

Mosaic Form

Technical Data Sheet

Compatible with Element, Element HT & Array



Description

Mosaic Form is a strong and extremely flexible material, perfect for rigid or functional orthotics and requires little post processing.

Key Features

- ✓ Strong
- ✓ Durable
- High moisture resistance
- ✓ Sandable
- Easy to print

Sample Applications

- Rigid orthotics
- Packaging
- Jigs & fixtures

Available Colors



Filament Specifications

| Diameter | Tolerance |
|----------|-------------|
| 1.75mm | +/- 0.05 mm |

Printing Guidelines

| Slicer Profile | Coming soon to canvas3d.io | |
|------------------------|------------------------------------|--|
| Nozzle Temperature | 235°C | |
| Heated Chamber | Not Required | |
| Build Surface | Element Bed Type I with glue stick | |
| Special Considerations | N/A | |

Storage/Handling Considerations

| Hygroscopicity | None |
|--------------------|--------------|
| Drying Temperature | Not Required |
| Drying Time | Not Required |

Material Properties

| Property | Standard | Typical Value |
|-------------------------|-----------|---------------|
| Density | | 1.25 g/cc |
| Tensile Strength, Break | D638 | 36.2 MPa |
| Tensile Modulus | D638 | 412 MPa |
| Elongation at break | D638 | >300% |
| Heat Deflection Temp. | 0.455 MPa | N/A |

Multi-Material Compatibility

Automation

| Same-material Automated Changeover | With Material Pod |
|------------------------------------|-------------------|
|------------------------------------|-------------------|

Supports

| Same-material support | Yes |
|--------------------------------|-------------|
| Compatible Soluble Materials | Dissolve LT |
| Compatible Breakaway Materials | None |

Mosaic Form



Safety Data Sheet

Section 1: Identification

Product Identification:

Product Name: Mosaic Form

Chemical Name: N/A

Recommended Use: Additive Manufacturing

Supplier Information:

Mosaic Manufacturing 403-111 Peter Street, Toronto, Ontario, Canada M5V 2H1 Phone 647-570-0375

Email: <u>info@mosaicmfq.com</u>

Section 2: Hazard(s) Identification

Regulation (EC) NO 1272/2008: Not classified as a dangerous product

Physical Hazards: None

OSHA Regulatory Status: This product is not considered hazardous by the 2012 OSHA Hazard

Communication Standard (29 CFR 1910.1200)

Section 3: Composition/Information on Ingredients

Information not available.

Section 4: First-Aid Measures

Eyes: Flush with water. Consult a physician if symptoms persist.

Skin Contact: Not expected to require first aid measures with normal use. Wash with soap and water. For thermal burns from molten polymer, immediately flush with cold water. Do not attempt to remove cooled polymer from the skin. Obtain medical attention.

Inhalation: Leave exposed area and seek fresh air. If irritation persists, seek medical attention.

Ingestion: Not likely due to the nature of the product. If ingested, drink plenty of water. Do not induce vomiting. Consult a physician if symptoms persist.

Section 5: Fire-Fighting Measures

Extinguishing Media: Use extinguishers suitable for surrounding fire.

Safety Precautions for Persons exposed to products of combustion should wear NIOSH approved self contained breathing apparatus and full protective equipment.

Section 6: Accidental Release Measures

Spill or release: Clean up by vacuuming or sweeping to prevent falls. If molten, allow material to cool and place into an appropriate container for disposal.

Section 7: Handling and Storage

Precautions to be taken in handling and storage: Store in a dry, sprinkler equipped warehouse. Product as shipped is not a combustible dust. Mechanical handling can cause the formation of dusts. To reduce the risk for dust explosion, avoid dust accumulation.

Waste Disposal: Dispose in accordance with applicable federal, state and local regulations.

Section 8: Exposure Controls/Personal Protection

Exposure Limits: This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Respiratory Protection: A NIOSH approved respirator is recommended for protection against processing polymeric fumes, or from dust generated from grinding, sanding, or sawing operations.

Ventilation: Local exhaust is preferred.

Protection Gloves: Not required.

Eye Protection: Safety glasses with side shields are recommended. Other: No protective equipment is needed under normal use conditions.

Section 9: Physical and Chemical Properties

Form: Solid

Appearance: Translucent White Filament

Odor: None Freezing Point: N/A

Solubility in Water: Insoluble

Specific Gravity: >1
% Volatile: N/A
Boiling Range: N/A

Vapor Pressure (MM HG): Negligible

Melting Point: This product does not possess a specific melting point. It softens gradually over a wide temperature range.

Note: Those physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

Section 10: Stability and Reactivity

Polymerization conditions to avoid: None

Chemical Stability: Stable under normal conditions

Conditions to avoid: Incompatible materials, including strong oxidizing agents

Hazardous decomposition byproducts: Carbon oxides

Section 11: Toxicological Information

No specific toxicological information is available.

Section 12: Ecological Information

No specific ecological information is available.

Section 13: Disposal Considerations (non-mandatory)

Waste Disposal: Waste or unused product may be discarded in accordance with state, federal, and local regulations.

Section 14: Transport Information (non-mandatory)

Land Transport (DOT): Non-Regulated
Sea Transport (IMDG): Non-Regulated
Air Transport (ICAO/IATA): Non-Regulated

Section 15: Regulatory Information (non-mandatory)

TSCA: N/A **EINECS/ELINCS:** N/A **DSL/NDSL**: N/A PICCS: N/A **ENCS**: N/A **IECSC:** N/A AICS: N/A **KECL:** N/A

Section 16: Other Information

Prepared by: Mosaic Manufacturing

Issued: March/28/2024

This information set forth herein has been gathered from standard reference materials and/or supplier test data and is, to the best knowledge and belief of Mosaic Manufacturing, accurate and reliable. Such information is offered solely for your consideration, investigation and verification, and it is not suggested or guaranteed that the hazard precautions or procedures mentioned are the only ones which exist. Mosaic Manufacturing makes no warranties, expressed or implied, with respect to the use of such information or the use of the specific material identified herein combination with any other material or process, and assumes no responsibility therefore.