

# Material Safety Data Sheet

## Section 1. Product and Company Identification

Product Name: **BIOGAIN WSP**  
 Product Code: BUI/BIOGAINW  
 Effective Date: February 12, 2009

Manufacturer Information: Becker Underwood, Inc.  
 801 Dayton Avenue  
 Ames, Iowa 50010  
 Information Phone: (515) 232-5907  
 Emergency Phone: Chemtrec (800) 424-9300 or 703 527 3887 (international)

### Hazardous Material Information System:

Health	1
Flammability	1
Physical Hazard	0
Personal Protection	X

## Section 2. Ingredients and Hazards Identification

Emergency Overview: May cause respiratory tract, eye, and skin irritation.

### Potential Acute Health Effects:

- Eyes:* Short term harmful effects are not expected. However, irritation may develop causing itching and redness.
- Skin:* Short term harmful effects are not expected. However, mild skin irritation may develop causing itching and redness. Exposure to unprotected skin areas may cause temporary staining.
- Inhalation:* Short term harmful effects are not expected. However, exposure to dust may cause coughing or wheezing when inhaled. This product contains a very small amount of residual formaldehyde. Exposure to formaldehyde at or above the occupational exposure limit is very unlikely if this product is used in a well ventilated area. Excessive inhalation of formaldehyde may cause respiratory tract irritation and allergic reaction (sensitization). Formaldehyde is classified as a potential carcinogen.
- Ingestion:* Not an intended route of exposure. Short term harmful effects are not expected. However, may upset the gastrointestinal tract.

## Section 3. Composition/Information on Ingredients

The composition of this material is a trade secret. Contains no other components or impurities which will influence the classification with regard to human and environmental risk assessment.

## Section 4. First Aid Measures

- Eye Contact: Immediately flush eyes with water for at least 15 minutes. Prolonged or repeated contact may result in mechanical irritation.
- Skin Contact: Wash with soap and water.
- Inhalation: Move to fresh air. Seek medical attention if irritation develops.
- Ingestion: Seek medical attention. Unless advised otherwise, dilute with water or milk.

## Section 5. Fire Fighting Measures

- Flammability of Product: Not a fire or explosion hazard when stored under normal conditions. Explosion is possible when product is finely dispersed in air.
- Fire Fighting Media: Foam, alcohol foam, CO2, dry chemical, water fog.
- Protective Clothing: No special procedures required besides standard fire fighting procedures.

## Section 6. Accidental Release Measures

**Clean-Up Procedures:** Ventilate the area. Vacuum or use wet clean-up techniques and place in properly labeled and closed container. Dispose of collected material according to federal, state/provincial and local environmental regulations.

**Spills and Leaks:** Contain the spill to prevent discharges to surface streams or storm sewers.

## Section 7. Handling and Storage

**Handling:** Avoid breathing dust. General mechanical ventilation can be expected to effectively remove and prevent build up of any dust generated from handling this product in a closed environment. Protect eyes to prevent contact. Avoid prolonged or repeated exposure to skin. This material contains a very small amount of formaldehyde. The product will generate additional formaldehyde upon curing. Lack of adequate ventilation may result in airborne levels of formaldehyde above the occupational exposure limit. See OSHA 1910.1048 for additional information.

**Storage:** Keep container in a dry place inaccessible to children and pets at temperatures above freezing. Keep containers sealed until ready for use.

## Section 8. Exposure Control/Personal Protection

Hazardous Components		Occupational Exposure Limits		
Component	CAS Number	OSHA PEL	ACGIH TLV	Weight Percent
Citric Acid	77-92-9	15 mg/m <sup>3</sup>	10 mg/ m <sup>3</sup>	< 5%
Formaldehyde	50-00-0	0.75 ppm TWA 8 hour 2 ppm 15 min STEL	0.3 ppm Ceiling	0.20ppm
***No reportable quantities of hazardous ingredients are present***				
***No reportable quantities of toxic chemical(s) subject to the reporting requirements of Section 313 of SARA Title III and of 40 CFR 372 are present***				
*** Materials contained in a water soluble packet. If powder is released accidentally avoid breathing dust. Observe OSHA Permissible Exposure Limits for nuisance dust.				

**Engineering controls:** General mechanical ventilation can be expected to effectively remove and prevent build up of any dust generated from handling this product in a closed environment.

**Personal Protection:**

*Eyes:* Wear safety glasses. Have an eye wash station available.

*Body:* To prevent skin contact wear coveralls, apron, boots, or lab coat.

*Hands:* Avoid skin contact by using gloves.

*Respiratory:* No respiratory protection required under normal conditions of use. Use local exhaust to control excessive dust. If excessive dust persists use appropriate NIOSH approved respirator. Observe OSHA Permissible Exposure Limits for nuisance dust. For respiratory protection for formaldehyde exposure, refer to OSHA 1910.1048.

**Other:** Open wounds or skin surface disruptions should be covered with a chemical resistant patch to minimize absorption risks. Clean clothing should be worn daily to avoid possible long-term build up of the product leading to chronic overexposure.

## Section 9. Physical and Chemical Properties

Odor	Slight odor	Vapor Density	NA
Color	Dark Speckled	Evaporation Rate	NA
Physical state	Powder	Specific Gravity (H <sub>2</sub> O = 1)	NA
pH	NA	Solubility	Water soluble
Melting/Freezing Point	NA		

## Section 10. Stability and Reactivity

**Chemical Stability:** This material is chemically stable under normal storage and handling conditions.

**Hazardous Decomposition:** When involved in a fire, burning may evolve noxious fumes which may include carbon monoxide, carbon dioxide, nitrous oxides, acetic acid, or other toxic compounds depending on the chemical composition and combustion conditions.

**Hazardous Polymerization:** Is not known to occur.

**Incompatibility (Materials to Avoid):** Long term storage in direct contact with reactive metals such as aluminum, zinc, copper, nickel, magnesium, etc. Other materials to avoid include strong oxidizing agents.

## Section 11. Toxicological Information

**Chronic Toxicity:** None known

**Mutagenic Effects:** None known

**Teratogenic Effects:** None known

**Developmental Toxicity:** None known

**Acute Effects on Humans:** May cause skin, eye, and respiratory irritation.

**Sensitization:** Repeated or prolonged exposure to the substance at concentration above the exposure limits may cause respiratory tract and lung sensitization.

**Carcinogenic Effects:** No components > 0.1% are listed as carcinogens or suspected carcinogens. This product contains a very small amount of residual formaldehyde. Formaldehyde is classified by IARC as a known human carcinogen (Group 1), by NTP as reasonable anticipated to be a carcinogen, by ACGIH as a suspected carcinogen (A2) and by OSHA as an occupational carcinogen.

**Existing Medical Conditions Aggravated By Exposure:** May provoke asthmatic response in persons with asthma who are sensitive to airway irritants.

## Section 12. Ecological Information

**Ecotoxicity:** No data available, however the material is not expected to have any deleterious toxic effect.

**Environmental Fate:** No data available regarding the environmental fate or biodegradation.

## Section 13. Disposal Considerations

EPA Waste Number: Non-hazardous waste

Treatment: Dispose of according to all federal, state/provincial and local environmental regulations.

## Section 14. Transport Information

D.O.T. Classification: Not regulated

IMO/IMDG Not regulated

Classification:

IATA Classification: Not regulated

## Section 15. Regulatory Information

US Federal Regulations:

Product Information: This product is considered hazardous.

SARA 311/312:

*Acute:* No

*Chronic:* Yes

*Fire:* No

*Pressure:* No

*Reactive:* No

SARA 313: No reportable quantities of toxic chemical(s) subject to the reporting requirements of Section 313 of SARA Title III and of 40 CFR 372 are present.

Regulatory Listings:

United States (TSCA): Listed

## Section 16. Other Information

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