 Product Derivative Summary	
Reuse/Recycling Rate	See 4.4 Test Result	
Recovery Rate	See 4.4 Test Result	

## 4.2 Product Derivative Table

Product Name			Segway eKickScooter ZT3 Pro					
Derivative		Weight (g)	Weight (%)		Re-use (%)	Recycling (%)	Incineration (%)	Disposal (%)
Electric bicycle	Metal(screws,nut,wheel, axle of wheel,bodywork, core,brake,small bell, handle and tool)	17443.05	73.74			^		
	Plastic(cover of light,cell cover, cover of PCB, fixer of wheel,fender, switch and tool)	3245.58	13.72			^		
	Plastic(wheel,handle,foot pad,fixer of cable and brake system)	642.93	2.72				^	
	Printed Circuit Board (PCB)	214.08	0.90	Ideal		^		
				Regular		^ (0.45)		^ (0.45)
	Thin Cables	348.77	1.47	Ideal		^		
				Regular		^ (0.51)		^ (0.96)
	Motor(inner wheel)	1738	7.35			^		
	Waste(Foam on cell cover,label on bodywork, Foam inner bodywork)	23.93	0.10					^
Total		23656.34	100	Ideal	0	97.18	2.72	0.10
				Regular		95.77	2.72	1.51

Remark:

^ All weight (%) of this material belong to this category.

### 4.3 Product Derivative Summary

Product Derivative Table

	Segway eKickScooter ZT3 Pro	
	Percentage of Weight	
	Ideal	Regular
Reuse Weight	0.00%	0.00%
Recycling Weight	97.18%	95.77%
Incineration Weight	2.72%	2.72%
Disposal Weight	0.10%	1.51%
Product Sample Weight	100%	

### 4.4 Test Result

PASS

Required Reuse/Recycling Rate	Segway eKickScooter ZT3 Pro	
	Testing Reuse/Recycling Rate	
	Ideal	Regular
85%*	97.18%	95.77%
Required Recovery Rate	Testing Recovery Rate	
	Ideal	Regular
80%*	99.90%	98.49%

Remark: \* Refer to directive 2012/19/EU Annex V, the minimum targets of Category 4 shall meet the following requirements.

Date	Required Reuse/Recycling Rate	Required Recovery Rate
From August 15, 2018	85%	80%

--- END ---



