

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072



IDENTITY

Bionate® Polycarbonate Urethane

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name DSM PTG	Emergency Telephone Number 1(800) 424-9300
Address (Number, Street, City, State, and ZIP Code) 2810 7th Street Berkeley, CA 94710	Telephone Number for Information (510) 841-8800
	Date Prepared 06/02/08
	Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits (Recommended)	% (optional)
1. Thermoplastic Polyurethane Polymer, Polycarbonate urethane (This material is not considered to be hazardous.)				100
This MSDS applies to the 80A, 90A, 55D, 65D and 75D Polymers with and without Silicone end-groups				

Section III - Physical/Chemical Characteristics

Boiling Point	NA	Specific Gravity (H2O = 1)	1.05 – 1.2
Vapor Pressure (mm Hg)	NA	Melting Point	170-200 °C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA
Solubility in Water	Insoluble in water.		
Appearance and Odor	Pale amber granules or pellets. Faint odor.		

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) Not determined	Flammable Limits in air % by volume	LEL ND	UEL ND
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Extinguishing Media
Dry chemical, foam, carbon dioxide, or dry chemical.

Special Fire fighting Procedures

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Unusual Fire and Explosion Hazards

Toxic vapors can be emitted under fire conditions.
Protect product from flames of any kind.

Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid Over heating.
	Stable	X	

Incompatibility (Materials to Avoid)

None Known

Hazardous Decomposition or By-products

Carbon monoxide, carbon dioxide, and traces of hydrogen cyanide at highly elevated temperatures.

Hazardous Polymerization	May Occur	Conditions to Avoid
	Will Not Occur X	This substance does not polymerize.

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation?	Vapors may cause irritation.
	Skin?	Unlikely
	Ingestion?	Unknown

Health Hazards (Acute and Chronic)

None known

Carcinogenicity:	NTP? Not listed.	IARC Monographs? Not listed.	OSHA Regulated? Not listed.
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Signs and Symptoms of Exposure

Molten polymer will produce thermal burns.

Medical Conditions

Generally Aggravated by Exposure

Individuals with bronchial asthma or other types of chronic obstructive respiratory diseases may develop bronchospasm if exposure to melt processing fumes or vapors is prolonged.

Emergency and First Aid Procedure

Irrigate eyes with water for 5 minutes. Wash off skin in flowing water or shower. No adverse effects are known when polymer is ingested. If inhalation of melt processing fumes occurs, remove individual to fresh air. In all cases call a physician.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled

Sweep up and reuse or dispose. Spilled pellets may present a slipping hazard.

Waste Disposal Method

Incinerate or dispose of in an approved landfill in accordance with all applicable federal, state, and federal regulations.

Precautions to be Taken in Handling and Storage

Other Precautions

Section VIII - Control Measures

Respiratory Protection (Specify Type)

If handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator.

Ventilation	Local Exhaust	Special
	General exhaust ventilation	
	Mechanical (General)	Other

Protective Gloves

Protective gloves for handling hot material during processing.

Other Protective Clothing or Equipment

Safety glasses should be sufficient for most operations.

Work/Hygienic Practices
