

Material Safety Data Sheet

Section 1. Product and Company Identification

Product Name: CF CLEAR™
Product Code: BUI/CFILMCLEAR
Effective Date: May 11, 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	0
Physical Hazard	0
Personal Protection	X

Section 2. Hazard Identification

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

Potential Acute Health Effects:

Eyes: Irritation may develop causing itching, burning, tearing, redness or swelling.

Skin: Absorption of methanol through skin may result in the same effects as inhalation of methanol vapor.

Inhalation: Short term harmful effects are not expected. Prolonged inhalation can cause nausea, headache, and irritation of nose, throat, and lungs. Short-term exposure to high levels of methanol vapor may cause CNS depression. Symptoms include nausea, drowsiness, vertigo, fatigue, convulsions, unconsciousness and death, depending on exposure duration. Methanol is present in a concentration less than 4%. 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. However, may upset the gastrointestinal tract and cause diarrhea. Ingestion of methanol may cause death or serious irreversible injury such as blindness. Methanol metabolism causes systematic acidosis resulting in damage to the optic nerve. Symptoms may be delayed. Concentration of methanol in product is less than 4%.

Section 3. Composition/Information on Ingredients

Component	CAS Number	Weight Percent
Methanol (Methyl Alcohol)	67-56-1	4%
Formaldehyde	50-00-0	540 ppm
Water based, liquid solution of film-forming polymers for seed coating applications.	Proprietary	Proprietary

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 copious amounts of soap and water.

Inhalation: Move to fresh air. Seek medical attention if irritation persists.

Ingestion: Seek medical attention. Unless advised otherwise, dilute with two glasses of water and induce vomiting by finger down the throat or with syrup of ipecac.

Section 5. Fire Fighting Measures

- Flash Point:** >200° F
- Flammability of Product:** Not a fire or explosion hazard when stored under normal conditions.
- Fire Fighting Media:** Use extinguishing media appropriate for surrounding fire. Foam, alcohol foam, CO2, dry chemical, water fog
- Protective Clothing:** This product is an aqueous mixture which might burn. If evaporated to dryness, the solid residue may pose a moderate fire hazard. No special procedures required besides standard fire fighting procedures.

Section 6. Accidental Release Measures

- Clean-Up Procedures:** Ventilate the area. Collect spilled material with an inert absorbent such as sand or vermiculite. Place in properly labeled and closed container. Dispose of collected material according to federal, state, local, and state/provincial environmental regulations.
- Spills and Leaks:** Contain the spill or leak to prevent discharges to surface streams or storm sewers.

Section 7. Handling and Storage

- Handling:** Avoid breathing fumes. General mechanical ventilation can be expected to effectively remove and prevent build up of any vapor or mist generated from handling this product in a closed environment. Do not freeze. Protect eyes to prevent contact. Avoid prolong or repeated exposure to skin.
- 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
Methanol (Methyl Alcohol)*	67-56-1	200 ppm 260 mg/m ³	200 ppm TLV 250 ppm STEL	4%
Formaldehyde	50-00-0	0.75 ppm TWA 8 hour	0.3 ppm 0.37 mg/m ³	540ppm

*Methyl Alcohol is subject to the reporting requirements of Section 313 of SARA Title III with a De Minimis concentration of 1.0%.

- Engineering controls:** General mechanical ventilation can be expected to effectively remove and prevent build up of any vapor or mist generated from handling this product in a closed environment
- Personal Protection:**
- Eyes:* Wear safety glasses with side shields. Wear additional eye protection such as chemical goggles or face shield if splashing or spraying hazard exists. Have an eye wash station available.
 - Body:* To prevent skin contact use coveralls, apron, boots, or lab coat.
 - Hands:* Avoid skin contact by using chemically resistant gloves.
 - Respiratory:* No respiratory protection required under normal conditions of use. Use local exhaust to control excessive vapors/mists. If excessive vapors or mists are persist use appropriate NIOSH/MSHA approved organic vapor/mist respirator. 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.
- 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	Opaque	Evaporation Rate	Slower than ether
Physical state	Liquid	Specific Gravity (H₂O = 1)	~1 g/mL
pH	2-4	Solubility	Dispersible
Melting/Freezing Point	NA		

Section 10. Stability and Reactivity

Chemical Stability: This material is chemically stable under normal and 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. However, all of the water must be driven off first for this to occur.

Hazardous Polymerization: Is not known to occur.

Incompatibility (Materials to Avoid): Mineral acids (i.e. sulfuric, phosphoric, etc.); alkalis (i.e. sodium or potassium hydroxide, etc.) strong oxidizing agents, aluminum, zinc (galvanized), or any other reactive metal which will displace hydrogen, certain forms of plastics, rubber or rubber based coating, and strong reducing agents.

Section 11. Toxicological Information

Chronic Toxicity: Methanol is slowly eliminated from the body, hence repeated exposures may result in toxic levels in the blood and tissues.

Mutagenic Effects: Rodent studies have shown that high level exposure impairs neural tube closure and induces other birth defects. Methanol concentration in product is less than 4%.

Teratogenic Effects: None known

Developmental Toxicity: None known

Acute Effects on Humans: May cause skin, eye, and respiratory irritation. Methanol is slowly eliminated from the body, hence repeated exposures may result in toxic levels in the blood and tissues.

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. In limited animal studies, where methanol was given orally or applied to the skin, there has been no evidence of carcinogenic potential.

Existing Medical Conditions Aggravated By Exposure: May provoke asthmatic response in persons with asthma who are sensitive to airway irritants. Personnel with pre-existing CNS disease, skin disorders, impaired liver or kidney function, or chronic respiratory diseases should avoid exposure to methanol.

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, local, and state/provincial environmental regulations. Do not contaminate ponds, waterways, lakes, or other bodies of water.

Section 14. Transport Information

D.O.T. Classification: Not regulated

IMO/IMDG Classification: Not regulated

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: Methyl Alcohol is subject to the reporting requirements of Section 313 of SARA Title III with a De Minimis concentration of 1.0%.

Regulatory Listings

United States (TSCA): Listed

Section 16. Other Information

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