



CHEMICAL & FERTILIZER, LLC

Safety Data Sheet

Section 1 – Chemical Product and Company Identification

Product Name: HYBRID™
Chemical Name: Adjuvant
Common Name, Synonym: Proprietary
Material Uses: Agricultural Adjuvant
Manufacturer/Manufactured For: Miller Chemical and Fertilizer, LLC
Phone: (717) 632-8921 FAX: (717) 646-1104 CHEMTREC: (800) 424-9300

Section 2 – Hazard Identification

2.1 Classification of the substance or mixture

GHS Classification (29 CFR 1910.1200)

Skin Sensitization (Category 1b)
Skin Irritation (Category 2)

2.2 Label elements

GHS Labeling Elements



Pictogram:
Signal Word: Warning

Hazard Statements: Causes skin irritation. May cause an allergic skin reaction.

Precautionary Statements: Avoid breathing dust/fume/gas/mist/vapors/spray. Wash skin thoroughly after handling. Wear protective gloves. Contaminated clothing must not be allowed out of the workplace. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse. Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 – Composition/Information of Ingredients

Ingredient Name	CAS Number	%
This product has been tested as a whole to determine its hazard – see section 11		100



Product Name: HYBRID™

PA Right to Know: This product contains proprietary ingredients.

This product contains the following chemicals subject to the reporting requirements of Section 13 Title III of the Superfund Amendments and Reauthorization act of 1986 and 40 CFR part 372 (the corresponding CAS numbers and typical percent by weight are also provided).

None

Section 4 – First Aid Measures

EYE CONTACT

Immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids apart to ensure flushing of entire surface. Call a physician.

SKIN CONTACT

Immediately flush skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Thoroughly clean clothing and shoes before reuse. Call a physician.

INHALATION

Remove to fresh air. If not breathing give artificial respiration, preferably mouth to mouth. If breathing is difficult give oxygen. Call a physician.

INGESTION

If swallowed, DO NOT induce vomiting. Rinse mouth with water. Dilute stomach contents by drinking water. If vomiting occurs spontaneously, keep head below hips to prevent breathing vomit into lungs. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Call a physician immediately!

Section 5 – Fire-Fighting Measures

Flash Point (METHOD):	330°C (TCC)
Auto-Ignition:	Not Available
Flammable Limits:	Not Available
Extinguishing Media:	Use alcohol foam, carbon dioxide, water fog, dry chemical, or halon when fighting fires involving this material.
Special Fire Fighting Procedures:	None currently known.
Unusual Fire and Explosion Hazards:	Oxides of carbon may be generated.

Section 6 – Accidental Release Measures

Personal precautions

Evacuate non-essential personnel, eliminate ignition sources, and wear protective equipment (See Section VIII). Shut off source of leak only if safe to do so. Wear respiratory equipment if exposure limits are exceeded.



Product Name: HYBRID™

Contain spill

Recover free product. To clean up residue, flush sparingly with water or use an absorbent. Avoid runoff to ground water, surface waters, and sewers. It may be necessary to remove contaminated soil. If product is flammable or combustible, use non-sparking tools. If required, notify state and local authorities.

Section 6 – Accidental Release Measures *continued*

Disposal Method

Solids must be disposed of in a permitted waste management facility. Recovered liquids may be reprocessed or incinerated. Incineration must be handled in a permitted facility. Dispose of material in accordance with all Federal, State and Local regulations. Local regulations may be more stringent than Federal or State.

Section 7 – Handling and Storage

Handling: Wear protective equipment when handling. Wash thoroughly after handling. Do not get in eyes. Do not breathe vapor, mist, or dust. Avoid prolonged or repeated contact with skin. Do not swallow.

Storage: For industrial use only. Keep container closed when not in use. Store in a cool dry place between 41°F and 120°F. Keep out of reach of children.

Section 8 – Exposure Controls/Personal Protection

Engineering Controls:

Mechanical: Mechanical ventilation is preferred.

Respiratory Protection: If exposure limits are exceeded, or if exposure may occur, use a NIOSHA/MSHA respirator approved for your conditions of exposure. Refer to the most recent NIOSHA publications concerning chemical hazards, or consult your safety equipment supplier. Respiratory protection programs must be in compliance with OSHA requirements in 29 CFR 1910.134. For emergencies, a NIOSHA/MSHA approved positive pressure-breathing apparatus should be readily available.

Eye Protection: Chemical goggles or face shield. Always wear eye protection when working with chemicals. Never wear contact lenses when working with chemicals.

Skin Protection: Rubber gloves. Clean protective body covering, rubber apron, and rubber boots.



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Work Hygienic Practices: Avoid contact with skin, eyes, and clothing. After handling this product, wash hands before eating, drinking or smoking. If contact occurs, remove contaminated clothing. If needed, take First Aid action shown in Section IV. Launder contaminated clothing before use.

Other Protective Equipment: Safety shower, eye wash fountain, and washing facilities should be readily available.

Section 9 – Physical and Chemical Properties

Appearance:	Amber to brown liquid
Odor:	Moderate Oder
pH (aqueous approx. 5% in DW):	6.0 – 7.0 @ 20°C
Boiling point/Boiling range:	224°C
Freeze Point:	< 0°C
Flash Point:	330°C (TCC)
Vapor Pressure (mmHg):	22.8
Vapor Density (Air=1):	Not Determined
Solubility in Water:	emulsifies
Density:	7.60 – 7.70 lbs/gal @ 68°F (20°C)
Specific Gravity (H₂O=1 @ 4°C):	0.9 – 0.93 @ 68°F (20°C)
Evaporation Rate (NA=1):	Not Determined
Percent Volatile by Volume:	Not Determined

Section 10 – Stability and Reactivity

Chemical Stability:	Stable
Materials to Avoid:	Strong oxidizers
Conditions to Avoid:	High Temperatures, Freezing and sources of ignition
Hazardous Decomposition or Byproducts:	Carbon oxides (CO, CO ₂ , C ₂ O ₄ , etc.)
Hazardous Polymerization:	Will not occur

Section 11- Toxicological Information

Toxicity Data:

Acute Eye Irritation: May cause irritation
Skin Sensitization: Moderate potential to produce sensitization
Acute Dermal Effects: LD₅₀ >5000 mg/kg (rat)
Acute Dermal Irritation: 3.4/8 (rabbit) moderately irritating
Acute Oral Effects: LD₅₀ >5000 mg/kg (rat)
Mutagenicity: Data not available
Acute Inhalation Effects: LC₅₀ > 5.88 mg/L
Teratogenicity: Data not available



Product Name: HYBRID™

Section 12 – Ecological Information

Ecotoxicity: This product is a spray adjuvant and large spills may cause damage to vegetation. Contamination of waterways may cause fish kills. Prevent spread and runoff into drains, storm sewers and ditches that lead to waterways.

Aquatic Toxicity: Daphnia Magna: LC₅₀ 8.26 mg/L
Bluegill Sunfish: LC₅₀ 11.08 mg/L
Rainbow Trout: LC₅₀ 8.98 mg/L

Environmental Fate: Data not available

Section 13 – Disposal Considerations

Disposal: If uncontaminated, recover and reuse as product. If contaminated with other materials, the nature and extent of contamination may require use of specialized disposal methods. Consult local, county, state, or federal regulatory agencies for acceptable disposal procedures and disposal locations

Disposal Regulatory Requirements: Consult local, county, state, or federal regulatory agencies for acceptable disposal procedures and disposal locations

Container Cleaning and Disposal: Consult local, county, state, or federal regulatory agencies for acceptable disposal procedures and disposal locations

Section 14 – Transport Information

U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME:
PACKING GROUP:
HAZARD CLASS:
LABEL/PLACARD REQUIRED:
UN/NA No.:

WATER TRANSPORTATION

PROPER SHIPPING NAME:
PACKING GROUP:
HAZARD CLASS:
LABEL/PLACARD REQUIRED:
UN/NA No.:

AIR TRANSPORTATION

PROPER SHIPPING NAME:
PACKING GROUP:
HAZARD CLASS:



Product Name: HYBRID™

LABEL/PLACARD REQUIRED:

UN/NA No.:

SECTION 14 NOTES: This product is not considered a hazard

Section 15 – Regulatory Information

EPA Regulations:

Reportable Quantity –CERCLA: Not applicable

SARA Title III (EPCRA): Not applicable

RCRA Waste Code: Not applicable

State Regulations:

CA Proposition 65: Not applicable

EPA National Response Center (800) 424-8802

Section 16 – Other Information

Preparation Date: 08/17/15

Prepared By: Miller Chemical Regulatory Compliance Officer

Revision Date: 09/19/2016

Revision Notes:

NOTICE TO READER: THE INFORMATION CONTAINED IN THIS SAFETY DATA SHEET (“SDS”) RELATES ONLY TO THE SPECIFIC PRODUCT(S) DESIGNATED HEREIN (THE “PRODUCT”). THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED UPON DATA BELIEVED TO BE CURRENT AND CORRECT AS OF THE DATE OF THIS MSDS, AND OBTAINED FROM SOURCES THAT ARE BELIEVED TO BE RELIABLE. HOWEVER, THIS INFORMATION IS FURNISHED WITHOUT WARRANTY, REPRESENTATIONS OR LICENSE OF ANY KIND, EXPRESS OR IMPLIED, WITH RESPECT TO ACCURACY, CORRECTNESS, OR COMPLETENESS, AND NEITHER MILLER CHEMICAL AND FERTILIZER, LLC. NOR ITS MARKETING AFFILIATES (EACH, A “SELLER”) ASSUME ANY LEGAL RESPONSIBILITY FOR THE USE OR RELIANCE UPON SAME.