

**Natto Gum**  
**November 8, 2012**  
**MSDS (Material Safety Data Sheet)**

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SECTION 2. PRODUCT IDENTIFICATION

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. PRODUCT NAME : BP - PHYTOCOLLAGEN  
. PRODUCT CLASS : Fermentation product (from Soybean)

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SECTION 3. COMPOSITION

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. SINGLE OR MIXTURE : Mixture  
. CHEMICAL NAME : Poly-glutamic acid, Poly-fructose, water  
. HAZARDOUS COMPONENT(S)(CAS No.) : No hazardous materials present

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SECTION 4. PHYSICAL / CHEMICAL PROPERTIES

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. APPEARANCE(color) : Transparent to Pale yellow  
. APPEARANCE(form) : Liquid  
. ODOR : Slightly characteristic odor  
. SPECIFIC GRAVITY : 1.000 – 1.080  
. VISCOSITY : Not applicable  
. BOILING POINT : Not applicable  
. VAPOR PRESSURE : Not applicable  
. VAPOR DENSITY(AIR=1) : Not applicable  
. MELTING POINT : Not applicable  
. EVAPORATION RATE : Negligible (Butyl Acetate = 1)  
. SOLUBILITY IN WATER : Water soluble

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SECTION 5. FIRE AND EXPLOSION HAZARD

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. GENERAL HAZARD :	Not applicable	
. FLASHPOINT :	Not applicable	
. FLAMMABLE LIMITS :	LOWER : Not tested	UPPER : Not tested
. SPECIAL FIRE FIGHTING PROCEDURE :	Not required	
. UNUSUAL FIRE AND EXPLOSION HAZARD :	Not applicable	

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SECTION 6. HEALTH INFORMATION

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A. EXPOSURE / HEALTH EFFECT	
. INHALATION :	No adverse effects expected from inhalation
. INGESTION :	No adverse effects expected from ingestion
. SKIN CONTACT :	No adverse effects expected from skin contact
. CHRONIC EXPOSURE :	No adverse effects expected from chronic exposure
B. FIRST AID	
. INHALATION :	Remove to fresh air.
. INGESTION :	Throw up. Drink two glasses of water.
. SKIN EXPOSURE :	Wash well with water.
. EYE EXPOSURE :	Wash well with water.
C. TOXICITY DATA	
. ACUTE ORAL TOXICITY (RAT IN ORAL) :	5g / kg body weight
. SKIN IRRITATION (HUMAN) :	no irritant (tested with 5% solution)
. SKIN IRRITATION (RABBIT) :	no irritant (tested with 5% solution)
. SENSITIZATION (GUINEA PIG MAXIMIZATION TEST) :	no sensitization (tested with 5% solution)

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SECTION 7. STABILITY AND REACTIVITY

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. HAZARDOUS POLYMERIZATION WILL NOT OCCUR

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SECTION 8. SPILL OR LEAK PROCEDURES

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- . ACTION TO TAKE FOR SPILL/LEAKS : Use absorbent material
- . DISPOSAL METHOD : May incinerate. Disposal must comply with federal, state and local regulation.
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SECTION 9. TRANSPORT AND STORAGE INFORMATION

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. GENERAL :	Keep in a tightly closed, cool and dark place
. STORAGE PRESSURE :	Atmospheric
. LOADING TEMPERATURE :	Ambient

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SECTION 10. ADDITIONAL INFORMATION

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. For Industrial Use Only

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