



# CHEMICAL & FERTILIZER CORPORATION

## Material Safety Data Sheet

### Section 1 - Chemical Product and Company Identification

**Product Name:** ADHERE™

**Chemical Name:** not available

**Common Name, Synonym:** Mixture of Terpene polymers and emulsifiers

**Material Uses:** Deposition Utility Modifier

**Manufacturer/Manufactured For:** Miller Chemical & Fertilizer Corp., P. O. Box 333, 120 Radio Road, Hanover, PA 17331

Phone (717) 632-8921 FAX (717) 646-1104 CHEMTREC (800) 424-9300 24 hours every day

**MSDS prepared by:** Miller Chemical & Fertilizer Corp, (717) 632-8921

**Date of MSDS Preparation:** February 14, 2012.

### Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	%
Terpene Polymer Blend		
This product has been tested as a whole to determine it's hazard – see section 11		

### Section 3 - Hazards Identification

#### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

**CAUTION**

Keep out of reach of children

May cause eye irritation

Avoid contact with eyes and skin

Prevent spread and runoff into drains, storm sewers, and ditches that lead to waterways.

**Primary Entry Routes:** Eye and skin contact is the most likely exposure. Ingestion is possible. Contact with or inhalation of sprays may cause irritation to eyes, nose and throat.

**Target Organs:** Eyes, skin and respiratory tract

**Potential Health Effects:**

**Inhalation:** Spray may cause irritation to nose, throat, mucous membranes, coughing, or difficulty in breathing

**Eye:** May cause eye irritation.

**Skin:** May cause irritation

**Ingestion:** Large doses may cause nausea, vomiting, and stomach pain or cramps.

**Acute Effects:** Irritation

**Chronic Effects:** None known

**Medical Conditions Aggravated by Long-Term Exposure:** None known

### Section 4 - First Aid Measures

**Eye Contact:** Flush gently and thoroughly for 15 minutes with large amounts of clean water, occasionally lifting upper and lower lids. Seek medical attention if irritation persists

**Skin Contact:** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If redness or rash develops and persists, seek medical attention. Wash or clean contaminated clothing and shoes before wearing again

**Ingestion:** DO NOT INDUCE VOMITING. Do not force an unconscious person to drink or vomit. Seek medical attention immediately.

**Inhalation:** If respiratory symptoms develop, remove person to fresh air immediately. Begin artificial respiration or CPR (cardiopulmonary resuscitation) if required and seek medical attention as appropriate.

**Notes to Physician:** None Known

## Section 5 - Fire-Fighting Measures

**Flash Point:** > 200 °C

**Autoignition Temperature:** Not applicable

**LEL/UEL:** Not applicable

**Extinguishing Media:** Dry chemical, carbon dioxide (CO<sub>2</sub>), water spray or Sand/Earth.

**Hazardous Decomposition Products:** Oxides of carbon

**Fire-Fighting Instructions:** Keep unauthorized personnel away. Wear full protective clothing and self-contained breathing apparatus. Stay upwind. Stop spill/release if it can be done without risk. Apply water spray to knock down and absorb fumes and vapors and cool affected containers. Control runoff waters. Ventilate closed spaces before entering. Always stay away from the ends of tanks

**Fire-Fighting Equipment:** Full protective clothing and self-contained breathing apparatus

**Unusual Fire or Explosion Hazards:** Evacuate people downwind from fire. Control runoff.

## Section 6 - Accidental Release Measures

**Spill /Leak Procedures:** ELIMINATE ALL SOURCES OF IGNITION. DIKE OR IMPOUND TO KEEP PRODUCT OUT OF SEWERS AND WATERCOURSES. ABSORB SPILL WITH INERT MATERIAL. SHOVEL INTO WASTE CONTAINERS.

Flush area with water, contain and remove cleanup liquid. Small amounts of spilled liquid may be absorbed using appropriate absorbent material. As conditions warrant, notify proper authorities, downstream sewer and water treatment operations, and other downstream users about potentially contaminated water

## Section 7 - Handling and Storage

**Handling Precautions:** Keep containers closed when not in use. Keep away from sources of ignition. It is advisable to wash promptly if skin becomes contaminated; before eating, drinking, using tobacco, or chewing gum; before using toilet facilities; and at the end of the work shift before leaving the worksite. Product does not freeze.

**Storage Requirements:** Store at temperatures between -18°C and 40°C, in well-ventilated areas away from heat or flame.

**Regulatory Requirements:** None Known

## Section 8 - Exposure Controls / Personal Protection

**Engineering Controls:**

**Ventilation:** Mechanical ventilation is preferred.

**Administrative Controls:**

**Respiratory Protection:** A NIOSA/MSHA approved respirator should be worn when dusting/misting occurs

**Protective Clothing/Equipment:** Chemical protective goggles should be used where splashing may occur. Wear rubber or neoprene gloves where splashing may occur. If irritation occurs, impervious clothing and gloves should be worn.

**Safety Stations:** Not known.

**Contaminated Equipment:** Not Known.

**Comments:** None

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance and Odor:** Yellow to amber liquid/  
moderate terpene odor.

**Odor Threshold:** Not Known

**Vapor Pressure:** Not Known.

**Vapor Density (Air=1):** Not Known

**Percent Volatile (by volume):** Not known.

**Evaporation Rate:** Not determined.

**Formula Weight:** Not Applicable

**Specific Gravity (H<sub>2</sub>O=1, at 4 °C):** 0.92 – 0.95 @ 20 °C

**pH (2% solution):** 7 @ 20 °C

**Solubility in water:** Emulsifies

**Boiling Point:** not applicable

**Freezing Point:** not applicable

## Section 10 - Stability and Reactivity

**Stability:** Stable

**Hazardous Polymerization:** None Known

**Chemical Incompatibilities:** None known

**Conditions to Avoid:** Strong Oxidizers , High Temperatures, sources of ignition.

**Hazardous Decomposition Products:** At high temperatures product may release oxides of carbon

## Section 11- Toxicological Information

### Toxicity Data:\*

**Eye Effects:** May cause irritation

**Acute Dermal Effects Rats:** >5050 mg/kg

**Acute Oral Effects Rats:** >5050mg/kg

**Acute Inhalation Effects:**

LC<sub>50</sub>(rat):>2020mg/m<sup>3</sup>

**Chronic Effects:** Not known

**Carcinogenicity:** None found for this product

**Reproductive Toxicity:** None found for this product

**Mutagenicity:** None found for this product

**Teratogenicity:** None found for this product

## Section 12 - Ecological Information

**Ecotoxicity:** This product is a utility modifier adjuvant. Large spills could possibly damage vegetation. Contamination of waterways could possibly cause fish kills. Prevent spread and runoff into drains, storm sewers, and ditches that lead to waterways.

**Aquatic Toxicity:** Not Known

**Environmental Fate:** Not known

## 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 municipal, provincial or federal regulatory agencies for acceptable disposal procedures and disposal locations

**Disposal Regulatory Requirements:** Consult municipal, provincial or federal regulatory agencies for acceptable disposal procedures and disposal locations

**Container Cleaning and Disposal:** Consult municipal, provincial or federal regulatory agencies for acceptable disposal procedures and disposal locations

## Section 14 - Transportation Information

TDG PIN: not required

This product is not considered a hazard when in transit.

## Section 15 - Regulatory Information

WHIMIS Hazard Class: not required

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by those regulations.

## Section 16 - Other Information

**Preparation Date:** February 14, 2012

**Prepared By:** Miller Chemical Compliance Officer

**Revision Date:**

**Revision Notes:**

**NOTICE TO READER:** THE INFORMATION CONTAINED IN THIS MATERIAL SAFETY DATA SHEET ("MSDS") 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 CORPORATION,) NOR ITS MARKETING AFFILIATES (EACH, A "SELLER") ASSUME ANY LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON SAME.

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