Mosaic Dissolve LT



Technical Data Sheet

Compatible with Element, Element HT & Array



Description

Mosaic Dissolve LT is a convenient support material that enables the production of complex geometries and easily washes away in water. It is a PVA-based material which can be used as full support or as an interface between the support and the model to give the supported areas a smooth finish and ease support removal.

Key Features

- ✓ Water soluble
- Water soluble
 Biodegradable

Sample Applications

Support Material

Available Colors



Filament Specifications

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

Printing Guidelines

| Slicer Profile | Coming soon to canvas3d.io |
|------------------------|---|
| Nozzle Temperature | 245°C |
| Heated Chamber | Not Required |
| Build Surface | Element Bed Type I |
| Special Considerations | When using Dissolve LT as a support material, remove as much of the supports as possible before placing the part in water. |

Storage/Handling Considerations

| Hygroscopicity | High |
|--------------------|----------|
| Drying Temperature | 80°C |
| Drying Time | 12 Hours |

Note: When not in use, spool should be stored in a Mosaic Material Pod or inside a vacuum sealed container.

Material Properties

| Property | Standard | Typical Value |
|----------|----------|---------------|
| Density | ISO 1183 | 1.13 g/cc |

Note: It can take up to 12 hours Dissolve LT supports to fully dissolve in water. To speed up the process, you can increase the water temperature, change the water regularly, or agitate the water.

Multi- Material Compatibility

Compatible as a support material for

PLA, Matrix*, ESD PETG, Form

*When printing Matrix, use as a breakaway material as dissolving in water can cause Matrix to deform and lose its properties

Mosaic Dissolve LT Safety Data Sheet



Section 1: Identification

Product Identification:

| Product Name: Mosaic Dissolv |
|------------------------------|
|------------------------------|

Chemical Name: Polyvinyl Alcohol (PVA)

Recommended Use: Additive

Manufacturing Supplier Information:

Mosaic Manufacturing 403-111 Peter Street, Toronto, Ontario, Canada M5V 2H1 Phone 647-570-0375 Email: <u>info@mosaicmfg.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

| Components | CAS No. | Concentration Range (%) |
|----------------------------|------------|-------------------------|
| Polyvinyl Alcohol Compound | 25213-24-5 | >80 |

Section 4: First-Aid Measures

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

Skin Contact: 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: Water spray, dry powder, and foam. Carbon dioxide (CO₂)

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. In most cases, small amounts of dissolved material can be poured down the drain and solid material should be disposed of in the garbage.

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: Canvas or cotton gloves are recommended.

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

| State: | Solid |
|-------------------------------|----------------------|
| Form: | Filament |
| Color: | Translucent White |
| Odor: | None |
| Solubility in Water: | Unlimited Solubility |
| Specific Gravity: | 1.08 |
| % Volatile: | N/A |
| Boiling Range: | N/A |
| Vapor Pressure (MM HG) | Negligible |
| Melting Point/Freezing Point: | 178°C |

Note: 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, strong heat

Hazardous decomposition byproducts: oxides of carbon and other toxic fumes

Section 11: Toxicological Information

Serious eye damage/irritation: Causes serious eye irritation

Section 12: Ecological Information

No specific ecological information is available.

Section 13: Disposal Considerations

Waste Disposal: Waste or unused product may be discarded in accordance with state, federal, and local regulations. In most cases, small amounts of dissolved material can be poured down the drain and solid material should be disposed of in the garbage.

Section 14: Transport Information

Land Transport (DOT) Non-R Transport (IMDG) Non-R Transport (ICAO/IATA) Non-R

Non-Regulated Sea Non-Regulated Air Non-Regulated

Section 15: Regulatory Information

| TSCA | Not regulated |
|---------------|---------------|
| 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

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