



Materials Datasheet for Wallbarn M-Tray® - Polypropylene

Roof box load test DOE

Method: Edges of box supported on 48 mm (h) x 570 mm (l) blocks of wood, load applied to centre of box in 1kg increments over a 140mm diameter and deflection measured at the centre line.

Results:

Load : (KG)	Deflection: (mm)
0	0
1	0.4
2	1.5
3	1.7
4	2.34
5	2.89
6	3.44
7	4.1
8	4.55
9	5.2
10	6.12
11	7.72
12	8.65
13	9.81
14	11.02
15	12.37

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AXPOLY® PP51 1000

Product information sheet: Black copolymer polypropylene resin

Description: General purpose injection moulding compound suitable for a wide range of shaped products where consistent polymer properties are combined with reliable performance to deliver cost efficiencies without compromising on quality.

Product physical properties

Product grade: Axpoly® PP51 1000

Test parameter	ISO standard	Mean value	Units
MFI (2.16 kg @ 230°C)	1133	6	g/10mins
Density	1183 -1	0.96	g/cm ³
Tensile strength	527 - 1/2	20	MPa
Impact strength	180	9	kJ/m ²
Elongation @ break	527 - 1/2	25	%
Flexural Modulus	178	980	MPa

Please note this polymer is not approved for use in food, medical or toy applications.



www.axiongroup.co.uk/AxpolyPolypropylene

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1. Substance/Preparation and Company Identification

Company: MBA Polymers UK Ltd.
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Product/Trade Name:

PP2117 x yy/zz
 PP2131F20 yy/zz
 PP2123 x yy/zz
 PP 2126 x yy/zz
 PP2132 z yy/zz
 PP2143 x yy/zz
 PP2154 x yy/zz
 PP2172 x yy/zz
 PP2182 x yy/zz

(x: specific index for special product properties)
 (yy/zz: Colour index following the RAL colour code system)

Use: Injection Moulding (molten plastic processing)

Synonym: Post Consumer PP Re-granulate (PCR)

2. Hazard Identification

Following the GHS criteria the product needs no identification of hazards.
 Potential risks mentioned below refer to the product as a melted mass.

Potential Health Effects - Eyes: Fumes released during processing may cause eye irritation.

Potential Health Effects - Skin: Danger of burns while handling the hot product.

Potential Health Effects – Inhalation: Fumes released during processing may irritate respiratory system.

3. Composition/Information on Ingredients

CAS #	Component
9003-7-0	Polypropylene
9002-88-4	Polyethylene
n.a.	Other thermoplastic material
n.a.	Additives: UV Stabilizers, Antioxidants, Colour pigments, lubricants

4. First Aid Measures

Contact medical assistance immediately in case of an accident or an indisposition.

First Aid: Eyes: In case of contact, flush eyes with water for at least 5 minutes. Obtain medical attention if irritation persists.

First Aid: Skin: In case of contact, wash thoroughly with soap and large amounts of water. If irritation develops, get medical attention. In case of contact with molten product, cool rapidly with water and seek immediate medical attention. Do not attempt to remove molten product from skin because skin will tear easily.

First Aid: Ingestion: Due to the physical nature of this material, ingestion is unlikely to occur. If ingestion of a large amount does occur, seek medical attention.

First Aid: Inhalation: If dusts or vapours produced during thermal processing of this material are inhaled, remove to fresh air. If respiratory irritation occurs, if breathing becomes difficult, or if other symptoms develop, seek medical attention.

First Aid: Notes to Physician: No information available.

5. Fire Fighting Measures

Extinguishing media: Dry extinguishing media, foam, carbon dioxide.

Specific hazards: In case of fire carbon dioxide, carbon monoxide can be released.

Special protective equipment: Self contained breathing equipment.

Disposal: Dispose of fire debris and contaminated extinguishing water according to official regulations.

6. Accidental Release Measures

Precautions: Avoid inhalation. Keep away from sources of ignition.

Cleaning up/Taking up: Take up product by sweeping or shovelling up. Avoid raising dust. Adequate ventilation recommended.

Additional information: High risk of slipping due to leakage or spillage of the product.

Preventive environmental protection: Avoid any disposal of the product into the environment.

7. Handling and Storage

Handling: Processing machines need to have exhaust ventilation.

Storage: Store in dry and cool area. Avoid all potential sources of ignition.

8. Exposure Controls and Personal Protection

Ensuring effective ventilation at workplaces it can be assumed that threshold limits will not be reached for the following substances:

9003-7-0: Polypropylene

9002-88-4: Polyethylene

Personal protective equipment - Respiratory: In case of dust caused e.g. during handling or cutting a breathing protection with particle filter Type P1 or FFP1 is recommended.

Personal protective equipment – Hand protection: Use additional heat protection gloves when dealing with hot molten product.

Personal protective equipment – Eye protection: Wear safety glasses when dealing with hot molten product.

General safety measures: Handle in accordance with good industrial safety practice. Do not inhale dust mists or vapours. Avoid contact of hot molten product with skin.

9. Physical and Chemical Properties

Form Beads

Colour depending on colouring

Odour Slight specific odour

Softening temperature App. 75°C

Ignition temperature >320°C

Raw density: App. 0,94 g/cm³ at RT

Bulk density: App. 500 kg/m³

Solubility in water Insoluble

10. Stability and Reactivity

Conditions to avoid: Avoid extreme heat and all potential sources of ignition like heat, sparks and open flames. Thermal decomposition starts app. at 300°C.

Decomposition products: Monomers, oxides, hydrocarbons. Overheating of the product causes thermal degradation and generates gases and vapours.

11. Toxicological Information

Additional information: Based on our experience no adverse health effects are known if the product is handled as recommended.

12. Ecological Information

Degradability: No data available.

Additional information: Insoluble in water.

13. Disposal Considerations

Packaging: Uncontaminated packaging can be reused.

Product: Product has to be disposed according national official regulations.

Waste code number (Basel Code): B3010.

14. Transport Information

Not classified as hazardous under transport regulations.

15. Regulatory Information

EC regulations: Products does not require hazard warning label.

Other regulations: Make sure that handling with the product is in accordance with the official regulations for personal safety.

16. Other Information

Additional information:

In addition to the information given above we refer to our specific product information sheets and our processing data sheets.

The information herein is based on our current knowledge and experience. The data above does not describe product properties.

The data implies no guarantee of properties. The suitability of the product for a specific purpose can only be ensured with investigation and testing.

Technical Data Sheet

PP2154



Description

A post-consumer recycled polypropylene copolymer with enhanced flow properties for general use. Available in standard black (reference 90/04).

Material Properties

	Value	Unit	Test Method
Physical			
Density	0.93	g/cm ³	ISO 1183
Rheological			
Melt Flow Rate (230°C / 2.16 kg)	15	g/10 min	ISO 1133
Mechanical			
Tensile Stress at Yield (23°C)	17	MPa	ISO 527-2/50
Flexural Modulus (23°C)	800	MPa	ISO 178
Impact			
Notched Izod Impact Strength (23°C)	9	kJ/m ²	ISO 180/1A

Note:

The data above is provided in good faith and represents typical properties based on our current knowledge and experience. Product properties may be changed without notice. These properties are provided as a guide and should not be construed as binding specification limits or minimum values. This document does not create any liability, warranty or guarantee of product performance. It is the buyer's responsibility to determine the suitability of MBA Polymers products for the intended application. We DO NOT recommend our materials for toys or for applications that involve food contact or human oral contact or for medical applications.

Technical Data Sheet

PP2154



Processing Information

	Value	Unit
Preprocessing		
Drying Temperature	80	°C
Drying Time	1-2	hr
Moisture Content	<0.05-0.10	%
Injection Moulding		
Melt Temperature Range	190-220	°C
Recommended Melt Temperature	200	°C
Mould Temperature Range	30-60	°C
Recommended Mold Temperature	40	°C
Extrusion		
Melt Temperature Range	180-210	°C
Recommended Melt Temperature	200	°C

Note:

The processing parameters listed above are general guidelines based on our current knowledge and experience. The suitability of the data for a specific processing method can only be ensured with investigations and tests by the end user.