



CHEMICAL & FERTILIZER, LLC

Safety Data Sheet

Section 1 – Chemical Product and Company Identification

Product Name: Miller Sustain®

Chemical Name: Adjuvant

Common Name, Synonym: Mixture of Terpene polymers and emulsifiers

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)

Not a hazardous substance or mixture according to 29 CFR 1910.1200 (OSHA HCS)

2.2 Label elements

GHS Labeling Elements

Pictogram: Not Applicable

Signal Word: Not applicable

Hazard Statements: Not applicable

Precautionary Statements: Not Applicable

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

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



Product Name: Miller Sustain®

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 bellow 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):	> 100°C
Auto-Ignition:	Not Available
Flammable Limits:	Not Available
Extinguishing Media:	Dry chemical, carbon dioxide (CO ₂), water spray or Sand/Earth
Special Fire Fighting Procedures:	None currently known.
Unusual Fire and Explosion Hazards:	Generates CO ₂ , CO and smoke. Combustion products may be toxic

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.

Contain spill

Shut off leak if safe to do so. Dike area, recover and reclaim material if possible. This material should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. Absorb the liquid on material such as sand, vermiculite, or other inert, noncombustible absorbant and place in a clean, dry container suitable for disposal. Containers should be closed and segregated for later disposal. Scrub the area with detergent and water.

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.



Product Name: Miller Sustain®

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 at temperatures between 41°F and 104°F (5°C and 40°C) and in well-ventilated areas away from heat or flame. Keep out of reach of children.

Section 8 – Exposure Controls/Personal Protection

- Engineering Controls:**
Mechanical: General ventilation is usually adequate.
- 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.
- 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:** Gardner 10 Max/Yellow to Amber liquid
- Odor:** Moderate Terpene
- pH (aqueous approx. 5% in DW):** 6.0 – 7.0 @ 20°C
- Boiling point/Boiling range:** Not Determined
- Freeze Point:** Not Determined



Product Name: Miller Sustain®

Flash Point:	> 100°C
Vapor Pressure (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Solubility in Water:	Emulsifies
Density:	7.71 – 7.75 lbs/gal @ 68°F (20°C)
Specific Gravity (H ₂ O=1 @ 4°C):	0.92 - 0.93 g/mL @ 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/Conditions to Avoid:	Strong oxidizing agents, excessive heat and sources of ignition.
Hazardous Decomposition or Byproducts:	At high temperatures may release oxides of carbon
Hazardous Polymerization:	Will not occur

Section 11- Toxicological Information

Toxicity Data:

Acute Eye Irritation: May cause irritation
Acute Dermal Effects: LD₅₀ >5050 mg/kg (rabbit); May cause skin irritation.
Acute Oral Effects: LD₅₀ >5050 mg/kg (rat): Large doses may cause nausea, vomiting, and stomach pain or cramps.
Acute Inhalation Effects: LC₅₀ >5.26 mg/m³ (rat): May cause slight irritation if mist occurs
Carcinogenicity: None found
Mutagenicity: None found
Teratogenicity: None found
Chronic Effects: Not known

Section 12 – Ecological Information

Ecotoxicity: This product is a spray adjuvant. Large spills could possible damage vegetation. Contamination of waterways could possibly cause fish kills. Prevent spread of runoff into drains, storm sewers, and ditches that lead to waterways.
Aquatic Toxicity: Data not available
Environmental Fate: Data not available

Section 13 – Disposal Considerations



Product Name: Miller Sustain®

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:
LABEL/PLACARD REQUIRED:
UN/NA No.:

OTHER AGENCIES:

SECTION 14 NOTES: This product is not considered a hazard

Section 15 – Regulatory Information



Product Name: Miller Sustain®

EPA Regulations:

Reportable Quantity –CERCLA: Not applicable

SARA Title III (EPCRA): Not applicable

RCRA Waste Code: Not applicable

State Regulations:

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

CA Proposition 65: Not applicable

EPA National Response Center (800) 424-8802

Section 16 – Other Information

Preparation Date: 09/26/2012

Prepared By: Miller Chemical Compliance Officer

Revision Date: 09/19/2016

Revision Notes: GHS Compliance

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 SDS, 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.