# **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
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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 (CO<sub>2</sub>)

**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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