Section 1: Chemical Product – Company Identification

Manufacturer: Kugler Company
Address: PO Box 1748
          McCook, NE  69001
Telephone number: 308 345-2280
Effective Date: 04-02-12
Product: FA-20
Chemical Name: FULVIC ACID COMPLEX
Chemical Family: Proprietary
Formula: Amorphous Polymer
Synonyms: FULVIC ACID COMPLEX
CAS Number: SEE INGREDIENT STATEMENT, Section III
EPA Number: Not required
Physical State: Liquid

Section II: Physical Data

Boiling Point: 104 Degrees C.
Freezing Point: -2 Degrees F.
Spec. Gravity: 1.101
Vapor Pressure: 14.2 @20C
Vapor Density (Air = 1): 1.21 @ 20 C
pH (3% Soln.): 2.2
Solubility: 100% Soluble
Volutiles: 80 (water)
Evaporation: Normal 0.4 (water)
Melting Point: Not Applicable
Appearance: Amber liquid with slight odor

Section III: Hazardous Ingredients

<table>
<thead>
<tr>
<th>Material</th>
<th>Percent</th>
<th>TLV</th>
<th>Hazard</th>
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<tbody>
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<td>None known</td>
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Section IV: Health Hazard Data

Threshold Limit Values: OSHA PELV = none established
Minimize contact with eyes, skin, clothing, etc.
Carcinogen Listings NTP / IARC: Not listed as a carcinogen
Primary Route(s) of Entry: Skin contact, eye contact
Symptoms of Overexposure: Severe eye irritant, may cause pain & redness.
                         Skin irritant, may cause pain, redness & dermatitis
Conditions Aggravated by Exposure: None known
Irritancy of Material:  See above
Sensitization to Material: None known
Teratogenicity: None known
Mutagenicity: None known
Reproductive Toxicity: None known
Synergistic Substances: None known

First Aid
- Eyes: Immediately flush eyes with water for at least 15 min. while holding eyelids open.
- Skin: Immediately wash with soap and water.
- Inhalation: Remove to fresh air. See doctor if effects occur.
- Ingestion: Give water to dilute and get medical attention.

Notes to Physician: Very low toxicity. Treat symptomatically.
Section V: Fire and Explosion Hazard Data
Flash Point (method used): Not Applicable  Auto Ignition Temp: Not applicable
Flammable Limits in Air % by Volume: Lower: not applicable  Upper: not applicable
Extinguishing Media: None
Special Fire Fighting Procedures: none
Unusual Fire and Explosion Hazards: none

Section VI: Spill or Leak Procedures
Spill Response: Contain with dykes. Spilled material may be vacuumed or absorbed with inert material (i.e.; dry sand or earth) then place into a chemical waste container.
Neutralizing Chemicals: Spill may be carefully neutralized with lime (calcium oxide), sodium carbonate or sodium bicarbonate.
Waste Disposal Methods: Dispose of in compliance with governmental regulation.

Section VII: Reactivity Data
Stability: stable  Conditions to Avoid: Contact with strong oxidizing agents
Incompatibility: none  Materials to Avoid: Strong oxidizing agents, strong caustics
Hazardous Polymerization: Will not occur  Conditions to Void: none
Hazardous Decomposition Products: Sulfur dioxide, carbon dioxide, and carbon monoxide

Section VIII: Control Measures
Ventilation Requirements: Adequate ventilation for comfort is recommended
Respiratory Protection: Normally not needed. Use NIOSH approved respirator when dusts, mists or vapors are present
Protective Gloves: Wear appropriate protective gloves to prevent skin exposure
Eye Protection: Wear eye protection; chemical safety goggles
Other Protective Equipment: Wear appropriate clothing to prevent skin exposure. Clothing which contacts skin should be changed daily.

Section IX: Special Precautions
Repair/Maintenance of Contaminated Equipment: None required
Hygiene in Handling & Storage: Wash thoroughly after handling. Personal hygiene is strongly encouraged so all clothing items are changed daily
Other: Normal precautions common to good manufacturing practice should be followed

Keep out of reach of children. Do not store with food, feed or other material to be used or consumed by humans or animals Do not contaminate water supplies, lakes, streams or ponds. Protect against physical damage. Store in cool, dry place separate from combustible, organic or other readily oxidizable materials. Avoid storage on wood floors. Immediately remove and dispose of any spilled material.

Section X: Additional Regulatory Concerns

Section XI: SHIPPING INFORMATION
Shipping name: Not regulated by DOT, IATA, or IMO.
Hazard Class: None
Identification No: None
Labels Required: None
Placarding: None
Freight Class: Class 55

Section XII: GENERAL PRODUCT INFORMATION
National Fire Protection Association Rating: Rating level: 4-Extreme, 3-High, 2-Moderate, %Slight, 0-Minimum)
Health: 1
Fire: 0
S.A.R.A. Title III Hazard Classification: (Yes/No)
Immediate (Acute) Health: N
Delayed (Chronic) Health: N
Sudden Release of Pressure: N
Fire: N
Reactive: N

Mail Inquiries to Kugler Company
PO Box 1748
McCook, NE  69001-1748

While the Kugler Company believes the data set forth herein is accurate as of the date hereof, The Kugler Company makes no warranty with respect thereto and expressing disclaims all liability for reliance thereon, such data is offered solely for consideration, investigation and verification.