

# **Mosaic Dissolve (Low Temperature)**

#### **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.

### **Key Features**

- Water soluble
- Biodegradable

## **Sample Applications**

Support Material

#### **Available Colours**



Natural

## **Filament Specifications**

Diameter	Tolerance
1.75 mm	+/- 0.05 mm

## **Printing Guidelines**

Slicer Profile	Coming soon to canvas3d.io	
Nozzle Temperature	205°C	
Heated Chamber	Not Required	
Build Surface	Element Platform M1	
Special Considerations	N/A	

## **Storage/Handling Considerations**

Hygroscopicity	Low
Drying Temperature	65°C
Drying Time	4 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	1.23 g/cc
Tensile Strength, Yield	ISO 527	78 MPa
Tensile Modulus	ISO 527	5230 MPa
Strain at break	ISO 527	3%
Impact Strength	ISO 179	2 kJ/m^2
Heat Deflection Temp.	ASTM 648	60°C

#### **Mosaic Dissolve LT**



## **Safety Data Sheet**

#### **Section 1: Identification**

**Product Identification:** 

**Product Name:** Mosaic Dissolve LT

Chemical Name: Polyvinyl Alcohol (PVA)

**Recommended Use:** Additive manufacturing

**Supplier Information:** 

Mosaic Manufacturing

600-110 Spadina Avenue, Toronto, Ontario, Canada M5V 2K4

Phone 647-570-0375

Email: info@mosaicmfg.com

### **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	N/A	>96
Methanol (Impurity)	67-56-1	<1
Additives	N/A	<1

#### **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.

### **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 Filament

**Color:** Translucent Yellow

Odor: None Freezing Point: N/A

**Solubility in Water:** Unlimited Solubility

Specific Gravity: >1
% Volatile: N/A
Boiling Range: N/A
Vapor Pressure (MM HG): Negligible
Melting Point: 190-210°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, including strong oxidizing agents

**Hazardous decomposition byproducts:** Thermal decomposition can yield intense heat, dense smoke, phenols, hydrogen cyanide, carbon dioxide, and carbon monoxide.

#### **Section 11: Toxicological Information**

No specific toxicological information is available.

#### **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.

#### **Section 14: Transport Information**

Land Transport (DOT):Non-RegulatedSea Transport (IMDG):Non-RegulatedAir Transport (ICAO/IATA):Non-Regulated

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### **Section 15: Regulatory Information**

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

### **Section 16: Other Information**

Prepared by: Mosaic Manufacturing

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