

# New EU Toys Directive (2009/48/EC)

## **TECHNICAL FILE**

Item No.: 53349

Item Name: Splash & Dash Water Park

Prepared by: Johnson Jin

Date: Jan 09, 2020

Checked by: Mi Huang

**Date:** Jan 09, 2020

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## **DECLARATION OF CONFORMITY**

We, the Manufacturer

Bestway (Europe) s.r.l.,

Via Resistenza, 5, 20098 San Giuliano Milanese (Milano), Italy



declare with all responsibility that the products:

Model No.53349

Model Name: Splash & Dash Water Park

#### Product description:

- \* 4.48m x 3.11m x 2.66m / 14'8" x10'2" x8'9"
- \* Made of a durable and colorful pvc-coated polyester material.
- \* Double stitched for added durability
- \* Secure mesh cover surround at tower peak
- \* Setup is quick and easy. The heavy duty blower inflates the water park in less than 2 minutes.
- \* 1 elevated platform
- \* Comes with a large play pool area
- \* Comes with a bucket that dumps out water randomly for a soaked surprise.

This also keeps the slide slippery for extra fun rides

- \* A water blaster is attached to the park, so you can spray your friends
- \* Full Color Box
- \* 1 Ea.,23.3 kg(LB)
- \* Designed for outdoor use

Content: 1 slide, 1 blower(stakes included), 1 repair kit (multiple assorted patches), 1 storage bag,8 bouncer stakes,1 water spray hose assembly.





is in conformity with follow European directives

DIRECTIVE 2009/48/EC of the European Parliament and of the Council of 18 June 2009 on the safety of toys

Conformity with the requirements of above Directives is testified by complete adherence to the following harmonized standards

EN 71-1: 2014+A1: 2018 Mechanical And Physical Properties

⊠ EN 71-3: 2013+A3: 2018 Migration of certain elements

Mi. huang

The product of the declaration described above is in conformity with the requirements of the following specifications / test reports:

Test Report No. TJHL1811006378PG

issued by: SGS-CSTC Standards Technical Services (Tianjin) Co., Ltd.

Place: Via Resistenza, 5, 20098 San Giuliano Milanese (Milano), Italy

Date: 2020-01-09

Name: Mi Huang

Function: Certification Engineer

Signature:

Part I: Physical Safety Assessment

SECTION 1 – Description	
Item/Concept Name:	53349
Detailed Description:	Splash & Dash Water Park
Materials Used:	Fabric + Plastics
Age Grading:	5+ years

#### **Executive Summary**

#### **SECTION 2** – Foreseeable Use

Intended/Foreseeable Use

Children will play the item as intended.

Or children may use the item on lawn, yard, and floor without water;

#### **SECTION 3** – Mechanical/Physical Compliance Findings

#### EN71-1

#### **Europe**

The product is likely to comply with the requirements for children over 36 months based on the play feature, construction and design.

Non-conformity was not identified during this review, but the following requirements should be noted for the compliance.

- Mold flash shall not be present
- No sharp point, sharp edge can be found.
- Materials used in the toy shall be clean

#### **SECTION 4** – Product Design Evaluation

#### Risk Assessment Recommendations:

#### Major Concerns

#### Submersion/Drowning

The inflatable device may present drowning hazard as it will be filled with water and young children will play in it. The risk is slightly reduced as following warnings were found on the inflatable device: For example: "Warning. Prevent Drowning. Children under 5, especially toddlers are at high risk of drowning. Closely watch children who are in or near this inflatable device. Empty inflatable device or prevent access when not in use." "Warning! Children have drowned in portable swimming pools. Ensure active adult supervision at all times. Do not leave children unsupervised in or around the pool – keep them within arms' reach. Empty and store safely after use." "Warning! Never leave your child unattended – drowning hazard."

Action: this hazard can be reduced by making sure the inflatable device not hold too much water and alerting the consumer that the inflatable device should be used under adult's supervision all times.

#### Fall down

Children may suffer fall down hazard if they climb on the containing wall. What's more, there may be another fall down hazard, while children playing inside the pool when the bottom surface becomes wet.



Action: Always keeping adult supervision and install the product over impact absorbing surfaces such as sand, wood-bark chips, rubber and foam can slightly reduce this hazard.

#### Safety Collapse

The Item may capture the users who are playing inside in case of suddenly lost of air pressure, but the risk of capture of user is lower as there are some opening in the containing wall.

Actions: The opening of entrance should be make in different color as so it is easily to identify the entrance for exit while there is an accident.

#### Electric Shock

There may present electric shock hazard to children if they misuse the blower. However, this hazard is reduced as the product is assembled by adult, and used under adult's supervision.

Action: Alerting the consumers by adding the warning on the packaging "Adult assembly required", and children should be under supervised at all times.

#### Minor Concerns

#### **Airway obstruction**

The red water pipe connector may present the airway obstruction hazard to young child. However, the hazard is reduced due to the older age range for the item.



Action: the hazard can be reduced by

- Adding adult assemble before using;
- Alerting the hazard to customers, such as: "Warning! Not suitable for children under 36 months, small part, choking hazard."

#### Lift hazard

There could be a minor lift hazard from the high wind if the inflatable device was installed in outdoor, this hazard is minor as there are many anchors included in the product.

Action: The risk of this hazard can be reduced by adding the warning "Do not use the product in high wind" and correct use the anchors provided by the manufacturer

#### Impact hazard

The product may present an impact hazard to eyes as the water blaster will spray water.

Action: this hazard can be reduced by using clean water and alerting the users do not spray others' eyes with the water blaster.

#### Critical Manufacturing Concerns

Heavy elements content and raw materials should be controlled, especially lead in paint and phthalates, which are involved large number of US CPSC and REPAX recall cases.

All the edges should be rounded and mould flash and process splinter should be well controlled throughout production in order to minimize the laceration hazard from sharp points on the items.

The item should be manufactured in a clean environment and this should be closely monitored throughout production to avoid external contamination.

Well processing the inflaming retarding for the product, it's better to use inflammable materials.

SECTION 5 – Flammability	
Flammability  Flammability	The product may not comply with the EN71-2 requirements as the following reasons:  1) the rate of spread of flame of the product may exceed 30mm/s  2) the rate of spread of flame may be greater than 20mm/s, and there was flaming debris or molten drips.  3) the rate of spread of falme may be between 10mm/s and 30mm/s, and not found the appropriate part(s) of the toy and the packaging was permanently marked with the warning: "Warning. Keep away from fire."
	Actions: Add safe flame retardant into the material or using flame-retardant materials for the product.

SECTION 6 – Hygiene				
Hygiene	Toys must be designed and manufactured in such a way as to meet hygiene and cleanliness requirements in order to avoid any risk of infection, sickness or contamination (New Toy Safety Directive 2009-48-EC).			
	Microbial contamination			
	As the anchor bag is intended to fill with water, water remained in the water blob, may increase the risk of mold growth in the slide, the risk of microbial contamination is lower as it has a clear maintenance instruction to alert the consumers.			

SECTION 7 – Radioactivity	
Radioactivity	This product has no characteristic related to this hazard.

SECTION 8 – Applicable European Directives, Regulations and Harmonized Standards			
Applicable Standards	EU Toy Safety Directive (2009/48/EC) - EN 71-1 Safety of toys - Mechanical and physical properties - EN 71-2 Safety of toys - Flammability - EN 71-3 Safety of toys - Migration of certain elements		
	REACH Annex XVII – Restrictions - Cadmium - Organotins - Phthalates - PAHs		
	Regulation (EC) 1907/2006, REACH, Article 33  - Substances of very high concern (SVHCs) on the current candidate list Regulation (EU) No 519/2012  - Short Chain Chlorinated Paraffin (SCCP) Content		
	Packaging Waste Directive (Pb + Cd + Hg + Cr VI) (94/62/EC)		
Other Test Recommendations	EN 71-9 Safety of Toys - Organic Chemical Compounds EN71-12 Germany AfPS GS 2014:01 – PAHs Denmark Statutory Order No. 1082-Lead German Chemikalien Verbotsverordnung - Pentachlorophenol (PCP)		
	Gulf Countries - GSO EN 71-1 Safety of toys - Mechanical and physical properties - GSO EN 71-2 Safety of toys - Flammability - GSO EN 71-3 Safety of toys - Migration of certain elements		

## **SECTION 9** – Labelling Assessment Yes CE Mark Note: For the new Toy Directive the CE mark must be visible at the point of sale. All texts required shall be written in the official language of the country in which the toy is to be sold. New Toy Safety Directive (2009/48/EC) The following information should be present on the product itself, it can be present on the packaging/instruction if the toy it-self is technically/economically not possible. Batch/Serial/Model Number Manufacturer name and address Importer name and address The CE marking must be affixed visibly, legibly and indelibly to the toy, to an affixed label or to the packaging. It must be visible at the point of sale. Labelling The toy or its packaging need to be marked with "Warning! Not suitable for children under 36 months. Small Parts, Choking Hazard. "visible at the point of sale. If the age warning pictograph is used, this must be preceded by the signal word "Warning". An example would be Warning The padding pool or its packaging shall be marked the following warning, as long as the warning is clearly visible at the time of purchase: "Warning. Only for domestic use." The padding pool shall bear the following warning pictograms and warning text.

"Warning. Never leave your child unattended - drowning hazard"

The height of the pictograms shall be not less than 40 mm.

The warning text of the pictograms on the paddling pool shall be indelible and easily legible and in a colour which contrasts with the body of the paddling pool. The warning text shall be placed below or to the side of the pictograms.

The colours of the pictogram on the activity toy shall be respected including the background white colour.

The warning shall be clearly visible during use of the paddling pool.

The packaging of *paddling pools* shall carry the following information:

"Children can drown in very small amounts of water. Empty the pool when not in use".

"Do not install the paddling pool over concrete, asphalt or any other hard surface".

Meanwhile, the warnings, markings and information specified above shall be repeated in the assembly and installation instructions.

Instructions A detailed instruction booklet shall be accompanied with the item. In which contains:

- Warnings
- Product description
- Maintenance
- Cleaning & Storage
- Repair

An instruction of repair patch was found and accompanied with supervision contents. It is suggested to print warning statement to alert the parent / adult to use the patch correctly

(repair the damaged toys by adult only and frequent check the used patch stuck on the item.)

SECTION 10 - Recall Case Study	У		
SECTION 10 – Recall Case Study	Category: Toys Product: Play tent "Pop-Up Tent with 100 Balls"  Brand: Outdoor Active  Name:  Type/number of model: Product code: art.16200; EAN 4022498572629, lot 03/10  Batch number/Barcode:  OECD Portal Category:	Injuries, Cuts  The product poses a risk of injuries because the metallic wires of the tent can break and sharp points can protrude through the tent fabric causing cuts and injuries to children playing with the tent. The product does not comply with the	Voluntary measures: Voluntary recall from consumers by the distributor.
	Description: Toy pop-up tent with 100 balls.  Country of origin: China	Toys Safety Directive and with the relevant European standard EN 71-1.	

#### Part II: Chemical Safety Assessment Report

#### **Summary and Recommendation**

None of the materials listed in the submitted BOM is identified from the substances that are classified as CMR of categories 1A, 1B or 2 under Regulation (EC) No. 1272/2008, substances which are Persistent, Bioaccumulative and Toxic (PBT) and very Persistent and very Bioaccumulative (vPvB), restricted substances listed on Annex XVII of REACH and SVHCs on Candidate List. It is also recommended to review the manufacture process to ensure these substances are not added.

The test listed in the table "**Applicable European Directives**, **Regulations and Harmonized Standards**" are recommended for compliance testing, in order to reduce unintentional chemical risk such as contamination of material during production process.

Chemical management from incoming material to finish product throughout the supply chain is an important part for fulfilling complex and ever-changing chemical requirements. The "**Universal Chemical Safety Assessment**" provided additional information to assist manufacturer in reviewing the manufacturing process, it is to ensure the chemical properties of a toy manufactured through such process is consistence to the BOM stated.

#### **Universal Chemical Safety Assessment**

The following assessment was based on worst case scenario by assessing the possibility of existing of hazardous chemical in the material given in the BOM submitted.

#### **Product classification:**

#### A. New Toy Safety Directive (2009/48/EC)

i: The FABRIC, PP, ABS and PVC parts of the **TURBO SPLASH WATER ZONE\_MEGA WATER PARK** (SAMPLE) are likely to be defined as **scraped-off toy materials**. These materials are **accessible** to children when the SAMPLE is used as intended or in a foreseeable way, when taking into accounts the behavior of children.

Component No.	Material	Accessible as defined by EN 71-1?
1-4	Fabric	Yes
5-7	Polypropylene(PP)	Yes
8	ABS	Yes
9	Poly(vinyl chloride) (PVC)	Yes

The CMR substances in categories 1A, 1B and 2 and the 19 elements should fulfill the chemical requirements of Part III, Annex II of 2009/48/EC unless they are **inaccessible**.

ii: The SAMPLE is likely to be defined as a **non-scented** toy. The likelihood of the occurrence of 66 allergenic fragrances will not be assessed.

iii: Although some parts of the SAMPLE are intended to be placed in the mouth, the SAMPLE will not be assessed for nitrosamines and nitrosatable substances due to the following reasons:

- (1) the SAMPLE is not designed for children under 36 months;
- (2) the SAMPLE does not contain rubber or finger paints<sup>1</sup>.

#### B. REACH (Regulation (EC) No 1907/2006)

i: The SAMPLE is likely to be defined as an **article with substances not intended to be released and substance** under normal and foreseeable conditions of use.

Remark:

. (http://ec.europa.eu/growth/sectors/toys/safety/guidance/index\_en.htm)

#### Chemical requirements under new Toy Safety Directive and REACH:

	CMR substances	Any substance that is classified as CMR categories 1A, 1B or 2 is prohibited to be used in the SAMPLE unless the substance is below the concentration limit set in Regulation (EC) No 1272/2008 <sup>2</sup> . The occurrence of CMR substances in the ABC is assessed in this report.		
	19 Elements <sup>3</sup>	The manufacturer of the SAMPLE has to confirm that the migration levels of the restricted elements are under the defined maximum permitted levels in pliable and scraped-off toy materials.  Safety assessment on the migration of the 19 elements is not suggested <sup>4</sup> .		
New Toy Safety Directive (2009/48/EC)	55 Fragrances⁵	55 fragrances are banned (subject to concentration up to 100 mg/kg when their presence is technically unavoidable under good manufacturing practice). The SAMPLE is non-scented toy.  The likelihood of the occurrence of the fragrances is very low. Therefore, safety assessment of 55 fragrances is not performed.		
	11 Fragrances <sup>5</sup>	<ul> <li>11 fragrances are permitted but must be labeled if the concentration of each exceeds 100 mg/kg. Safety</li> <li>assessment of 11 fragrances is also not performed on the SAMPLE as they are non-scented.</li> </ul>		
	Nitrosamines and nitrosatable substances	Nitrosamines and nitrosatable substances are banned in toys for children under 36 months or for toys that are intended to be placed in the mouth. As the SAMPLE is not designed for children under 36 months and it does not contain rubber or finger paints, thus these substances will not be assessed in this report.		
REACH (Regulation	SVHCs	EU importer may obtain from the manufacturer of the SAMPLE regarding SVHC information to pass along the supply chain if the SAMPLE contains over 0.1% w/w of a SVHC on Candidate List <sup>6</sup> .  The likelihood on the presence of SVHCs in the ABC is assessed in this report.		
(EC) No 1907/2006)	Restricted substances	Restricted substances for which Annex XVII of REACH contains a restriction relevant to toy materials and children's products should not be used in the SAMPLE unless the restricted condition is complied.  The likelihood on the presence of restricted substances in the SAMPLE is listed in this report.		

Remarks:

<sup>&</sup>lt;sup>1</sup>Referring to the explanatory guidance document (**rev 1.9**) published by the European Commission of **Feb 10, 2016**, nitrosamines and nitrosatable substances are relevant in particular for rubber and finger paints.

<sup>&</sup>lt;sup>2</sup>Maximum concentration of the substance regulated under the new Toy Safety Directive (2009/48/EC), CMR categories 1A, 1B and 2, that can be present in toys, components of toys or micro-structurally distinct parts of toys. Referring to Appendix B(2) of Directive 2009/48/EC, the relevant concentration for the classification of mixtures containing the substances should be those established in accordance

with Regulation (EC) No 1272/2008 (with amendment referring to Commission Regulation (EU) No 286/2011) from Jun. 1, 2015.

In case the limit for a substance is set in EN 71-9 and this limit is lower than the specific concentration and the generic limit for a CMR substance in accordance with Regulation (EC) No 1272/2008 (with amendment referring to Commission Regulation (EU) No 286/2011), the limit in EN 71-9 will be used.

<sup>3</sup>The list of 19 elements is available in Annex II Part III (13) of Directive 2009/48/EC.

<sup>4</sup>According to EN 71-3, there is no relationship between the total element content of a toy material and the soluble migration of that element under standard test conditions. Therefore, measuring the total element content and converting the result to give a soluble element figure is not an answer to this problem.

As presented by Maureen Logghe from the European Commission on the topic of European Commission Toys Standards, the timeframe for the European Committee for Standardization (CEN) to revise EN 71-3 to meet the requirements of Directive 2009/48/EC is four years from his presentation, ie. before 2013.

(http://corporate.nca.ie/eng/Business\_Zone/Product\_Safety\_and\_Recalls/Toy\_Safety/toy-safety-seminar/NCA-toy-seminar-Maureen-Logghe-Standards-061010.pdf)

<sup>5</sup>The list of fragrances is available in Annex II Part III (11) of Directive 2009/48/EC.

<sup>6</sup>SVHCs on Candidate List is updated by the European Chemicals Agency (ECHA) on a periodic basis. (http://echa.europa.eu/chem\_data/authorisation\_process/candidate\_list\_table\_en.asp )

#### Conclusion:

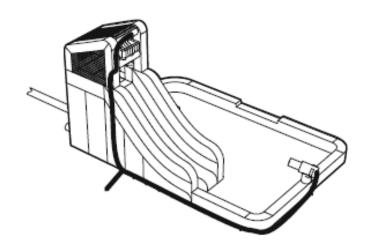
Although the data indicates a number of injures and a number of fatalities involving inflatable pool and toy, given the exposure of these items to the population it is thought that there may be a relatively low probability of injury resulting from their use and that injuries may be unlikely to be severe.

### BOM (Bill of Materials)

Product Name: Beachfront Bonanza Mega Water Park

Date: 2019-08-06 Item No: 53349

Description or level number	Part Number	Number Used (g)	Material, Substance, Component	CAS or Einecs	MSDS Required Y/N	
Water Park	1	13100	Fabric	1		
Blower Motor	2	7750	PP,ABS,Silica gel	/		
Stakes	3	260	PP	/		
Carrying Bag	4	15	Fabric	1		
Accessories		3220	PVC 61.2% DOTP 29.4% ESO 1.0% Barium zinc Heat Stabilizer 0.9% CaCO3 7.5%	9002-86-2		
	5			6422-86-2		
	3			8013-7-8		
				/		
				471-34-1		
STEM WATER(FYF029)	6	20.12500		78-59-1	N	
500#BLACK OIL(FYB071)			Polymerization of the prepolymer 45%	1	Υ	
411#BLUE OIL(FYB081)			Photosensitive monomer 35%	1	Y	
211#YELLOW OIL(FYB079)	7	.   00.00210	30.36213 Pr	Photoinitiator 12%	1	Y
102#WHITE OIL(FYB068)			Pigments 8%	1	Y	
302#311#RED OIL(FYB080)						



## Addresses of the places of manufacture and storage:

Bestway (Europe) s.r.l. (Via Resistenza, 5, 20098 San Giuliano Milanese (Milano), Italy) license to Bestway inflatables and material corp. (No.3065 Cao An Road, Shanghai, 201812, China) for production and storage of Bestway (Jiang Su) Plastics Corp. (No.8 Garden Road, Funing Economic Development Zone, Jiang Su, 224400, China)