



PUSH
PLASTIC

SAFETY DATA SHEET

EFFECTIVE DATE: 01/01/2018

Revision Number v1

1. Product and Supplier Identification

Product Name: Push Plastic BVOH

Chemical Name: BVOH (Butenediol vinyl alcohol co-polymer)

Recommended use: Additive Manufacturing

Supplier Information:

Push Plastic
1206 ESI Dr
Springdale, AR 72764 USA
Emergency Phone: (479)725-0842
Email: Sales@pushplastic.com

2. Composition of Ingredients

Components: BVOH Resin

CAS no. not disclosed

Concentration: 100%

3. Hazards

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)

4. First Aid Measures

Inhalation: Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. If symptoms persist, call a physician.

Skin Contact: Cool skin rapidly with cold water after contact with hot polymer. Wash off immediately with soap and water. Consult a physician.

Eye Contact: Immediately flush with water for at least 15 minutes. If eye irritation persists, consult a specialist.

Ingestion: No hazards which require special first aid measures.

Precautions: Processing fumes inhalation may be irritating to the respiratory tract. If symptoms are experienced remove victim from the source of contamination or move victim to fresh air and obtain medical advice.

5. FIRE 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.

Hazards from Combustion Products: Fire will produce dense black smoke containing hazardous combustion products, carbon oxides, hydrocarbon fragments, nitrogen oxides.

Specific Hazards: Take precautionary measures against static discharges. During processing, dust may form explosive mixture in air. Thermal decomposition can lead to release of irritating gases and vapors.

6. Accidental Release Measures

Clean up: Sweep up and shovel into suitable containers for disposal. Do not create a powder cloud by using a brush or compressed air.

Environmental Precautions: Do not flush into surface water or sanitary sewer system. Should not be released into the environment.

7. Handling and Storage

Precautions to be taken in handling and storage: Store in a dry, cool, sprinkler equipped warehouse. Provide for appropriate exhaust ventilation and dust collection at machinery

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

8. Exposure Controls and Personal Protection

No Exposure Limits unless noted below

Engineering Measures to Reduce Exposure: Handle in accordance with good industrial hygiene and safety practice. Provide for appropriate exhaust ventilation at machinery. Processing fume condensate may be a fire hazard and toxic; remove periodically from exhaust hoods, ductwork, and other surfaces using appropriate personal protection.

Hand Protection: Protective gloves are recommended

Eye Protection: Safety glasses with side-shields or chemical goggles are recommended

Respiratory Protection: When using this product at elevated temperatures, implement engineering systems, administrative controls or a respiratory protection program (including a respirator approved for protection from organic vapors, acid gases and particulate matter) if processing fumes are not adequately controlled or operators experience symptoms of overexposure. If dust or powder are produced from secondary operations such as sawing or grinding, use a respirator approved for protection from dust.

9. Chemical and Physical Data

Form: Solid

Appearance: Natural

Odor: Slight

Freezing Point: N/A

Solubility in Water: SOLUBLE!

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.

10. Stability and Reactivity

Stability: Stable at normal conditions. Hazardous polymerization does not occur.

Conditions to Avoid: To avoid thermal decomposition, do not overheat. Heating can release hazardous gases. Do not exceed melt temperature recommendations in product literature. In order to avoid autoignition/hazardous decomposition of hot thick masses of plastic, purgings should be collected in small, flat, shapes or thin strands to allow for rapid cooling. Quench in water. Do not allow product to

remain in extruder at elevated temperatures for extended periods of time: purge with a general purpose filament

Hazardous Decomposition Products: Processing fumes evolved at recommended processing conditions may include trace levels of hydrocarbon fragments, phenols, alkylphenols, diarylcarbonates, other substituted hydrocarbons, hydrogen cyanide (hydrocyanic acid).

11. Toxicological Information

No specific toxicological information is available.

12. Ecological Information

No specific ecological information is available. Do not flush into surface water or sanitary sewer system.

13. Disposal

Waste or unused product may be discarded in accordance with state, federal, and local regulations. Recycling is encouraged.

14. Transportation Information

Transport Classification: Not regulated as hazardous for shipment

15. Regulatory Information

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

16. Other Information

Prepared by: Management

DISCLAIMER: This Material Safety Data Sheet [MSDS] information is provided based on the Hazard Communication Regulations for your region or country and for the use of the persons required to receive this information under those regulations. The information is neither designed nor recommended for any other use or for use by any other person, including for compliance with other laws. Push Plastic does not warrant the suitability for use of this MSDS for any other material or product not specifically

identified herein. Push Plastic does not warrant the accuracy or authenticity of this MSDS unless it has been obtained directly from Push Plastic. Modification of this MSDS is strictly prohibited. This MSDS is based on information, that is believed to be reliable, but may be subject to change as new information becomes available. Because it is not possible to anticipate all conditions of use, additional safety precautions may be required. Since the use of this material is not under Push Plastics control, each user is responsible for making its own determination as to the safe and proper handling of this material in its own particular use of this material. Push Plastic MAKES NO REPRESENTATION OR WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Each user should read and understand this information and incorporate it into individual site safety programs as required by applicable hazard communication standards and regulations.

End of Material Safety Data Sheet