Product Specification Sheet



BST Metal Detectable Paddles | SH1*



BST Metal Detectable Paddles

Our paddles are fully detectable and feature optional holes which allow ingredients to pass through the paddle, which in turn, helps with ease of stirring. The paddle blade has a chamfered edge for efficient scraping. Our range of detectable hygiene paddles are specifically developed for the food processing industry.

These detectable hygiene paddles are produced from a specially formulated material based on high impact food contact approved polypropylene. Each product is virtually unbreakable, lightweight, easy to clean and store, has excellent wear resistance whilst reducing the risk of damage to floor surfaces and machinery.

Metal Detectable Paddle Advantages

- √ Hygienic single mould construction, eliminating bacteria traps & improving hygiene
- √ Five bright colours to choose from for easy visual identification (varies per model)
- √ Highly durable, lightweight and provides excellent wear and tear resistance
- ✓ Reduced risk of damage to floor surfaces and machinery
- ✓ Can be used as part of HACCP and BRC procedures
- ✓ Displays due diligence in the prevention of foreign body contamination

Product and Packaging Information

Paddle with Holes	SH1PA66DIGM*	Hand Paddle	SH1HP55SSMB
Paddle w/o Holes	SH1PA6DIGM*	Pack Weight	0.60kg
Pack Weight	1.44kg / 1.47kg	Dimensions	125 x 290 x 540mm
Dimensions	125 x 290 x 1190mm	Colours	Blue
Colours	B,R,G,Y,W		
Pack Size	1	Detectability	Metal Detectable
Temperature Range	-30 ~ 80°C	Commodity Code	39269097
Material	Polypropylene		

Safety Certificates / Approvals

FDA Approved	BRC Compliant	Made In Britain
EU Compliant	ISO 9001:2015	







Materials

Manufactured from a material based on high-impact, food contact approved polypropylene. The material contains full and uniform dispersion of ferrous based detectable elements throughout the product.

Animal Derivatives

To the best of our knowledge there are no ingredients in the formulation of this material that is of animal origin. As such, this material should not pass on any animal derived disease like BSE (Bovine Spongiform Encephalopathy) or other TSE (Transmissible Spongiform Encephalopathy).

Declaration of Conformity for Food Contact Applications

Results summary:

Migration Test Result Summary:	Conclusion
European Commission regulation (EU) No 10/2011	
Finished moulded product: Migration Test	PASS

The migration from the material was less than the maximum permitted by the Regulations.

Specific Migration Of Metals Test Result Summary:	Conclusion
European Commission regulation (EU) No 10/2011	
Specific Migration of Metals	PASS

FDA Test Result Summary:	Conclusion
US FDA 21 CFR 177.1520 (Olefin Polymers) Polypropylene copolymer	PASS

The raw material used in the manufacturing of this product does not contain silicone

U.S Food & Drug Administration Testing

Results: US FDA 21 CFR 177.1520 (Olefin Polymers) Polypropylene Copolymer.

Extractable Fraction: With reference to US US FDA 21 CFR 177.1520 d (3) (ii). Sample preparation in n-hexane at 50°C for 2 hours.

	Result (%w/w)	Reporting Limit (% w/w)	Reference Limit (%w/w)
Extractable Fraction	3.0	0.1	5.5
Comment	PASS	-	-

Soluble Fraction: With reference to US US FDA 21 CFR 177.1520 d (4) (ii). Sample preparation in xylene at 25°C for 2 hours.

	Result (%w/w)	Reporting Limit (% w/w)	Reference Limit (%w/w)
Soluble Fraction	9.2	0.1	30.0
Comment	PASS	-	-

Note: 1. %(w/w) = Percent by weight by weight

2. ND = Not detected

3. °C = Degree Celsius

All testing has been carried out by UKAS accredited testing laboratory.

Overall Migration Testing

The materials were tested in accordance with requirements of the Plastic Materials and Articles in Contact with Food Commission regulation (EU) No. 10/2011 following Methods BSEN 1186:2002. The Regulations require that no plastic material shall be capable of transferring its constituents to food which it may come into contact in quantities exceeding the appropriate limit. For the material the appropriate limit is 10 mg/dm2.

Simulant	Conditions	
3% Acetic Acid	24 Hours at 40°C	2.4 mg/dm2
95% Ethanol	24 Hours at 40°C	1.6 mg/dm2
Iso-octane	4 Hours at 20°C	<4.2 mg/dm2

Test Result Summary:	Conclusion
European Commission regulation (EU) No 10/2011	
Finished moulded product: Migration Test	PASS

Specific Migration of Metals Testing

Method: Sample preparation in 3% acetic acid (w/v) in aqueous solution at 70°C for 2 hours with reference to EN 13130-1:2004; followed by analysis using Inductively Coupled Argon Plasma Spectrometry (ICP).

Test Item	Result (mg/kg)	Reporting Limit (mg/kg)	Reporting Limit (mg/kg)
Specific Migration of Barium	ND	0.25	1
Specific Migration of Cobalt	ND	0.03	0.05
Specific Migration of Cooper	ND	0.25	5
Specific Migration of Iron	ND	0.25	48
Iso-octane Specific Migration of Lithium	ND	0.5	0.6
Specific Migration of Manganese	ND	0.25	0.6
Specific Migration of Zinc	ND	0.5	25
Comment	PASS	-	-

Note: 1. mg/kg = Milligram per kilogram of foodstuff in contact with

2. °C = Degree Celsius

3. ND = Not Detected

Declaration of absence Silicone

On the basis of our knowledge of the manufacturing process and information provided by raw material suppliers. Contains Polydimethylsiloxane CAS 63148-62-9, 0,0060%

Metal Detectability

This product is manufactured from electromagnetically detectable plastic compound. This compound contains evenly dispersed non-toxic detectable additives, making the material detectable by correctly calibrated metal detection systems. Metal detectability performance will vary based on, but not limited to the following factors:

- Calibration Levels
- Product Type (E.g. Wet, Dry, Frozen, Liquid)
- Aperture Dimensions
- Orientation

Orientation is a highly influential factor for the metal detectability of a contaminant that is non spherical, i.e. it will be easier to detect the contaminant when passing in one orientation compared to another - this is known as the orientation effect.

For this reason BST recommend that all our products be thoroughly tested on your metal detection systems by a trained and certified professional. It may be the case that your equipment needs to be re-calibrated in order to reliably detect this product. Such a professional should be available by contacting the manufacturer of your metal detection system.

The information provided in this product specification sheet is based on our experience and knowledge to date and we believe it to be true and reliable. This information is intended as a guide for your use of our products, the use of which is entirely at your own discretion and risk. We, BS Teasdale & Son Ltd, cannot guarantee favourable results and assume no liability in connection with the use of our products. © 2020 BS Teasdale & Son Ltd. All Content, Data & Images are owned by BS Teasdale & Son Ltd and are protected by international copyright law.