

Test Report No.: **1160009663a 001**

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Client:

Buyer's name: N/A

Manufacturer's name: N/A

Test item(s): Hair Dryer

Test Model No(s): ZY892BN

Reference Style No(s). Refer to page 9

Sample Receiving date: 2014-07-25, 2014-08-15

Delivery condition: Apparent good, Samples tested as received

Test specification:

Test result:

According to RoHS (recast):

**Restriction of the Use of Certain Hazardous Substances in
Electrical and Electronic Equipment, 2011/65/EU**

Pass

Other Information:

Test period: 2014-07-25 ~ 2014-08-04, 2014-08-15 ~ 2014-08-18

**For and on behalf of
TÜV Rheinland / CCIC (Ningbo) Co., Ltd.**



2014-09-17 Tom Xie Department manager

Date Name/Position

Test result is drawn according to the kind and extent of tests performed.

This test report relates to the a. m. 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.

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Test Report No.:

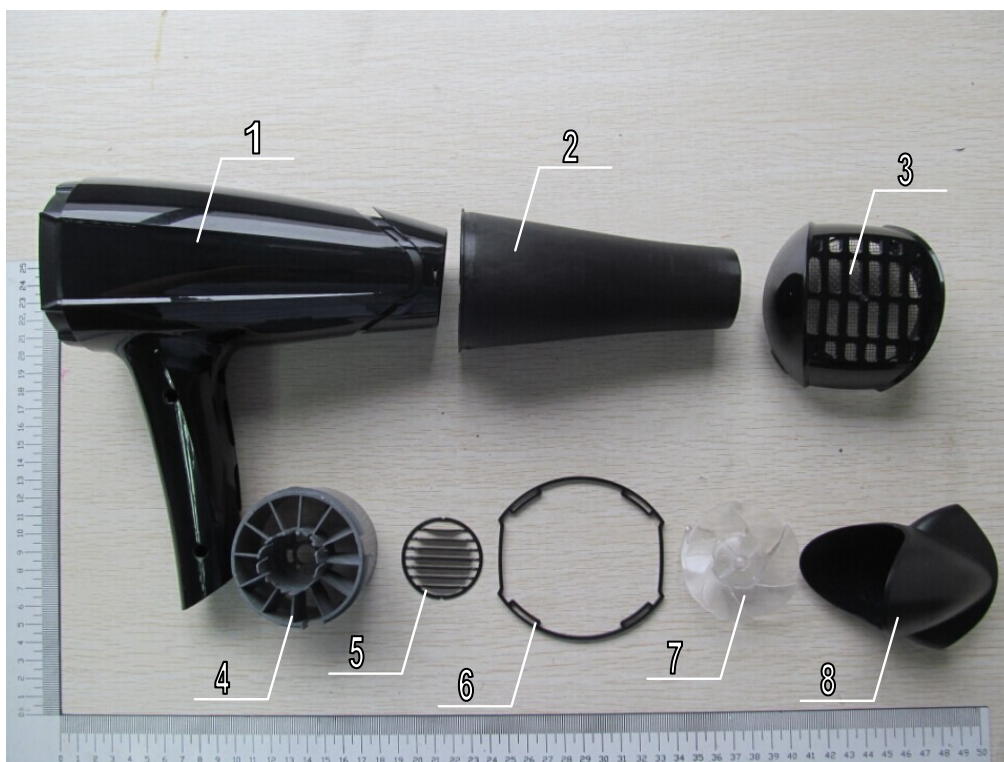
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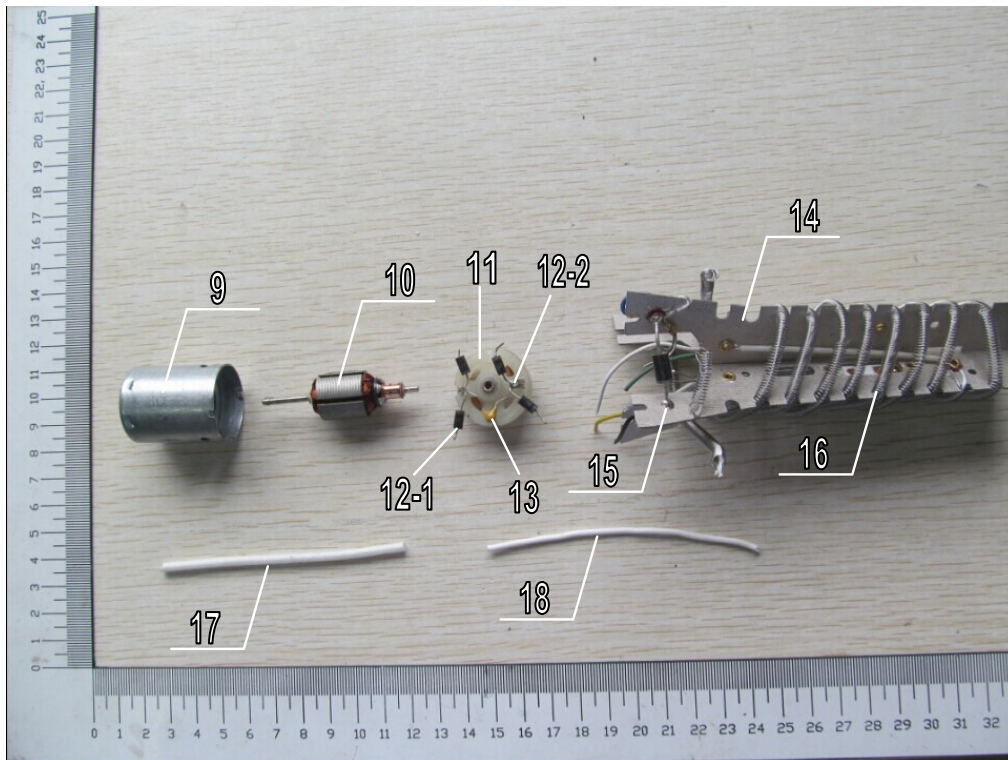
A. Screening Test by XRF Spectroscopy

Test Method: Cadmium, Lead, Mercury, Chromium, Bromine
- With reference to EN 62321: 2009 section 6(XRF)

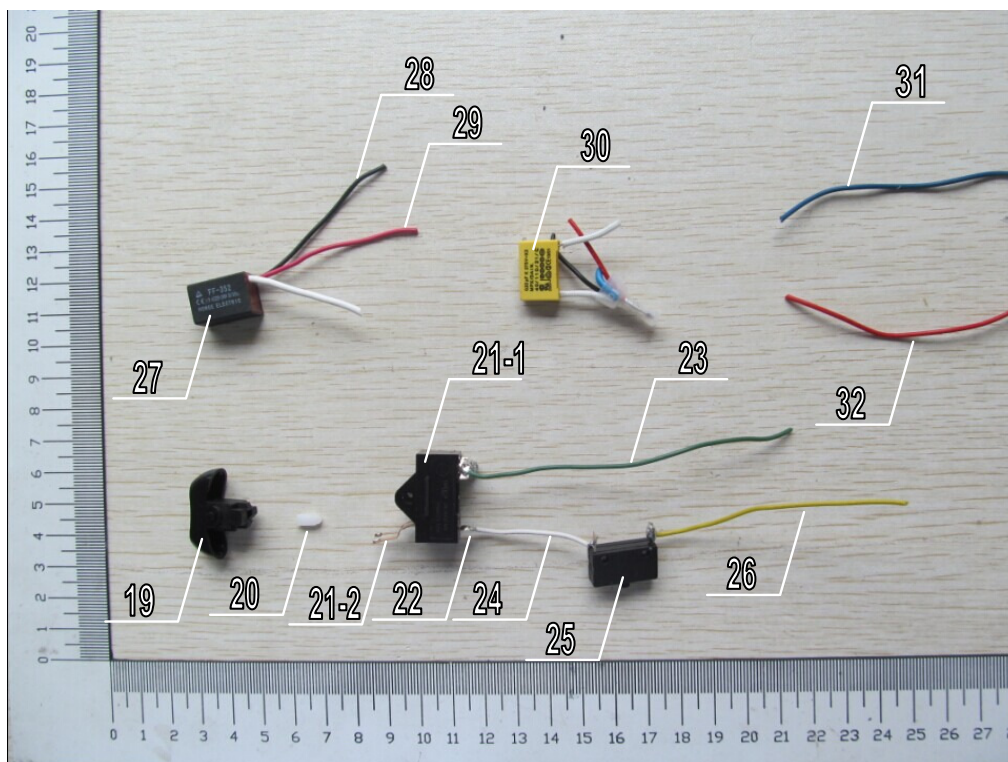
Testing Period: 2014-07-25 ~ 2014-08-18



Material No.	Result (mg/kg)				
	Cd	Pb	Cr	Hg	Br
	Limit(mg/kg)				
	100	1000	Cr(VI): 1000	1000	PBB:1000 PBDE:1000
1(black plastic shell)	n.d.	n.d.	n.d.	n.d.	n.d.
2(black plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
3(metal net)	n.d.	n.d.	n.d.	n.d.	N.A.
4(grey plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
5-1(black coating)	n.d.	n.d.	n.d.	n.d.	n.d.
5-2(metal base)	n.d.	n.d.	n.d.	n.d.	N.A.
6(black plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
7(transparent plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
8(black plastic)	n.d.	n.d.	n.d.	n.d.	n.d.



Material No.	Result (mg/kg)				
	Cd	Pb	Cr	Hg	Br
	Limit(mg/kg)				
	100	1000	Cr(VI): 1000	1000	PBB:1000 PBDE:1000
9-1(silvery metal shell)(motor)	n.d.	n.d.	n.d.	n.d.	N.A.
9-2(magnet)	n.d.	n.d.	n.d.	n.d.	N.A.
9-3(metal)(V-spring)	n.d.	n.d.	n.d.	n.d.	N.A.
10-1(silicon steel sheet)	n.d.	n.d.	n.d.	n.d.	N.A.
10-2(copper wire)	n.d.	n.d.	n.d.	n.d.	N.A.
10-3(copper sheet)(commutator)	n.d.	n.d.	n.d.	n.d.	N.A.
10-4(plastic)(commutator)	n.d.	n.d.	n.d.	n.d.	n.d.
10-5(soldering tin)	n.d.	d(^1)	n.d.	n.d.	N.A.
11(beige plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
12-1(diode)(body)	n.d.	n.d.	n.d.	n.d.	n.d.
12-2(soldering tin)	n.d.	d(^1)	n.d.	n.d.	N.A.
13(capacitor)(body)	n.d.	n.d.	n.d.	n.d.	n.d.
14(mica sheet)	n.d.	n.d.	n.d.	n.d.	n.d.
15(soldering tin)	n.d.	d(^1)	n.d.	n.d.	N.A.
16(heating wire)	n.d.	n.d.	n.d.	n.d.	N.A.
17(white insulating bush)	n.d.	n.d.	n.d.	n.d.	n.d.
18(white wire sheath)	n.d.	n.d.	n.d.	n.d.	d(^1)



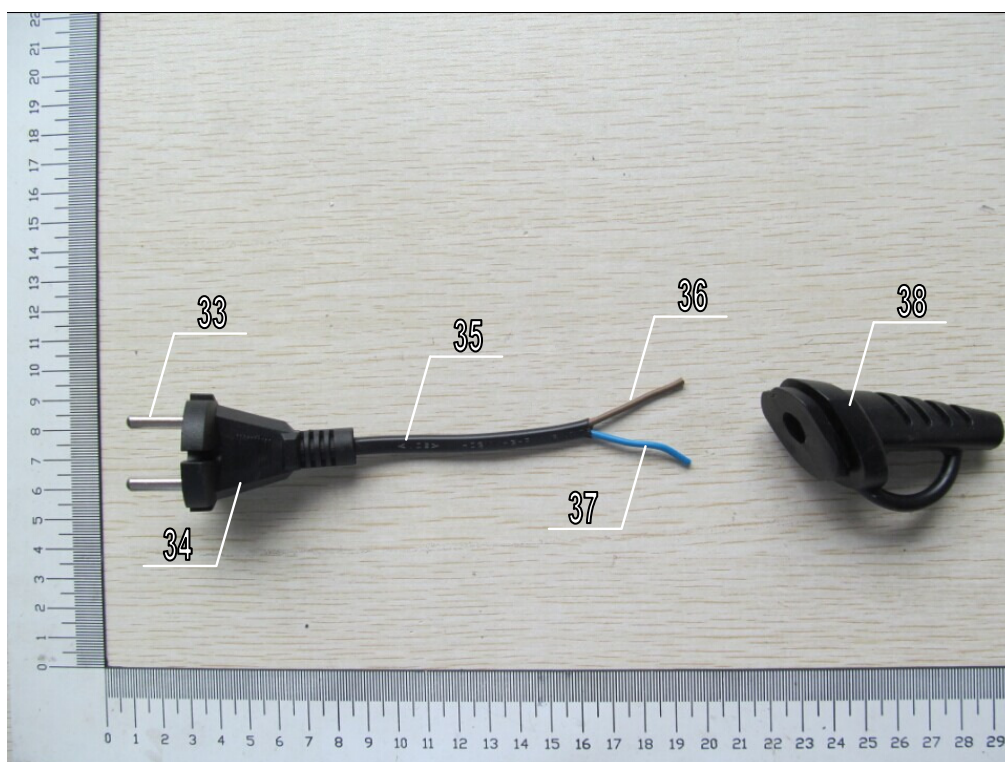
Material No.	Result (mg/kg)				
	Cd	Pb	Cr	Hg	Br
	Limit(mg/kg)				
	100	1000	Cr(VI): 1000	1000	PBB:1000 PBDE:1000
19(black plastic button)	n.d.	n.d.	n.d.	n.d.	n.d.
20(white plastic)	n.d.	n.d.	n.d.	n.d.	n.d.
21-1(black plastic shell)	n.d.	n.d.	n.d.	n.d.	n.d.
21-2(metal contact sheet)	n.d.	n.d.	n.d.	n.d.	n.d.
22(soldering tin)	n.d.	d(^1)	n.d.	n.d.	N.A.
23(green wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
24(white wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
25(black plastic shell) (micro switch)	n.d.	n.d.	n.d.	n.d.	n.d.
26(yellow wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
27-1(black plastic shell)	n.d.	n.d.	n.d.	n.d.	d(^1)
27-2(SMD resistor)	n.d.	n.d.	n.d.	n.d.	n.d.
27-3(SIP audion)(body)	n.d.	n.d.	n.d.	n.d.	n.d.
27-4(SIP diode)(body)	n.d.	n.d.	n.d.	n.d.	n.d.
27-5(black plastic) (transformer)	n.d.	n.d.	n.d.	n.d.	n.d.
27-6(PCB)	n.d.	n.d.	n.d.	n.d.	n.d.

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Material No.	Result (mg/kg)				
	Cd	Pb	Cr	Hg	Br
	Limit(mg/kg)				
	100	1000	Cr(VI): 1000	1000	PBB:1000 PBDE:1000
27-7(soldering tin)(PCB)	n.d.	d(^1)	n.d.	n.d.	N.A.
27-8(sealling material)	n.d.	n.d.	n.d.	n.d.	n.d.
28(black wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
29(red wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
30(yellow plastic shell)	n.d.	n.d.	n.d.	n.d.	d(^1)
31(blue wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
32(red wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.



Material No.	Result (mg/kg)				
	Cd	Pb	Cr	Hg	Br
	Limit(mg/kg)				
	100	1000	Cr(VI): 1000	1000	PBB:1000 PBDE:1000
33(metal pins)	n.d.	d(^1)	n.d.	n.d.	N.A.
34-1(black plastic) (the plug frame)	n.d.	n.d.	n.d.	n.d.	n.d.

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Material No.	Result (mg/kg)				
	Cd	Pb	Cr	Hg	Br
	Limit(mg/kg)				
	100	1000	Cr(VI): 1000	1000	PBB:1000 PBDE:1000
34-2(white plastic) (the pins stent)	n.d.	n.d.	n.d.	n.d.	d(^1)
35(black plastic sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
36(brown wire sheath)	n.d.	n.d.	n.d.	n.d.	N.A.
37(blue wire sheath)	n.d.	n.d.	n.d.	n.d.	n.d.
38(black plastic)(bushing)	n.d.	n.d.	n.d.	n.d.	n.d.

Abbreviation:

Pb	denotes Lead
Cd	denotes Cadmium
Hg	denotes Mercury
Cr	denotes Chromium
Cr(VI)	denotes Chromium(VI)
Br	denotes Bromine
PBBs	denotes Total Polybrominated Biphenyls
PBDEs	denotes Total Polybrominated Diphenyl Ethers
<	denotes less than
N.A.	denotes Not Applicable
n.d.	denotes Not Detected
d	denotes Detected

Remark:

(^1) The screening result was found in the inconclusive region (X), thus the further wet chemistry tests are suggested.

(^2) The Chromium (VI) content in surface layer has been confirmed with reference to EN 62321: 2009 Annex.

XRF Screening limits for different materials:

Materials	Concentration (mg/kg)				
	Cd	Cr	Pb	Hg	Br
Metallic material	$P \leq 50 < X \leq 150 < F$	$P \leq 630 < X$	$P \leq 690 < X \leq 1360 < F$	$P \leq 520 < X \leq 1560 < F$	NA
Polymeric material	$P \leq 50 < X \leq 150 < F$	$P \leq 630 < X$	$P \leq 690 < X \leq 1360 < F$	$P \leq 520 < X \leq 1560 < F$	$P \leq 300 < X$
Electronic material	$P \leq 50 < X \leq 180 < F$	$P \leq 500 < X$	$P \leq 550 < X \leq 1640 < F$	$P \leq 410 < X \leq 1870 < F$	$P \leq 240 < X$

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B. Confirmation Test by Wet Chemistry

Test Method: Total Cadmium, Lead, Mercury, Chromium-Ref. to EN 62321:2009
 Chromium VI – Ref. to EN 62321:2009
 PBBs, PBDEs – Ref. To EN 62321:2009

Testing Period: 2014-07-25 ~ 2014-08-18

Material list:

Material No.	Material	Color	Test Plan
			A=Test HM only B=Test FR only C=Test HM+FR
10-5	solder	silvery	A
12-2	solder	silvery	A
15	solder	silvery	A
18	plastic	white	B
22	solder	silvery	A
27-1	plastic	black	B
27-7	solder	silvery	A
30	plastic	yellow	B
33	metal (copper)	silvery	A
34-2	plastic	white	B

Test result:

	Cd	Pb	Cr (VI)	Hg	PBBs	PBDEs
Maximum Permissible Limit ppm (mg/kg)	100	1000	1000	1000	1000	1000

Material No.	Ppm (mg/kg)					
	Cd	Pb	Cr ^{VI}	Hg	PBBs	PBDEs
	MDL (mg/kg)					
	2	2	2	2	--(^3)	--(^3)
10-5	N.A.	303	N.A.	N.A.	N.A.	N.A.
12-2	N.A.	19	N.A.	N.A.	N.A.	N.A.
15	N.A.	20	N.A.	N.A.	N.A.	N.A.
18	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.

Material No.	Ppm (mg/kg)					
	Cd	Pb	Cr [^]	Hg	PBBs	PBDEs
	MDL (mg/kg)					
	2	2	2	2	--(^3)	--(^3)
22	N.A.	40	N.A.	N.A.	N.A.	N.A.
27-1	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
27-7	N.A.	120	N.A.	N.A.	N.A.	N.A.
30	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.
33	32	31520 ^{6(c)}	N.A.	N.A.	N.A.	N.A.
34-2	N.A.	N.A.	N.A.	N.A.	N.D.	N.D.

Abbreviation:

Pb	denotes Lead
Cd	denotes Cadmium
Hg	denotes Mercury
Cr	denotes Chromium
Cr(VI)	denotes Chromium(VI)
PBBs	denotes Total Polybrominated Biphenyls
PBDEs	denotes Total Polybrominated Diphenyl Ethers
N.D.	denotes Not Detected
MDL	denotes Method Detection Limit
N.A.	denotes Not Applicable
[^]	The total Chromium have been determined

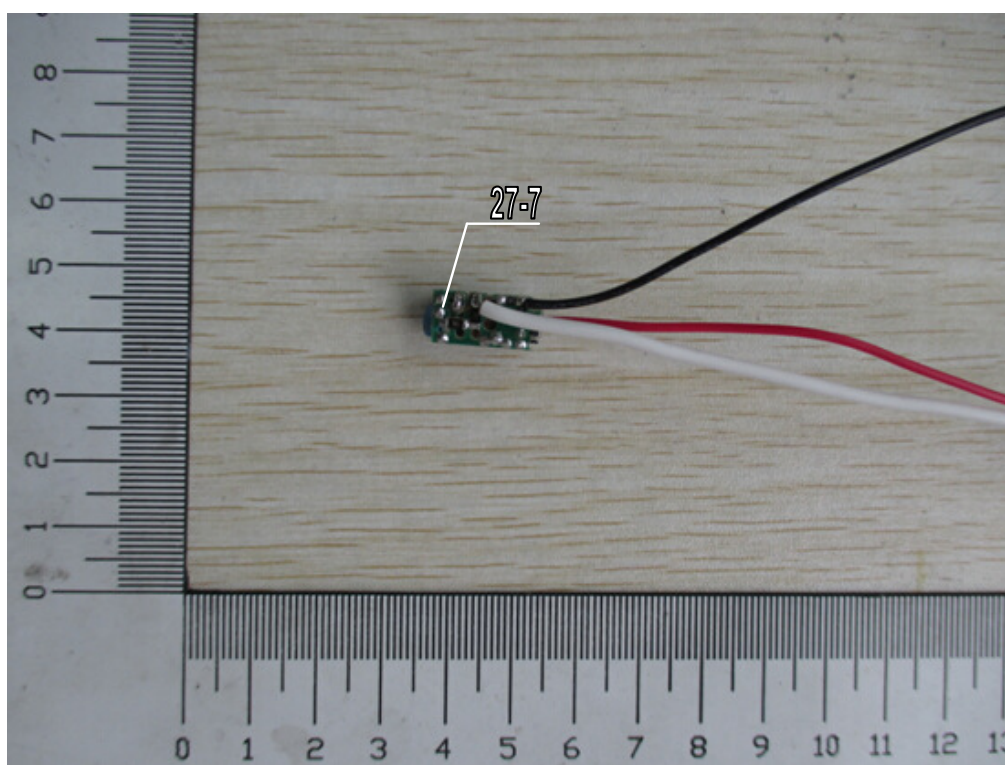
Remark:

(^2) The Chromium (VI) content in surface layer has been confirmed with reference to EN 62321: 2009 Annex.

(^3) The method detection limit for each individual PBBs and individual PBDEs are:

Method Detection Limit in ppm (mg/kg)		
PBBs	Monbromobiphenyl	5
	Dibromobiphenyl	5
	Tribromobiphenyl	5
	Tetrabromobiphenyl	5
	Pentabromobiphenyl	5
	Hexabromobiphenyl	5
	Heptabromobiphenyl	5
	Octabromobiphenyl	5
	Nonabromobiphenyl	5
	Decabromobiphenyl	5

Method Detection Limit in ppm (mg/kg)		
PBDEs	Monbromodiphenyl ether	5
	Dibromodiphenyl ether	5
	Tribromodiphenyl ether	5
	Tetrabromodiphenyl ether	5
	Pentabromodiphenyl ether	5
	Hexabromodiphenyl ether	5
	Heptabromodiphenyl ether	5
	Octabromodiphenyl ether	5
	Nonabromodiphenyl ether	5
	Decabromodiphenyl ether	5



6(c) Copper alloy containing up to 4 % lead by weight.

declare that:

Model ZY882BN/ZY882B/ZY882N/ZY882/ZY885BN/ZY885B/ZY885N/ZY885/ZY889BN/ZY889B/
ZY889N/ZY889/ZY892BN/ZY892B/ZY892N/ZY892/ZY882F/ZY882FN/ZY885F/ZY885FN/
ZY887BN/ZY887B/ZY887N/ZY887 and model ZY892BN are the same serials, all components were
made by the same raw material but different in shapes and sizes.

TÜV Rheinland / CCIC (Ningbo) Co., Ltd. will not be responsible for this statement.

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Sample Photo(s):



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