



Section 1: Identification	
Product Name / Trade Name	WillowFlex FX 1504
Supplier	Biolnspiration GbR S.Goldschmidt-Str. 12 16225 Eberswalde Germany
CAS#	Mixture
In Case of Emergency	+49 3334 2995293 (Germany) +1 (510) 250-7982 (USA)
Date Prepared	30 – September - 2015

Section 2: Hazards Identification	
1. Effects of Acute Exposures	This material has no known health hazards.
2. Effects of Chronic Overexposure	None Known
3. Carcinogen Potential	
<ul style="list-style-type: none"> <li>• National Toxicology Program</li> <li>• IARC Monograph:</li> <li>• OSHA:</li> </ul>	Not Listed Not Listed Not Listed

Section 3: Composition / Information on Ingredients	
Name	CAS #
Proprietary Thermoplastic Polymer	Confidential
Thermoplastic Urethane	Confidential
Proprietary Additive	Confidential
Polybutylene Succinate	67426-06-7

Section 4: Emergency and First Aid Procedures	
Inhalation:	Remove from exposure if adverse effects are observed.
Eyes:	Flush eyes with clean water for several minutes. If hot material should splash into eyes, flush with water and seek medical attention.
Skin:	If molten material comes in contact with the skin, cool under ice water or running stream of water. DO NOT attempt to remove the material from skin. Removal could result in severe tissue damage. Seek medical attention immediately.
Ingestion:	If swallowed in large quantities, get medical advice.

Section 5: Fire-fighting measures	
Autoignition Temperature	>275° C (700° F)
Upper Explosive Limit	Not Determined
Lower Explosive Limit	Not Determined
Extinguishing Methods	Dry chemical, foam, water fog, carbon dioxide
Special Fire and Explosion Hazards	Smoke may contain the original material in addition to combustion products of varying composition that may be toxic and/or irritating. Dust may form an explosive hazard. Wear full firefighting attire including self-containing breathing apparatus.

Section 6: Accidental Release Measures	
Steps to be Taken in Case Material is Released or Spilled:	Sweep up. Avoid formation of dust. If spilled while molten, allow to harden then sweep up.
Water Disposal Methods (Consult federal, state and local regulations):	Dispose of in accordance with Federal, State and Local Regulations.

Section 7: Handling and Storage	
1. Store in a cool, dry, and ventilated area away from heat. Take precautionary measures against static discharges.	
2. Store in a sprinkler protected area.	
3. Handle using all appropriate person protection equipment including safety glasses and gloves. Avoid formation of dust as the dust can create an explosive hazard. Use a dust respirator as needed. Electrostatic build-up may occur during pouring or transferring the material, the spark produced could be enough to ignite flammable liquids. Always transfer the product by means that avoid static build-up.	

Section 8: Exposure Controls / Personal Protection	
Skin:	Wear thermal gloves when handling the material.
Ventilation:	Adequate ventilation is recommended to minimize accumulation of fines or vapors during processing and handling.
Respiratory:	If exposure to dust or vapors is likely, use NIOSH / MSHA approved respiratory protection equipment. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.
Eyes and Face:	Wear safety glasses

Section 8: Exposure Controls / Personal Protection (cont.)	
Protective Clothing:	Lightweight industrial protective clothing
Other Measures:	Follow normal personal hygiene and good housekeeping practices.

Section 9: Physical and Chemical Properties	
Appearance and Odor	Solid Filament, Various Colors based on Pigment, No odor.
Boiling Point	N/A
Solubility	Insoluble in Water
Evaporation	N/A
Specific Gravity	Not measured
Vapor Pressure	N/A
Melting Point	Starts at 110° C (230° F)
Vapor Density	N/A

Section 10: Stability and Reactivity	
Stability:	Material is Stable
Hazardous Polymerization:	Hazardous polymerization will not occur
Conditions to Avoid:	Do not expose to open flame
Combustion Products:	Combustion may produce products of varying composition, which may be toxic and/or irritating. These include, but are not limited to, carbon dioxide, carbon monoxide, aldehydes, and nitrogen oxides. May also include isocyanates and small amounts of hydrogen cyanide.

Section 11: Toxicological Information	
Acute:	No target organ effects noted following ingestion or dermal exposure in animal studies.
Skin:	LD50/dermal/rabbit > 2000 mg/kg
Ingestion:	LD50/oral/rat > 5000 mg/kg
Chronic:	None
Medical Conditions Generally Aggravated by Exposure:	People with respiratory ailment may be sensitive to dust.

Section 11: Toxicological Information (continued)	
Carcinogenicity:	No data available.
Mutagenicity:	No data available.
Reproductive Toxicity:	No data available.
Teratogenicity:	No data available.

Section 12: Ecological Information	
Exotoxicity Effects	EC50 / 72h / algae > 1100 mg/L
Biodegradable	Inherently biodegradable

Section 13: Disposal Considerations	
Waste Information	Transfer to an approved disposal area in accordance with federal, state, and local regulations.

Section 14: Transport Information	
DOT Non-Bulk	Not Regulated
DOT Bulk:	Not Regulated
IMDG:	Not Regulated
ICAO/IATA:	Not Regulated
<p><i>This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.</i></p>	

Section 15: Regulatory Information	
This material is not regulated by D.O.T.	
This material is not hazardous by OSHA Hazardous Communication Standard 29 CFR 1910.1200	
All components of this Material are on the TSCA Inventory or are exempt	
CERCLA Hazardous Substances:	None Known
SARA 313:	Not Listed



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MATERIAL SAFETY DATA SHEET

<b>Section 16: Other Information</b>
Hazard Material Information System (USA) Health – 1, Flammability – 1, Reactivity - 0