Product Specification Sheet



BST Safety Glasses | BSTSG / BSTSG12



Introducing the BST Safety Glasses

These metal detectable & x-ray visible safety glasses are designed specifically for use in the food industry, where minimising the risk of foreign body contamination is of the highest priority.

The BST Safety Glasses are manufactured using Food Grade ABS which is optimised for metal and x-ray detection in the food and pharmaceutical industries.

Safety Glasses Advantages

- ✓ Detectable by in-line metal detection systems & x-ray inspection systems
- ✓ Compliant with EN 166:2001
- ✓ Gives protection against high speed particles
- ✓ Reduces the risks associated with eye hazards
- √ Feature adjustable arms
- ✓ Compliant with EU including mandatory EU migration test standards
- ✓ Can be used as part of HACCP and BRC procedures
- ✓ Displays due diligence in the prevention of foreign body contamination

Product and Packaging Information

Single Pair Code	BSTSG	Pack Weight	0.35kg	
Pack of 12 Code	BSTSG12	Pack Weight	4.2kg	
Frame Colour	Blue	Frame Material	Detectable ABS	
Dimensions	52mm x 140mm	Detectability	Metal Detectable (Frames)	
Size	One size fits all	Country Of Origin	Taiwan 90049010	
Ocular Material	Polycarbonate	Commodity Code		

Safety Certificates / Approvals

EU Compliant

BRCGS Compliant

ISO 9001:2015





Food Contact Status

Hereby we declare that the materials ABS are manufactured in line with the relevant requirements of 2023/2006/EC as amended by Commission Regulation (EC) 282/2008, on good manufacturing practice (GMP) for materials and articles intended to come into contact with food. The raw materials used in the manufacturing process of the above mentioned materials meet the relevant requirements of EU Framework Regulation 1935/2004 on materials and articles intended to come into contact with food. The monomers, starting substances and additives used are listed in Annex I of the consolidated Commission Regulation No.10/2011 as amended by (EU) 321/2011, (EU) 1282/2011, (EU) 1183/2012, (EU) 202/2014, (EU) 2015/174, (EU) 2016/1416, (EU) 2017/752, (EU) 2018/79, (EU) 2018/213, (EU) 2018/831, (EU) 2019/37, (EU) 2019/1338, and (EU)

2020/1245 respectively, related to Plastic Materials and Articles intended to come into contact with foodstuffs.

The colourant used in the formulation of the ABS is compliant with European Council Resolution AP(89)1 on the use of colourants in plastic materials coming into contact with food, and also with German BfR Recommendations (IX). The carbon black used in the formulation of the ABS Black is specifically tested to by the supplier to ensure continuous compliance with carbon black (CAS 1333-86-4, FCM Substance No 411) purity requirements and specific restrictions/specifications mentioned in Annex I of the Commission Regulation (EU) No 10/2011, and the content in the formulation is far below the threshold level of 2.5 wt. % maximum allowed.

Migration Testing

The following overall migration results for Food Grade ABS were obtained using a UKAS accredited laboratory, with overall migration simulants and conditions as detailed in EU Regulation No 10/2011 as amended, on plastic materials and articles intended to come into contact with food.

Sample: ABS-2016/047

Test conditions: Simulants A, B and Iso-octane: 10 days at 40°C 95%v/v ethanol: 2 days at 20°C

Method	EN-1186-3 Migration into 10% v/v Ethanol (Simulant A)	EN-1186-3 Migration into 3% w/v Acetic Acid (Simulant B)	EN-1186-14§ Migration into Iso-octane (Substitute test)	EN-1186-14§ Migration into 95% Ethanol (Substitute test)
Replicate #1	0.4 mg/dm2	0.8 mg/dm2	346.7 mg/dm2	14.5 mg/dm2
Replicate #2	0.4 mg/dm2	0.8 mg/dm2	303.8 mg/dm2	15.5 mg/dm2
Replicate #3	0.4 mg/dm2	0.7 mg/dm2	318.0 mg/dm2	14.3 mg/dm2
Mean Result	0.4 mg/dm2	0.8 mg/dm2	322.8 mg/dm2	14.8 mg/dm2
EU Limit	10.0 mg/dm2	10.0 mg/dm2	10.0 mg/dm2	10.0 mg/dm2

#Limit and tolerance are quoted after the application of a fatty food reduction factor of 2 as quoted in EU Regulation 10/2011.

To summarise the overall migration test results, the ABS complies with the overall migration requirements given in EU Regulation 10/2011, as amended, with regards to use with all non-fatty foods, aqueous foods and fatty foods that require a reduction factor of 2 (or greater), as given in EU regulation 10/2011, as amended.

Metal Detectability

The BST safety glasses frames are 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.

X-Ray Visibility

In contrast to metal detection, x-ray visibility is determined by material density. For this reason, the material for the glasses frames contain an additional, evenly dispersed, food safe, high density additive. X-ray detection performance will be reduced when small fragments are buried in deeper, denser products - detection will depend on product type and density.

We highly recommend that all our products be thoroughly tested on your x-ray inspection systems by a trained and certified professional. It may be the case that your equipment needs to be recalibrated in order to reliably detect this product. Such a professional should be available by contacting the manufacturer of your x-ray inspection 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. © 2024 BS Teasdale & Son Ltd. All Content, Data & Images are owned by BS Teasdale & Son Ltd and are protected by international copyright law.