

Safety Data Sheet according to Regulation (EU) No. 453 / 2010:

Product = **SWP standard HIPS range** (Issue D. 24-08-2015)

Section 1: Identification of the substance/mixture and of the company

1.1 Trade name: HIPS

The safety data sheet pertains to the following products: P91 P90 P90M P90S P90NR P90MR

1.2 Relevant uses of the substances or mixture and uses advised against

Plastic sheet for thermoforming and fabrication.

1.3 Details of supplier of the safety data sheet

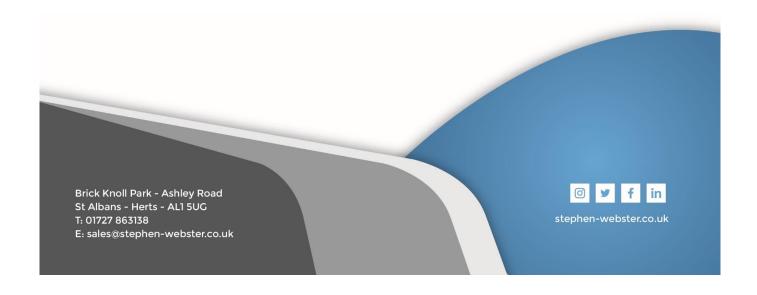
Company: Stephen Webster Plastics

Address: Unit 2, Brick Knoll Park, Ashley Road, St Albans, Hertfordshire, AL1 5UG

Telephone: +44 (0)1727 863138 Email: sales@stephen-webster.co.uk

1.4 Emergency telephone number

Telephone: +44 (0)1727 863138





Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272 / 2008: this product is classified as not hazardous. Classification according to Directive 67 / 548 / EEC: this product is classified as not hazardous.

2.2 Label elements

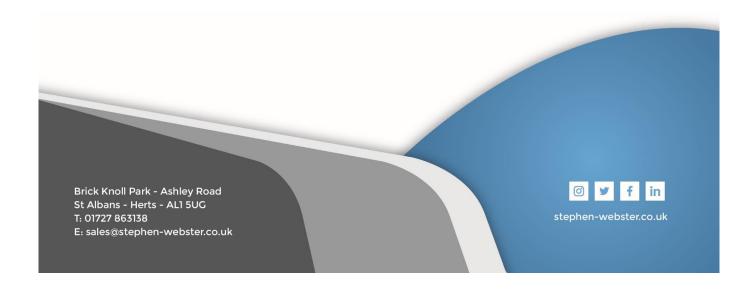
These products are not classified as dangerous according to EC Directive 67 / 548 / EEC or 1999 / 45 /EC. Hazard labelling is not compulsory.

Section 3: Composition / information on ingredients

3.1 Chemical characterisation: STYRENE, 1,3-BUTADIENE copolymer + colourants.

Content (%): POLYSTYRENE, 86%, CAS = 9003-53-6 Butadiene, 10%, CAS = 9003-17-2 White mineral oil (petroleum), 2%, CAS = 8042-47-5 Colourants, 2%

REACH Information: - In accordance to Article 33 of the REACH Regulation This article does not contain, in a concentration above 0.1% (w/w), any of the substances included on the candidate list (status 27/06/2018) set out according to article 59 (10) of the REACH regulation. (We provide this product information on the basis of our current knowledge and experience and can neither give any warranty nor assume any responsibility for factors outside our control or knowledge.)





Section 4: First aid measures

4.1 Description of first aid measures

General Information: No special measures necessary.

Inhalation: No adverse effects anticipated by this route of exposure incidental to proper industrial handling. **After skin contact:** After contact with molten product, cool skin area rapidly with cold water. Do not peel solidified product away from skin. Seek medical attention.

After eye contact: Gently rinse the affected eyes with clean water for at least 15 minutes. Have the affected person remove contact lenses if he/she is wearing them and continue rinsing. Do not let the person rub their eyes. Arrange for examination and treatment by a physician as soon as possible.

After ingestion: Call in a physician immediately and show him the safety data sheet.

4.2 Most important symptoms and effects, both acute and delayed symptoms

Dust: Skin irritation, eye irritations and redness.

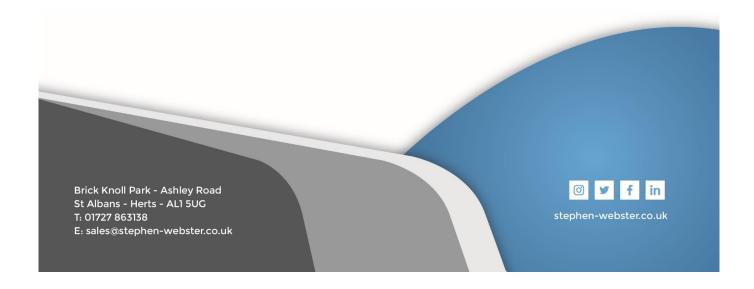
4.3 Indication of any immediate medical attention and special treatment needed

In case of problems, seek medical advice and show them the safety data sheet.

Section 5: Firefighting measures

5.1 Extinguishing media

Water, carbon dioxide, dry extinguishing agents, foams.





5.2 Special hazards arising from the substance or mixture

Smoke is emitted when burned without sufficient oxygen. The smoke may contain combustion products of varying composition in addition to carbon dioxide (CO²), carbon monoxide (CO), water vapour, acrylic monomers and hydrogen chloride (HCl).

5.3 Advice for firefighters / Special protection of firefighters

Wear positive-pressure self-contained breathing apparatus and protective firefighting clothing (includes firefighting helmet, coat, trousers, rubber boots and gloves).

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep the molten mass away from the eyes and skin. Where there is a risk of exothermal decomposition due to overheating then cool the melt in a water bath. Don't breathe the vapours and provide adequate ventilation.

6.2 Environmental precautions

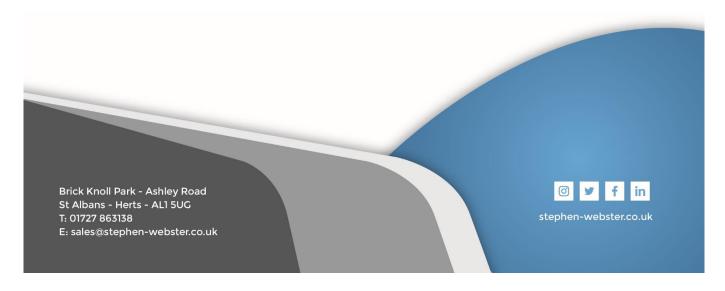
Do not allow to enter the drains or waterways.

6.3 Methods and materials for containment and cleaning up

Any spillages should be taken up immediately. Pick up mechanically.

6.4 Reference to other sections

Information regarding personal protective measures in section 8.





Section 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:

To avoid thermal decomposition, do not overheat. Good general ventilation should be sufficient for most conditions. Avoid breathing dust.

Hygiene measures:

The usual industrial precautions must be taken during work, in particular do not eat, drink or smoke during the handling of the product and clean hands / face during work intervals and after work.

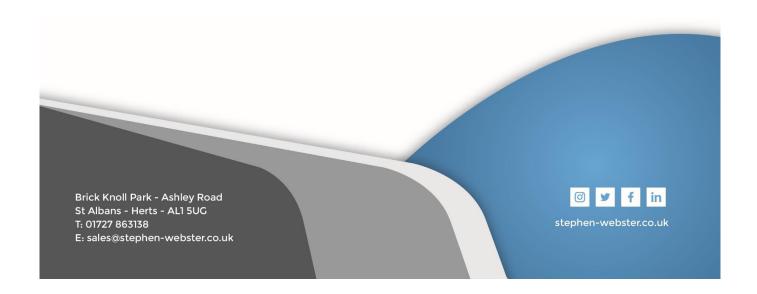
Protection against fire and explosion:

Take precautions against accumulation of electrostatic charge.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:

Keep container tightly closed in a cool, well ventilated place. Store at ambient temperatures and protect from moisture. Protect from direct sunlight.





Section 8: Exposure controls/personal protection

8.1 Exposure controls

General protective measures:

Observe precautions disposal of Directive 89 / 686 / EEC and following amendments regarding individual protection equipment for handling materials in the chemistry industry.

Respiratory protection:

In case of insufficient exhaust ventilation or prolonged exposure use respiratory protection equipment according to directive 89 / 686 / EEC.

Eye protection: Use safety glasses.

Hand protection: Use suitable gloves to protect against specific hazard.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form: solid sheet Odour: None

Melting point / range: 90-130°C
Decomposition temp: >270°C
Vapour pressure: Not applicable
Specific gravity: 1.05 – 1.12 @ 25°C

Flash point: >355°C

Auto-ignition temp: >370°C Flammability: Not applicable





Section 10: Stability and reactivity

10.1 Chemical stability

Stable under normal handling and storage conditions

10.2 Possibility of hazardous reactions

No hazardous reactions when stored and handled according to prescribed instructions.

10.3 Conditions to avoid

Temperatures exceeding the thermal stability of the product. Electrostatic charges.

10.4 Hazardous decomposition products

No decomposition if used as intended. On decomposition possible oxides of carbon and nitrogen as well as carbon monoxide.

Section 11: Toxicological information

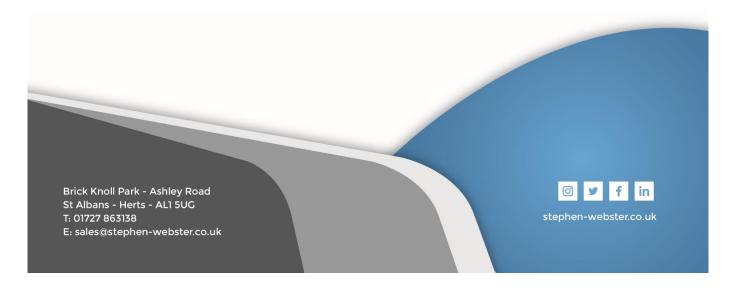
11.1 Information on toxicological effects

Single dose oral toxicity is believed to be low.

Considered to be physiologically inert.

Eye contact: Solid or dust may cause irritation or corneal injury due to mechanical action.

Skin contact: Essentially non-irritating to skin.





Section 12: Ecological information

12.1 Mobility

The product is non-volatile macro molecule of limited spreading.

12.2 Biodegradability

The product is hard to decompose.

12.3 Eco toxicity

The product is non-bio accessible.

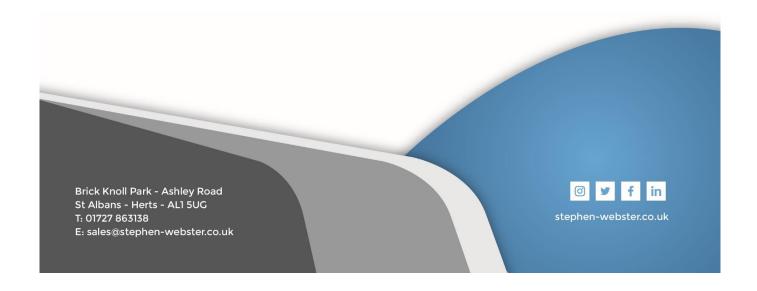
12.4 Additional information

Do not allow to enter ground water, waterways or waste water.

Section 13: Disposal considerations

13.1 Waste treatment methods

Clean uncontaminated product may be disposed of by sale to re-processors. After appropriate treatment the product can be re-melted and reprocessed into new articles. Mechanical recycling is only possible if the material has being selectively retrieved and segregated according to type.





Section 14: Transport information

14.1 - 14.5

ADR not restricted ADN not restricted RID not restricted IATA not restricted IMDG not restricted

14.6 Special precautions for user

See section 6 to 8 of this safety data sheet.

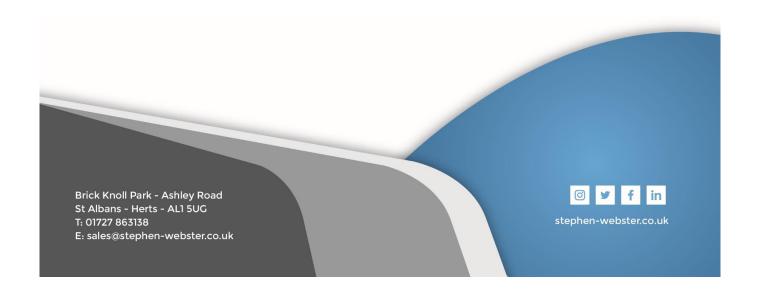
Section 15: Regulatory information

15.1 Safety, health and environmental regulations / legislation

All the ingredients of the preparation comply with the applicable requirements of the current REACH regulation.

15.2 Chemical safety assessment

No data available.



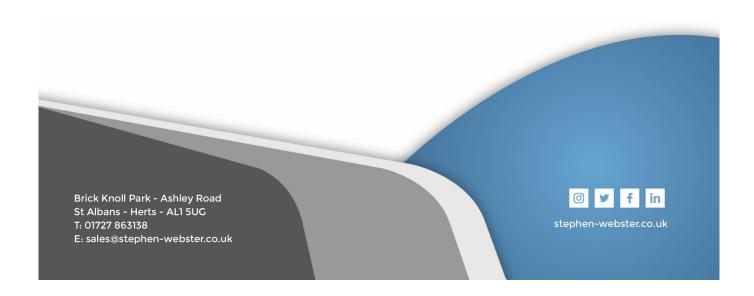


Section 16: Other information

Product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with legal regulations.

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. Stephen Webster Plastics make no warranty, express or implied, with respect to this information and expressly disclaims all liability for reliance thereon. This data is offered for your consideration, investigation and verification.

Recipients of our product must take responsibility for observing existing laws and regulations.





TECHNICAL DATA SHEET

STANDARD MATT-FOIL HIPS – HIGH GLOSS GENERAL PURPOSE POLYSTYRENE (GPPS) COEXTRUDED ONTO HIGH IMPACT POLYSTYRENE (HIPS)

GENERAL				
Property	Method	Unit	SWP HIPS	
Density	ISO 1183	g / cm³	1.06	
MECHANICAL				
Property	Method	Unit	SWP HIPS	
Tensile Strength at yield	ISO 527-2 / 50	MPa	22	
Tensile E Modulus	ISO 527-2	kJ / m²	1750	
Elongation at Break	ISO 527-2	%	4	
Charpy Impact notched	ISO 179 / 1eA	kJ / m²	10	
Charpy Impact unnotched	ISO 179 / 1eU	kJ / m²	13	
OPTICAL				
Property	Method	Unit	SWP HIPS	
Gloss / Matt level at 60° 1	ISO 2813	Units	>90	
THERMAL				
Property	Method	Unit	SWP HIPS	
Heat Deflection Temperature	ISO 75-2 / A	°C	87	
Vicat Softening Point	ISO 306 / B50	°C	90	
OTHERS				
Property	Method	Unit	SWP HIPS	
Flammability	UL94	Rating	НВ	
Mould Shrinkage	ISO 294-4	%	0.4 - 0.7	

Remark: These technical data of our products are typical ones. The actual measured values are subject to production variations.

1. Gloss values are attained from smooth finish thermoformed parts

