

**TEST REPORT**

**On Behalf of**

**Zhejiang Tongxi Technology Co.,Ltd**

**plastic dustbin**

**Model: YY-660, YY-1100**

**Prepared For : Zhejiang Tongxi Technology Co.,Ltd**

**No.718, Juying Road, Eastern New Area, Jiju  
District, Taizhou, Zhejiang**

**Prepared By : Beide (Shenzhen) Product Service Limited**

**6F, Bldg E, Hourui 3rd Ind Zone, Xixiang, Bao'an  
Dist, Shenzhen, China**

**Date of Test : Mar. 08-21, 2022**

**Date of Report : Mar. 21, 2022**

**Report Number : B-S2203A0646**

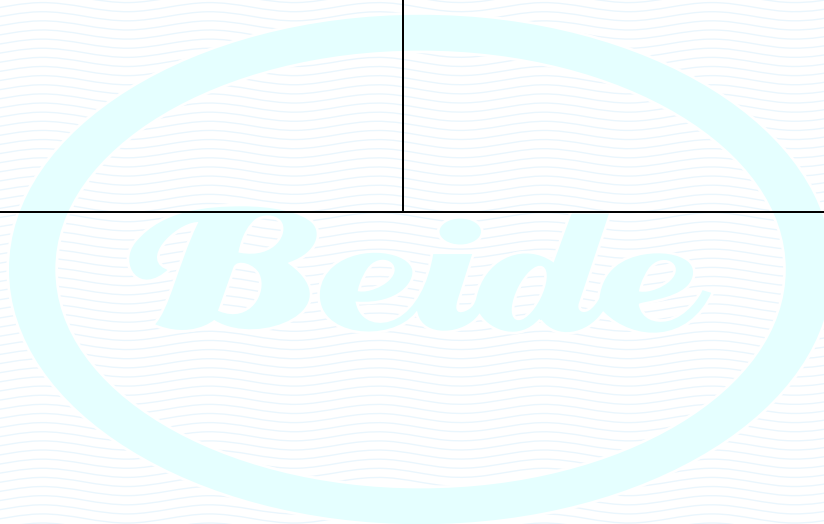
<p align="center"><b>TEST REPORT</b></p> <p align="center"><b>EN 840</b></p> <p align="center"><b>Mobile waste and recycling containers</b></p> <p align="center"><b>Part 2: Containers with 4 wheels with a capacity up to 1300 l with flat lid(s), for trunnion and/or comb lifting devices – Dimensions and design</b></p> <p align="center"><b>Part 5: Performance requirements and test methods</b></p> <p align="center"><b>Part 6: Safety and health requirements</b></p>	
Testing laboratory .....	Beide (Shenzhen) Product Service Limited
Address .....	6F, Bldg E, Hourui 3rd Ind Zone, Xixiang, Bao'an Dist, Shenzhen, China
Report body .....	Beide (Shenzhen) Product Service Limited
Address .....	6F, Bldg E, Hourui 3rd Ind Zone, Xixiang, Bao'an Dist, Shenzhen, China
Applicant .....	Zhejiang Tongxi Technology Co.,Ltd
Address .....	No.718, Juying Road, Eastern New Area, Jiju District, Taizhou, Zhejiang
Client No.....	0576D817
Standard .....	EN 840-2:2020 EN 840-5:2020 EN 840-6:2020
Result .....	Comply with : EN 840-2:2020 EN 840-5:2020 EN 840-6:2020
Procedure deviation .....	N.A.
Non-standard .....	N.A.
Type of verdict object .....	plastic dustbin
Brand .....	N.A.
Model/type reference .....	YY-660
Manufacturer .....	Zhejiang Tongxi Technology Co.,Ltd
Address .....	No.718, Juying Road, Eastern New Area, Jiju District, Taizhou, Zhejiang

<b>Possible case verdicts :</b>	
Case does not apply to the verdict object .....	: N (.A.)
Verdict object does meet the requirement .....	: P(ass)
Verdict object does not meet the requirement ...	: F(ail)
<b>Name and address of the testing laboratory:</b> <b><u>Beide (Shenzhen) Product Service Limited</u></b> <b><u>6F, Bldg E, Hourui 3rd Ind Zone, Xixiang,</u></b> <b><u>Bao'an Dist, Shenzhen, China</u></b>	
<div style="text-align: center;">  </div> <p><b>Reported by :</b> _____ <u>Mar. 21, 2022</u></p> <p style="text-align: center;">Signature / Anna Deng / Engineer      Date</p>	
<div style="text-align: center;">  </div> <p><b>Checked by :</b> _____ <u>Mar. 21, 2022</u></p> <p style="text-align: center;">Signature / Austin Zhong / Engineer      Date</p>	
<div style="text-align: center;">  </div> <p><b>Approved by :</b> _____ <u>Mar. 21, 2022</u></p> <p style="text-align: center;">Signature / Martin Wang / Manager      Date</p>	





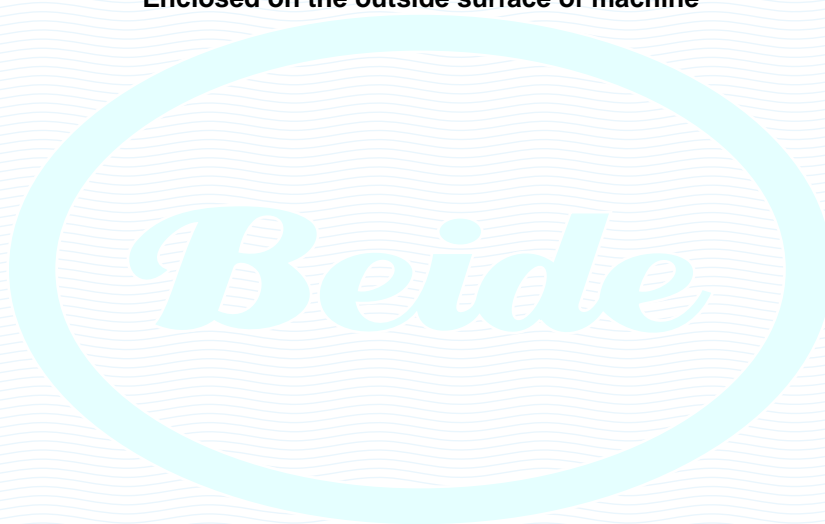
<b>General remarks:</b>	
<p>"(see remark #)" refers to a remark appended to the report.</p> <p>"(see appended table)" refers to a table appended to the report.</p> <p>Throughout this report a comma is used as the decimal separator.</p> <p>The test results presented in this report relate only to the object tested.</p> <p>This report shall not be reproduced except in full without the written approval of the testing laboratory.</p>	<p>Attached with:</p> <p>Appendix A: Photo-documentation</p>



## Artwork of Marking Label

plastic dustbin  
Model: YY-660  
nominal volume: 660 l  
EN 840-2:2020  
EN 840-5:2020  
EN 840-6:2020  
Zhejiang Tongxi Technology Co.,Ltd  
Made In China 2022/02

**Enclosed on the outside surface of machine**



EN 840-2			
Clause	Requirement – Test	Result - Remark	Verdict
4	Volumes		P
	This part of EN 840 identifies the two classes of containers:		--
	— Class I - small size (nominal volume up to 1000 l);	660l	P
	— Class II - large size (nominal volume between 1000 l and 1300 l).		N
	Within the two above-mentioned classes of containers the following volumes are identified: 500l, 660l, 770l, 1000l, 1100l and 1200l. Nominal volumes different from those referenced can be used by agreement between user and manufacturer. The tolerance of the volumes shall be $\pm 5\%$ maximum measured according to EN 840-5.	660l	P
5	Dimensions and design		P
5.1	The design of the containers need not correspond to the drawings given in Figure 1. The functional dimensions given in Table 1 shall be respected. Recommendations for manufacturers of lifting devices are given in EN 1501-5.		P
5.2	The container shall be constructed so that when it is unloaded or loaded with a nominal load (see Clause 6), it fits on an approved compatible lifting device. It shall be automatically locked safely into the lifting device during the lifting operation. If the container is equipped with a comb receiver, it shall correspond to Figure 2 (Form A).		P
5.3	The lid(s) shall cover the opening of the container completely. It/they shall be opened easily by itself/themselves during the emptying cycle. It/They shall be made with at least two fixing points and have at least one means of opening.		P
5.4	Handles fitted in front of the trunnion shall have a measurement over the handles of 10 mm less than the actual measurement in Table 1, dimension N°33. The handles and their location shall also be designed so that they do not harm the operator.		P
5.5	If the container has ribs in the frontal receiver they shall meet the requirements of Figures 2 and 4.		P



EN 840-2			
Clause	Requirement – Test	Result - Remark	Verdict
5.6	The container shall have four swivel castors. Each swivel castor shall be capable of withstanding 1/3 of the total permissible mass. Each castor shall meet the requirements of EN 840-5. The container shall have facilities for mounting the castor platine according to at least one of the configurations as shown in Figure 5.		P
5.7	All the surfaces of the container including design features shall be smooth and free of any foreign bodies or flaws.		P
5.8	The container should have a drain plug.		P
5.9	When direction locks are fitted they shall be fixed on at least two castors.		P
5.10	The container should be fitted with two braked wheels to requirements of EN 840-5. In case of centralized braking and locking system the brake pedal and the lock shall be fixed on a lateral side of the container. The centralized locking shall be able to be unlocked with a standard triangular key as shown in Figure 6. The effectiveness of the centralized braking system shall conform to EN 840-5.		P
6	Nominal mass		P
	The container shall be constructed strongly enough to carry a mass of 0,4 kg/dm <sup>3</sup> x nominal volume. Containers with a nominal volume of more than 1100 l shall be constructed strongly enough to carry a load of 440 kg.		P
7	Safety and health requirements		P
	The container shall meet the safety and health requirements according to EN 840-6.		P
8	Testing		P
	The container shall fulfil the performance requirements and the tests of EN 840-5.		P
9	Marking		P

EN 840-2			
Clause	Requirement – Test	Result - Remark	Verdict
9.1	Each container complying with the requirements of this part of EN 840 shall be durably and readably marked on the body in a visible part with:		--
	— number of this document (EN 840-2);	EN 840-2	P
	— nominal volume;	660 l	P
	— manufacturer's name or trademark;	Zhejiang Tongxi Technology Co.,Ltd	P
	— total permissible mass, in kilograms;		N
	— year and month of manufacturing.	2022/02	P
9.2	Additional marking for quality, recycling, etc. is allowed. Plastic parts of containers, lids and wheels shall be marked in accordance with EN ISO 11469. The use of recycled materials is allowed, presuming that all requirements of this standard are complied with.		P
10	Designation		P
	<p>The container complying with the requirements of this document shall be designated as follows:</p> <div> <div>Container</div> <div>EN 840-2</div> <div>660</div> <div>A</div> <div>0</div> <div>264</div> </div> <p>Description _____</p> <p>Standard number _____</p> <p>Nominal volume, in litres _____</p> <p>Frontal receiver form: _____</p> <p>A = frontal receiver (FormA)</p> <p>0 = without frontal receiver</p> <p>Lateral receiver: _____</p> <p>A = trunnions</p> <p>0 = without lateral receiver</p> <p>Nominal load, in kilograms _____</p>		P



EN 840-5			
Clause	Requirement – Test	Result - Remark	Verdict
4	Tests		P
4.1	General		--
	Before and after the tests a visual inspection of the container shall be done for the purpose of:		--
	a) checking that the container is not damaged and has no visual defect;		P
	b) checking that the manufacturing characteristics of the container to be tested are those specified in the standards applying to the container according to EN 840-1 to EN 840-4;		P
	c) comparing the condition of the container before and after the sequence of the tests.		P
	After completing the tests some deformation of the container is permissible, however, it shall remain entirely functional.		P
4.2	Control before the tests		P
4.2.1	Visual aspects		P
	No obvious damage, cracks, bubbles, large flashes or sharp edges shall be present. No surface defects (unsmooth areas; trails in colour) perceivable from a distance of 1 m by the naked eye shall be visible.		P
4.2.2	Compatibility with EN 840-1 to EN 840-4	Compatibility with EN 840-2	P
4.2.2.1	Components		P
	Body, lid, wheels and other fittings shall conform to the relevant container standard.		P
4.2.2.2	Sizes and dimensions		P
	Functional and safety dimensions for the container and its components shall be checked according to the figures and the relevant tables of EN 840-1 to EN 840-4.		P
4.2.2.3	Volumes		P
	The volumes of container shall be measured:		--
	a) for the body, by tank method;		P
	b) for the lid, by tank method;		P

EN 840-5			
Clause	Requirement – Test	Result - Remark	Verdict
	c) volume results in a) and b) minus any duplicated volumes.		P
	The volumes shall be within the tolerances according to EN 840-1 to EN 840-4.		P
	For containers according to EN 840-3 volume measurement by means of calculation is allowed.		N
4.2.2.4	Tank method		P
	The test equipment shall consist of a tank with sufficient capacity to receive the container to be tested.		P
	The test procedure is as follows: - place the empty container in a tank, the container shall not be inclined; - simultaneously fill the tank and the container with water at a temperature of $(15 \pm 5) ^\circ\text{C}$ ; - measure the quantity of water inside the container		P
	Accuracy of measurement shall be $\pm 1 \%$ of the measured capacity of the container.		P
4.2.3	Deflection for comb lifting system		P
	The frontal receiver shall have a horizontal deflection of no more than:		--
	a) 1,5 % of the length of the frontal receiver for plastic;		P
	b) 0,6 % of the length for steel.		N
	For other systems the values are to be defined when the systems are standardised.		N
4.2.4	Masses		P
	The tolerances on the container mass claimed are as follows: for plastic containers $\pm 5 \%$ and for metal containers $\pm 10 \%$ .	for plastic containers $\pm 5 \%$	P
4.2.5	Colour		P
	The colour shall be defined and agreed between customer and supplier. For colour measurement, differences and tolerances refer to existing International Standards.		P

EN 840-5			
Clause	Requirement – Test	Result - Remark	Verdict
4.2.6	Marking		P
	Marking of the container shall correspond to EN 840-1 to EN 840-4.		P
4.3	Control after the tests		P
	Not withstanding variations in deflection and sizes, it shall be possible to lift and tilt the container loaded according to 4.5 with nominal load safely on the designated lifting equipment and to move the container on its wheels.		P
4.4	Conditions of the test		P
	The tests shall be carried out at the following temperatures: - T1 = (23 ± 5) °C - T2 = ( <sup>0</sup> -18 <sub>-2</sub> ) °C.		P
	The minimum duration of conditioning before testing at a test temperature T2 shall be 12 h.		P
	For special purposes a temperature lower than -18 °C or higher than 23 °C can be agreed; in this case it shall be indicated in the test report.		N
4.5	Test load		P
	For the test the containers are to be filled with ballast bags of HDPE granules of 4 kg max., with granules having a density of 0,5 kg/dm³.		P
	The test load shall be 0,4 kg/dm³ multiplied by nominal volume, but not more than 440 kg.		P
4.6	Other test conditions		P
	Any other test conditions shall be defined within the tests involved.		P
4.7	Tests on the containers		P
4.7.1	General		--
	All tests shall be carried out on new containers.		P
4.7.2	Impact tests by ball drop		P
	The ball drop test is not compulsory for steel containers.		N



EN 840-5			
Clause	Requirement – Test	Result - Remark	Verdict
	The ability of sensitive points of the container to resist impacts at low temperature shall be tested under conditions in 4.4.		P
	The 2-wheeled containers shall be placed on a concrete or steel surface in the normal position.		N
	There shall be a steel frame between the concrete surface or the steel surface and the container so that the complete area of the bottom of the container can be deflected during the test.		N
	The 4-wheeled containers shall stand on their wheels.		P
	Ball drop tests shall be carried out using a 5 kg steel cylinder, diameter 65 mm, with hemispheric end radius of 32,5 mm. The steel cylinder is guided in a vertical pipe with a slot or with holes in order to allow the air to escape during the drop.		P
4.7.3	Impacts on an inclined plane		P
	<p>Only 4-wheeled containers shall be tested with impact on each wall of the body and on each corner to check the resistance to straining and breaking of sensitive areas, including protruding areas and fittings. The test conditions shall be:</p> <ul style="list-style-type: none"> <li>- test temperature T1= room temperature;</li> <li>- test load according to 4.5;</li> <li>- inclination of 10° (ten degrees) to the horizontal;</li> <li>- impact against a wall perpendicular to the moving direction;</li> <li>- a total of 16 impacts according to the sequence in Table 1.</li> </ul>		P
	During the procedure the lid shall be closed. The loaded container shall be placed on a trolley with an inclination of 10° (ten degrees) (relative to the horizontal). Precautions shall be taken to avoid accidental tipping of the container during the test (see Figure C.1).		P
4.7.4	Kerb travel (run)		P

EN 840-5			
Clause	Requirement – Test	Result - Remark	Verdict
	<p>Only 4-wheeled containers shall be tested for kerb travel using run tests under the following conditions:</p> <ul style="list-style-type: none"> <li>- test shall be carried out at room temperature T1;</li> <li>- test load according to 4.5;</li> <li>- apparatus shall comply with Annex A;</li> <li>- kerb height shall be 140 mm orthogonal to the moving direction and located at the end of the run;</li> <li>- wheels are to be guided in order to be orthogonal to the kerb at the time of the impact;</li> <li>- impact velocity shall be <math>(1,85 \pm 0,05)</math> m/s;</li> <li>- there shall be 4 impacts for each of the shorter ends of the container (8 in total).</li> </ul>	<p>After the test there shall be no permanent deformation or breakage which disturbs handling, tilting, rolling (castors move freely).</p>	P
4.7.5	Kerb travel (falls)		P
4.7.5.1	General		--
	<p>Strength tests shall be carried out on 2- and 4-wheeled containers under the following conditions:</p> <ul style="list-style-type: none"> <li>- test temperature T1 = room temperature;</li> <li>- test load according to 4.5;</li> <li>- height fall of 140 mm.</li> </ul>	<p>After the test there shall be no permanent deformation or breakage, which disturbs handling, tilting, rolling or safety and health (castors shall move freely).</p>	P
	The container shall be lifted up to 140 mm and then dropped freely so that 2 wheels hit the ground first.		P
4.7.5.2	Test conditions		P
	<ul style="list-style-type: none"> <li>- 2 wheels shall hit the ground;</li> <li>- at least 1 000 drops shall be carried out;</li> <li>- number of 5 drops per minute maximum;</li> <li>- test apparatus shall be according to Figure B.1 and B.2.</li> </ul>	<p>After the test there shall be no permanent deformation or breakage which disturbs handling, tilting, rolling (castors move freely).</p>	P
4.8	Stability test		P
	The static stability of empty and loaded containers on a flat plane of 10° (ten degrees) to the horizontal shall be tested at first on empty containers and after that on containers filled with the nominal load.		P
	The test shall be carried out without wind.		P

EN 840-5			
Clause	Requirement – Test	Result - Remark	Verdict
	For 4-wheeled containers, the brakes, if any, could prevent them from rolling. Other arrangements shall be made to prevent containers from gliding or rolling without hindering tipping.		P
	<p>The container shall be checked in 3 directions.</p> <p>a) Stability at right angles to the slope line (transversal stability):</p> <p>the wider part of 4-wheeled containers and the wheel's axle of 2-wheeled containers shall be parallel to the slope line.</p> <p>b) Longitudinal stability:</p> <p>the wider part of 4-wheeled containers and the wheel's axle of 2-wheeled containers shall be in the right angle to the slope line.</p> <p>c) Diagonal stability:</p> <p>the diagonal line of the container shall be parallel to the slope line.</p>		P
	The longitudinal stability test of 4-wheeled containers includes the brake test according to 4.9.4. In consideration of all test conditions the container shall neither tip nor move.		P
4.9	Pulling and rolling tests		P
4.9.1	General		--
	The aim of these tests is to check the handling and immobilisation of the containers and to fulfil the safety and health requirements for the operators.		P
	<p>These tests shall include:</p> <ul style="list-style-type: none"> <li>- pulling tests;</li> <li>- wheels tests;</li> <li>- brake tests.</li> </ul>		P
4.9.2	Pulling tests		P
	The strength required to start and maintain the container movement shall be measured (regarding the apparatus, see Figure 3).		P
4.9.3	Wheels testing		P



EN 840-5			
Clause	Requirement – Test	Result - Remark	Verdict
	The functional qualities of the wheels over a given distance, at a defined speed, under load, with a periodical step shall be tested. It is a test specifically for the wheel.		P
	The apparatus shall be a concrete surface horizontal circle with a diameter of 1,1 m.		P
	The wheel is rolled in a circle. A step of 11,5 cm height is placed in the circle along a radius and allows the wheel to fall down after each 3,5 m run (1 turn). The wheel is loaded with loads according to Table 3. The test shall be carried out in turns of moving and rest.		P
4.9.4	Brake tests		P
	The container shall not roll on a gradient of 10° to the horizontal under all load conditions.		P
4.10	Lifting-tilting tests		P
4.10.1	General		--
	This test checks that the container fits well on lifting devices in agreement with EN 1501-1. The apparatus shall be a compatible standardised lifting device. All lifting attachments of the container shall be tested.		P
	The container and the lifting device are on the same plane, on even ground. The test should be carried out under normal service conditions.		P
4.10.2	Lifting-tilting of the empty container		P
	This is a preliminary test to be done after visual inspection of the container and before the other tests.		P
	The test is carried out on an empty container successively with the lid closed.		P
	A minimum of 5 lifting-tilting cycles should be completed without damage or malfunction.		P
	After completing the tests no damage on any part of the containers, lid, etc, shall be visible with the naked eye. No hindering during the cycles is allowed. If unsuccessful, the test shall be stopped.		P
4.10.3	Lifting-tilting of the loaded container		P

EN 840-5			
Clause	Requirement – Test	Result - Remark	Verdict
	<p>The test shall be carried out on one sample under the following conditions:</p> <ul style="list-style-type: none"> <li>- test load shall conform to 4.5. A device to prevent the test load from being ejected during the test;</li> <li>- test temperature T1;</li> <li>- at least 100 cycles shall be made.</li> </ul>		P
	After every 10 cycles a break of 5 min is planned.		P
	After completing the test it shall be possible to safely position the container on the lifting device without lifting it by hand.		P
	The container shall be locked safely when tilting, during the cycles.		P
	After completing the test no permanent deformation or abnormal distortion of the container causing premature ageing and no changes in dimensions that would give handling and lifting difficulties shall appear.		P
4.11	Miscellaneous tests		P
4.11.1	Internal stress-cracking tests (for thermo plastics only)		N
	The following procedure tests the level of internal stress which can affect some molded plastic parts. Cracks after this test mean use of inadequate material or bad processing conditions.		N
	<p>The test shall be carried out under the following conditions:</p> <ul style="list-style-type: none"> <li>- tank large enough to include the whole container;</li> <li>- water bath with 2 % to 3 % in volume of active part strong detergent e. g.1) diluted in water;</li> <li>- bath temperature of <math>(70 \pm 5)^{\circ}\text{C}</math>;</li> <li>- duration of the bath shall be 48 h.</li> </ul>		N
	After the test the container shall be rinsed immediately and shall be checked visually only 6 h after the test.		N

EN 840-5			
Clause	Requirement – Test	Result - Remark	Verdict
	After completing the test no cracks or tears in sensitive areas (containers and lids) where they could extend to bring the container out of use, e.g. front rim, handles, grip hinges, wheel junctions, hinges, injection points, reinforcing ribs, rib edges shall be visible.		N
4.11.2	Handle test		P
	Lifting handles on 4-wheeled containers shall be tested.		P
	Lifting handles and their junction with the container shall be strong enough to avoid damage or disconnecting when they are used to lift the container up the kerb.		P
	The test shall be carried out under the following conditions: - test temperature T1; - test load shall conform to 4.5; - lifting height shall be minimum 50 mm; - test frequency shall be 5 times per minute with a number of 1 000 liftings at least.		P
	The container shall be lifted at least 50 mm by a 50 mm wide hook which is located around the middle of the handle, and afterwards is slowly moved down to the ground.		P
	After the test there shall be no permanent deformation or breakage, which disturbs handling the container.		P
4.11.3	Corrosion test		P
	The container shall be resistant to corrosion due to the state of the art.		P
	It is the task of the manufacturer to use surface treatments or materials which guarantee this performance.		P
	Bodies and lids, hot dip galvanised after completion, and other hot dip galvanised parts shall meet the requirements of EN ISO 1461.		N
	Zinc electro-plated parts shall meet the requirements of EN ISO 2081.		N



EN 840-5			
Clause	Requirement – Test	Result - Remark	Verdict
	Weldless bodies, lids and parts made out of continuously hot-dip zinc coated steel sheets shall meet the requirements of EN 10142.		N
4.11.4	Weathering (for thermo plastics only)		N
	Preparation of samples, conditions of exposures, sequence of exposures, test methods to measure performances of new and irradiated samples are defined in standards to be established by CEN/TC 249. In the meantime, ISO standards may be used (see Annex E)		N
	The material tested shall contain all the components added to the basic plastic at the rate used to mold the container, stabiliser, pigments or colorants, and, if any, fillers, other plastic etc. These additives may influence the effects of weathering on the plastic.		N
	The results of weathering on plastic containers shall include: - ageing of the plastic material; - changes in colour.		N
4.11.5	Test method for dome lid container (EN 840-3)		N
4.11.5.1	Equipment		N
	- A child mannequin in compliance with an appropriate European Regulation <sup>2</sup> ); size corresponding to 10 years old. The child mannequin is dressed with a thin sweatshirt made of at least 90 % cotton. The child mannequin is wearing the hood.  - A parallel piped-shaped plastic box (dimensions: length 600 mm x width 400 mm x height 320 mm).		N
4.11.5.2	Test method		N
	The test described below shall be performed five times for each of the following three child mannequin positions in relation to the container rim: - center; - left hand side; - right hand side.		N
	The untested dome lid braked container is placed on a hard concrete plane with an inclination of 1° maximum to the horizontal.		N

EN 840-5			
Clause	Requirement – Test	Result - Remark	Verdict
	Position the legs of the child mannequin on the plastic box, such that the head and arms are inside the container for the centre position and one arm inside the container for the lateral position. Close the lid manually until it stops without any unlocking. Remove the box by device at a speed of 0,5 m/s.		N
4.11.5.3	Acceptance criteria		N
	In each of the three positions, in any sequence of the test, the child mannequin shall fall from the container when the plastic box is removed.		N
	It is acceptable for the child mannequin's head to remain suspended for an amount of time not to exceed 2 s.		N
4.11.6	Sequence of the tests		P
	The sequence of the tests on each sample are defined by Table 4.		P

5	Test report		P
	<p>The test report shall include the following:</p> <ul style="list-style-type: none"> <li>a) name and place of the testing body;</li> <li>b) testing date;</li> <li>c) test conditions according to EN 840-5;</li> <li>d) description of the tested containers (manufacturer, designation, others);</li> <li>e) number of the containers tested (see 4.11.6);</li> <li>f) type of testing equipments;</li> <li>g) stipulated values mentioned in 4.7.2, 4.7.3, 4.7.4, 4.9.2 and the stipulated corrosion or/and weathering test for materials different from galvanised steel and polyethylene;</li> <li>h) result on each test.</li> </ul>		P

EN 840-6			
Clause	Requirement – Test	Result - Remark	Verdict
4	General requirements of construction		P
4.1	The container shall be constructed so that when it is unloaded or loaded with a nominal mass, it has a secure fit on an approved compatible lifting device and shall be automatically locked safely into the lifting device during the tilting and emptying operation. The container shall be in static stability according to 4.8 of EN 840-5:2020.		P
4.2	The container shall be safely fitted to the lifting device of the vehicle without being carried or lifted manually.		P
4.3	Wheeled containers shall be constructed so that, under test conditions according to EN 840-5, the pushing and pulling forces to keep the container moving shall not exceed the values given in EN 840-5:2020, 4.9. Pushing and pulling forces shall be declared in the instructions for use (see Clause 12).		P
4.4	During construction of containers the following factors influencing measurable handling force shall be optimized:  - design of container as regards to form, size and position of centre of gravity in relation to positioning of wheels and handles;  - even distribution of loads on wheels;  - low rolling resistance.		P
5	Handles		P
5.1	Two wheeled containers shall have handles for pulling, pushing and manoeuvring the container that enable the operator to grip safely with two hands.		N
	Four wheeled containers shall have handles for pushing, pulling, manoeuvring the container. Injuries caused by sharp edges shall be avoided.		P
5.2	Handles for pulling, pushing and manoeuvring the container shall have one of the external forms as shown in Figure 1 (based on the external form of Figure 1 ring form section and U-shaped form section are permitted). A minimum length of 120 mm and a minimum clearance of 36 mm around the handle is required (see Figure 2).		N



EN 840-6			
Clause	Requirement – Test	Result - Remark	Verdict
5.3	Handles for pulling, pushing and manoeuvring the container shall be positioned at a height of $(900^{+400}_{-25})$ mm (measured in the middle of the handle) above the ground. On two wheeled containers, for containers with a volume $\geq 140$ l, these handles shall have a minimum height of 800 mm in a tilted position (centre of gravity above the wheel axle). For containers less than 140 l the handles shall have a minimum height of 700 mm. On four wheeled containers vertical handles are optional. If two handles are fitted they shall be a minimum of 450 mm apart and shall cover a height range from 780 mm to 1 050 mm. 2 wheeled containers shall be filled with the test load for the test, their lids shall be closed.		N
6	Wheels		P
6.1	Containers with 4 wheels and a capacity not exceeding 1 700 l shall only have swivel castor wheels.		P
	Containers for towing with four wheels can have two fixed wheels or wheels which could be fixed.		P
6.2	The wheels and their position shall ensure a minimum of pushing/pulling force and good stability.		P
6.3	The wheels on all containers shall have a nominal diameter of 200 mm. Wheels of nominal diameter of 160 mm on four-wheeled containers as well as larger wheels on two-wheeled containers are optional, as long as pushing forces are not exceeded (see 4.3).		P
6.4	All wheels or castors shall be constructed to resist static and dynamic stress, e.g. by rolling against kerbstones (test according to EN 840-5).		P
6.5	If castor-mounting brackets are used they shall not protrude beyond the widest part of the container body.		N
7	Direction block		P
	When direction blocks are fitted on containers with 4 wheels they shall be fitted to at least two wheels.		P

EN 840-6			
Clause	Requirement – Test	Result - Remark	Verdict
8	Brakes		P
8.1	General remark:		--
	When brakes are fitted on containers with 4 wheels they shall be fitted to at least 2 wheels.		P
8.2	The brakes shall be adjustable or self-compensating and capable of retaining the container on a minimum slope of ten degrees to the horizontal.		P
8.3	Brakes shall be capable of being used easily by the operator.		P
8.4	If containers are fitted with a central brake locking system it shall be possible to secure it against unauthorised unlocking.		N
8.5	The brakes shall be tested according to EN 840-5:2020, 4.9.4.		P
9	Edges		P
9.1	The container shall not have any sharp edges (a radius less than 1,4 mm).		P
9.2	All edges which may be used for manoeuvring shall be rounded so that nobody can be injured.		P
10	Lids		P
10.1	To avoid the danger of crushed fingers when closing the lid, dome lids shall have a safety clearance to the front edge of at least 35 mm. The gap shall be closed by an elastic material.		N
	Flat lids shall not damage fingers.		P
10.2	Containers with dome lids shall be provided with a mechanism to hold the lid open automatically and prevent it from accidentally closing.		N
10.3	Containers with assisted lids shall be provided with a device to ensure that the container lid cannot cause injury by its movement.		N
10.4	The dome lid container shall be designed in such a manner that, in particular, a child's head cannot be trapped between lid and body of the container.		N

EN 840-6			
Clause	Requirement – Test	Result - Remark	Verdict
	For dome lid container, a minimum gap of 181 mm shall be kept between lid and body of the container. This gap shall not be closed either automatically (by spring force or gravity) or unintentionally by a child's hand force.		N
	The container shall be tested according to EN 840-5:2020, 4.11.5.		N
11	Cleaning		P
	Containers shall be designed for easy cleaning.		P
12	Instructions for use		P
12.1	Instructions for use shall be supplied so that the operator can have access to all available information on the correct use of containers.	See the instructions	P
	Those instructions shall give information on all relevant factors to enable correct usage of a container. Also safety and health requirements shall be included.		P



EN 840-6			
Clause	Requirement – Test	Result - Remark	Verdict
12.2	<p>In order to give purchasers and all users of the container the necessary information to enable them to correctly choose and safely use the containers, the information provided shall as a minimum include:</p> <ul style="list-style-type: none"> <li>- number of the European Standard (e.g. EN 840-6);</li> <li>- volume;</li> <li>- total permissible mass;</li> <li>- wheel diameter;</li> <li>- type of the wheel bearings;</li> <li>- whether direction blocks are fitted or not;</li> <li>- whether brakes are equipped or not;</li> <li>- adjusted braking torque;</li> <li>- whether a central brake lock is equipped;</li> <li>- pulling force, measured using the type test (see EN 840-5);</li> <li>- essential dimensions including height of handles in the upright and tilted position.</li> </ul>		P
	The lid(s) shall be closed before the lifting device pick up the container.		P
	This information shall conform to the delivered container.		P

**APPENDIX A**  
**Photo-documentation**

**Photo 1**

View:



**Photo 2**

View:



**Photo 3**

View:



**Photo 4**

View:





**Photo 5**

View:



*Beide*