

3401 Grays Ferry Avenue, Building 176, Philadelphia PA 19146

Website: www.allevi3D.com

Email: info@allevi3D.com

Safety Data Sheet

1. Identification

Product Name	Pluronic F127® Bioink Kit
Substance/Mixture	Solution, 40% (w/v) Pluronic F127® in deionized water
Company:	Allevi, Inc.
Address	3401 Grays Ferry Avenue, Building 176, Philadelphia PA 19146
Telephone	215-588-8937
Email	info@allevi3D.com

2. Hazards Identification

Classification of the substance or mixture	
Physical Hazards	Not classified
Health Hazards	Not classified
Environmental Hazards	Not classified
Label Elements, including precautionary statements	
Pictograms or hazard symbols	None
Signal word	No signal word
Hazard Statements	None
Precautionary statements	None

This substance is not classified according to the Globally Harmonized System (GHS)

3. Composition/Information on Ingredients

CAS Number	9003-11-6
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No components need to be disclosed according to the applicable regulations.

4. First Aid Measure

After Inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
After Skin Contact:	Wash off with soap and plenty of water.
After Eye Contact:	Rinse opened eye for several minutes under running water.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water. If a large quantity has been ingested or you feel unwell get medical advice/attention
Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2).
Indication of any immediate medical attention and special treatment needed	No data available.

5. Fire-fighting Measures

Suitable Extinguishing Media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
Specific hazards arising from the chemical:	Not data available
Precautions for Firefighters:	

Special Protective Equipment for Firefighters:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full –piece operated in positive pressure mode
Further information	No data available

6. Accidental Release Measures

Personal Precautions, Protective equipment and emergency procedures	Avoid dust formation. Avoid breathing vapours, mist or gas. For personal protection see section 8.
Environmental Precautions:	No special environmental precautions required.
Methods and materials for containment and cleaning up:	Mop up. Keep in suitable, closed containers for disposal.
Reference to other sections	For disposal see section 13.

7. Handling and Storage

Precautions for Safe Handling	
Technical Measures:	Wear personal protective equipment according to section 8 if risk of exposure. Provide appropriate exhaust ventilation where necessary.
Conditions for safe storage, including any incompatibilities	
Storage Conditions:	Store only in the original receptacle. Store in cool, dry conditions in well sealed receptacles. Storage class (TRGS 510): Non Combustible Solids
Specific end use(s)	No further relevant information available
Packaging Material:	Comply with laws

8. Exposure Controls/Personal Protection

Components with workplace control parameters	Contains no substances with occupational exposure limit values.
Control Parameters	Not set up
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Personal Protective Equipment	
General protective and hygienic measures:	The usual precautionary measures for handling chemicals should be followed.
Breathing equipment	Respiratory protection is not required. Where protection from nuisance levels of dust are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
Hand Protection:	Protective Gloves not really required. However, we recommend using protective gloves made of rubber.
Material of gloves	PVC gloves Chloroprene rubber, CR Butyl rubber, BR The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Penetration time of glove material	The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed
Eye Protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

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Skin and body protection:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Limitation and supervision of exposure into the environment	No special environmental precautions required

9. Physical and Chemical Properties

Physical State (20 °C)	Solid
Form	Gel/Solution
Color	Clear to cloudy
Odor	Odorless
pH	No data available
Melting point/freezing point	No data available
Boiling point/range	No data available.
Flash point	No data available
Flammability or explosive limits:	
Lower	No data available
Upper	No data available
Relative Density	No data available
Ignition temperature	
Decomposition temperature	No data available
Danger of explosion	No data available
Explosion limits	Not applicable
Oxidizing properties	No data available
Vapor pressure	Not determined
Solubility(ies)	
Water	No data available
Segregation coefficient (n-octanol/water)	No data available
Viscosity:	Not applicable
Other information	No further relevant information available

10. Stability and Reactivity

Reactivity	No data available
Chemical Stability	Stable under recommended storage conditions. Contains the following stabilizer(s): BHT (>=0 - <= 0.01%)
Possibility of hazardous reactions	No data available
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. – Carbon oxides Other decomposition products – No data available In the event of fire: see section 5.

11. Toxicological Information

Acute toxicity:	No data available
LD/LC50 values	No information available

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Skin corrosion/irritation:	No data available
Serious eye damage/irritation:	No data available
Sensitization	No sensitizing effects known
Germ cell mutagenicity:	No data available
Carcinogenicity:	
IARC =	No data available
NTP =	No data available
Reproductive toxicity:	No data available
Remark	Caution – substance not yet fully tested Due to the structure of the substance and studies made on similar products we assume that the product is unclassified.
Additional Information	RTECS: MD091 1050 Effects due to ingestion may include: Diarrhea, Weakness. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

12. Ecological Information

Ecotoxicity	
Aquatic Toxicity	No data available.
Persistence/degradability:	No data available
Bioaccumulative Potential:	Bioaccumulation is unlikely.
Mobility in Soil	No information available
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Other adverse effects	No further information available
Remark:	Caution – substance not yet fully tested. Due to the structure of the substance and studies made on similar products we assume that the product is unclassified.

13. Disposal Considerations

Waste Treatment methods	The product is not classified as hazardous waste
Uncleaned packagings	Contaminated packaging materials must be disposed of in the same manner as the product.
Recommendation	Disposal must be made according to official regulations
Recommended cleansing agent	Water, if necessary with cleansing agents

14. Transport Information

UN Number DOT,ADR,AND,IMDG,IATA	-
Proper shipping name (technical name) DOT,ADR,AND,IMDG,IATA	-
Transport hazard class(es) DOT,ADR,AND,IMDG,IATA Class	-
Packing group DOT,ADR, AND,IMDG, IATA	-
Environmental Hazards	Not applicable

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Special precautions for user	Not applicable
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable
Transport/Additional Information	Not dangerous according to the above specifications.

15. Regulatory information

Sara			
Section 302	No chemicals in this material are subject to the reporting of SARA Title III, Section 302.		
Section 313 (specific toxic chemical listings):	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.		
Sara 311/312 Hazards	No SARA Hazards		
Massachusetts Right to Know Components	No components are subject to the Massachusetts Right to Know Act		
Pennsylvania Right to Know Components	Polyethylene Glycol, propoxylated	CAS-No. 9003-11-6	Revision Date
New Jersey Right To Know Components	Polyethylene Glycol, propoxylated	CAS-No. 9003-11-6	Revision Date
California Prop. 65 Components	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm		

16. Other Information

This information is based on our present knowledge. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility. BioBots, Inc. and its affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. This document and information shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.