Appendix A
Material Safety Data Sheets for Safer Alternative Products
MSDS for Soy Gold 2000
SECTION I-IDENTIFICATION

PRODUCT: SOYGOLD® 2000
CAS No.: 67784-86-4
CHEMICAL: Fatty acid methyl esters
SYNONYMS: Methyl esters of soybean oil

SECTION II-INGREDIENTS AND HAZARD CLASSIFICATION

TYPICAL COMPOSITION

<table>
<thead>
<tr>
<th>Component</th>
<th>CA3</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliph C16-C18 Methyl Esters</td>
<td>67784-89-3</td>
<td>57.39</td>
</tr>
<tr>
<td>Surfactant</td>
<td>5018-45-9</td>
<td>1.5</td>
</tr>
</tbody>
</table>

SARA HAZARD: TITLE III SECTION 313: Not listed
FIRE (Section 314/315): None noted

SECTION III-HEALTH INFORMATION

EFFECTS OF EXPOSURE

INHALATION: No known problems
INGESTION: LD₅₀=500mg/kg (albino rats/similar products)
EYE CONTACT: Not classified as eye irritants
SKIN CONTACT: Not classified as a skin irritant or corrosive material

SECTION IV-OCCUPATIONAL EXPOSURE LIMITS

PEL: NO OSHA PEL
TWA: NO ACGLIALLY

SECTION V-EMERGENCY FIRST AID PROCEDURE

FOLLOW STANDARD FIRST AID PROCEDURES

SWALLOWING: Call physician or poison control center.
SKIN CONTACT: Wash affected area.
EYE CONTACT: Flush eyes with cool water for at least 15 minutes. Do not let victim rub eyes.
INHALATION: Immediately remove victim to fresh air. Get medical attention immediately.

SECTION VI-PHYSICAL DATA

SOLVING POINT: Over 600°F (215°C) at 760 mm Hg pressure
MELTING POINT: -1°C
VAPOR PRESSURE: 0.082 mm Hg at 25°C
SPECIFIC GRAVITY: 0.882 g/ml at 25°C
DIELECTRIC STRENGTH: >55.9
SOLUBILITY IN WATER: Negligible at room temperature
APPEARANCE AND COLOR: Light yellow to clear and liquid at room temperature
ODOR: Light vegetable oil odor

SECTION VII-FIRE AND EXPLOSION HAZARDS

FLASH POINT & METHOD USED: 425°F (220°C)(FMOC)
FLAMMABLE LIMITS: Not applicable
NFPA RATING: No NFPA rating
HMIS RATING: HEALTH: 0  FIRE: 1  REACTIVITY: 0
SPECIAL FIRE FIGHTING PROCEDURES & PRECAUTIONS
Treat as a fire. Use water spray, dry chemical, foam or carbon dioxide.

UNUSUAL FIRE & EXPLOSION HAZARDS
Rags soaked with any solvent present a fire hazard and should always be stored in UL listed or Factory Mutual approved covered containers. Improperly stored rags can create conditions that lead to oxidation. Oxidation, under certain conditions can lead to spontaneous combustion. This product contains antioxidants to retard oxidation.

SECTION VIII-REACTIVITY

STABILITY: Stable
HAZARDOUS POLYMERIZATION: None likely
MATERIALS TO AVOID: Strong oxidizing agents
HAZARDOUS DECOMPOSITION PRODUCTS: CO, CO2
CONDITIONS TO AVOID: None known

SECTION IX-EMPLOYEE PROTECTION

CONTROL MEASURES: Adequate ventilation
RESPIRATORY PROTECTION: None required
PROTECTIVE CLOTHING: No need anticipated
EYE PROTECTION: None required

SECTION X-ENVIRONMENTAL PROTECTION

ENVIRONMENTAL PRECAUTIONS: Avoid uncontrolled releases of this material into environment.
SPILL OR LEAK PRECAUTIONS: Contain spilled material. Transfer to secure containers. Where necessary, collect using absorbent media.
WASTE DISPOSAL: Dispose of according to federal, state and/or local requirements.

SECTION XI-REGULATORY CONTROLS

DOT CLASSIFICATION: Class 38
DOT PROPER SHIPPING NAME: Cleaning Compound, N.O.S.
OTHER REGULATORY REQUIREMENTS: Listed in TSCA Inventory

SECTION XII-PRECAUTIONS: HANDLING, STORAGE AND USAGE

No special precautions necessary.

SECTION XIII-DATE AND SIGNATURE

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. The stated DATES is reliable to the best of the company's knowledge and believed accurate as of the date indicated. However, no representation, warranty or guarantee of any kind, expressed or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

AG ENVIRONMENTAL PRODUCTS, L.L.C.
9864 PFLUMI
LENEXA, KS 66215

SIGNATURE: [Signature]
PREPARED BY: WILLIAM A. AYRES  REVISION DATE: 5-01-01

37
MSDS for Autowash #3
MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

Trade Name: SIEBERT AUTOWASH #3
Generic Name: Blanket Wash

Manufacturer: SIEBERT, INC.
Address: 8114 West 47th Street
City: Lyons State: IL Zip: 60534

DOT Hazard Classification: Not Regd.
NPPA Code: Health - 0 Flammability - 0 Reactivity - 0
H.M.S Code: Health - 1 Flammability - 0 Reactivity - 0 Personal Protection - B

II. HAZARDOUS INGREDIENTS

If present, IARC, NTP, and OSHA carcinogens and chemicals subject to the reporting requirements of SARA Title III Section 313 are identified in this section.

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS Number</th>
<th>%wt</th>
<th>TLV</th>
<th>STEL</th>
<th>SARA TITLE III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meqna</td>
<td>Various</td>
<td>70-90</td>
<td>None established</td>
<td>None established</td>
<td>No</td>
</tr>
<tr>
<td>Surfactant</td>
<td>Various</td>
<td>15-30</td>
<td>None established</td>
<td>None established</td>
<td>No</td>
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</table>


III. PHYSICAL DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point @ 760 mm Hg</td>
<td>308 - 335°F</td>
</tr>
<tr>
<td>Vapor Pressure @ 90°F</td>
<td>0.92</td>
</tr>
<tr>
<td>Specific Gravity @ 68°F</td>
<td>0.1 mm Hg</td>
</tr>
<tr>
<td>Water Solubility (%)</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Specific Vapor Density (air=1)</td>
<td>&lt;1.0</td>
</tr>
<tr>
<td>% Volatile by Volume:</td>
<td>&lt;1.0</td>
</tr>
<tr>
<td>% Volatile Organic Compound(s):</td>
<td>&lt;1.0</td>
</tr>
<tr>
<td>Appearance:</td>
<td>Clear golden liquid</td>
</tr>
<tr>
<td>Odor:</td>
<td>Typical organic odor</td>
</tr>
</tbody>
</table>

IV. FIRE AND EXPLOSION DATA

Flash Point (Method): >100°F (TCC)
Explosive Limit: LEL - NE  UEL - NE
Extinguishing Media: Water fog, carbon dioxide or dry chemical.
Special Fire Fighting Procedures: Wear self-contained breathing apparatus when fighting chemical fires.
Unusual Fire and Explosion Hazards: Fire suppression may be combusting at temperatures below normal flash point. Rags soaked with material, stored for a long period while mixed with strong alkali or acidic materials, may smolder, then smoke, and may even ignite.

V. HEALTH HAZARD DATA

Eyes - May cause temporary irritation, redness, tearing, blurred vision. Contact lenses must not be worn when possibility exists for eye contact due to spraying liquid or airborne particles.
Skin - Prolonged or repeated contact may cause irritation.
SIEBERT AUTOWASH #1

Breathing - Excessive inhalation of vapors may cause nasal and respiratory irritation, central nervous system effects including dizziness, weakness, fatigue, nausea, headache and possible unconsciousness.

Swallowing - Can cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

First Aid/Emergency Procedures

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet and get medical attention.

Skin Contact: Wash thoroughly with soap and water. Remove contaminated clothing. Launder contaminated clothing before re-use.

Eyes: Flush with copious amounts of water. Get medical attention.

Ingestion: Do not induce vomiting. If large quantity is swallowed, give large amounts of water (pint). NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Get medical attention immediately. Risk of damage to lungs exceeds poisoning risk.

Primary Entry Routes: Inhalation, skin contact.

Chronic Health Effects: Chronic overexposure may aggravate existing skin, eye and lung conditions.

VI. REACTIVITY DATA

Stability: Stable.

Hazardous Polymerization: Cannot occur.

Incompatibilities: Avoid contact with strong oxidizing materials, strong alkalis, strong mineral acids.

Hazardous Decomposition Products: Carbon monoxide, oxides.

Conditions to Avoid: None

VII. SPILL OR LEAK PROCEDURES

Procedures for Spill/Leak:

- Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks, etc.).
- Small Spill - Absorb liquid on paper, vermiculite, flour absorbent, or other absorbent material and transfer to a recovery drum.
- Large Spill - Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source; define area of spill to prevent spreading. Pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into recovery drums. Prevent run-off to sewer, septic tanks or other bodies of water. Notify proper authorities, as required, that a spill has occurred.

Waste Management:


VIII. SPECIAL PROTECTION INFORMATION

Respiratory Protection:

- If workplace exposure limit(s) of product is exceeded, a NIOSH/MSHA approved air supplied respirator is advised in the absence of proper ventilation. Control OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions. Engineering or administrative controls should be implemented to reduce exposure.

Ventilation: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain minimum exposure.

Eye Protection: Chemical Splash Proof Goggles and full face shield are advised for operations where eye or face contact can occur.

Gloves: Wear impervious gloves.

Other Protective Equipment: To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

IX. SPECIAL PRECAUTIONS
SIEBERT AUTOWASH #3

Special Handling/Storage:
To avoid skin contact and ingestion, wash hands and face well before eating or smoking. Do not permit food in work area. Avoid breathing mists if generated. Store at room temperature. Reseal container when not in use. Do not store near acids, bases or flammable liquids. Containers of this material should be rinsed when emptied, since emptied containers retain product residues (vapor, liquid, and/or solid). All hazard precautions given in this data sheet must be observed.

As of the date of preparation of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state laws. However, no warranty or representation with respect to such information is intended or given.

Date revised: 04/01/2001
jpa
MSDS for Mirachel NP 2520
Material Safety Data Sheet

Experimental Commercial Printing Cleaner NP 2520
(Formulation No. 2520)

Section I - Chemical Product and Company Identification

Manufacturer Name: Mirecham Corporation
Address: P.O. Box 4028
City, State, Zip: Phoenix, Arizona, 85063-4028
Emergency Phone: 1-800-847-3527

Date Prepared: 8/3/04
Revision Date: New

Section II - Composition/Information on Ingredients

Hazardous Component (CAS #)  OSHA PEL  ACGIH TLV  Other Limits  % (Optional)
None

Section III - Hazards Identification

Emergency Overview: Clear, non-flammable, water-based cleaner with a light citrus odor.
Potential Health Effects:
- Eye Contact: May cause mild temporary irritation.
- Skin Contact: Prolonged or repeated exposure may cause mild irritation.
- Inhalation: No adverse effects expected.
- Ingestion: No adverse health effects are anticipated to occur as a result of acute ingestion. Chronic effects are not known.
- Carcinogenicity: None of the components in this material are listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.
- Symptoms of Overexposure: Prolonged contact may cause mild irritation or dryness to sensitive skin.
- Medical Conditions Generally Aggravated by Exposure: None known.

Section IV - First Aid Measures

- Eyes: Immediately flush with clean water. Consult physician if necessary.
- Skin: Rinse with water.
- Ingestion: If swallowed, treat symptomatically and supportive. Do not induce vomiting. If vomiting occurs, keep head below hips to prevent aspiration. Consult physician. No adverse effects anticipated.

Section V - Fire and Explosion Hazard

Flash Point (Method Used): >212°F (PMCC, nonflammable)
Extinguishing Media: N/A
Special Fire Fighting Procedures: N/A
Unusual Fire Fighting and Explosion Hazards: N/A
Section VI - Accidental Release

Small Spills: Flush with water into containing area or to sewer where applicable with Federal, State or Local disposal requirements.
Large Spills: Bury and pump into suitable containers, clean up residual with absorbent material and wash with water. Dispose of in accordance with Federal, State or Local disposal requirements.

Section VII - Handling & Storage

Handling & Storage: Wear protective goggles or face shield if splashing or spraying liquid. Protect from freezing.
Precautions: Keep container tightly closed. Keep out of reach of children.

Section VIII - Exposure Controls, Personal Protection

Respiratory Protection: No respiratory protection is necessary.
Ventilation: Good general ventilation is sufficient.
Protective Clothing: When prolonged skin contact is expected, wear protective gloves.
Eye Protection: Wear safety glasses.
Skin/Hygiene Practices: Use good personal hygiene practices, wash hands before eating, drinking, smoking or using toilet facilities.

Section IX - Physical/Chemical Characteristics

Boiling Point: >10°F
Vapor Pressure (mm Hg) @ 20°C: Composite = 0.006
Vapor Density (AIR = 1): > 1
Solubility in Water: Complete
Appearance and Odor: Clear liquid with a mild citrus odor
Specific Gravity (H₂O = 1): 0.983
pH: 9.5 - 10.0
Evaporation Rate (Buyl Acetate = 1): > 1
Melting Point: N/A
N/A = Not Applicable
N.E. = Not Established

Section X - Stability & Reactivity

STABILITY: Unstable
Incompatibility (Materials to Avoid): Strong Acids and Alkalis
Hazardous Decomposition or By-products: Thermal decomposition may produce CO₂
Hazardous Polymerization: May Occur
WILL NOT Occur: X

Section XI - Toxicological Information

No data currently available

Section XII - Ecological Information

No data currently available
Section XIII - Disposal Considerations

Waste Disposal (Unused Material)  Flush uncontaminated material to sewer where applicable within Federal, State or Local disposal requirements.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, State and local waste disposal requirements may be more restrictive or otherwise different from Federal laws and regulations.

Section XIV - Transportation Information

<table>
<thead>
<tr>
<th>D.O.T. Shipping Name</th>
<th>Not Required</th>
<th>D.O.T. Hazard Class</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Stripping Name</td>
<td>N/A</td>
<td>UN/NPA Number</td>
<td>N/A</td>
</tr>
<tr>
<td>UN Class or Division</td>
<td>N/A</td>
<td>UN Packing Group</td>
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</tr>
<tr>
<td>NWP/PS Freight Class</td>
<td>Compound, Cleaning Fluid, NOC 40570 Sub 3</td>
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<td></td>
</tr>
</tbody>
</table>

Section XV - US Regulatory Information

Notice: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state, and local laws. The following specific information is made for the purpose of complying with numerous federal, state, and local laws and regulations.

Federal Regulations:

Workplace Classification This product is considered non-hazardous under the CSHA Hazard Communication Standard (29CFR 1910.1200)

SARA Title III

Section 311/312 This product is not a hazardous chemical under 29CFR 1910.1200, and therefore is not covered by Title III of SARA.

Section 313 This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

CERCLA Information (40CFR 302.4) Releases of this product to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304.

Waste Classification When a decision is made to discard unused portions of this product, it does not meet RCRA's characteristic definition of ignitability, corrosivity, or reactivity, and none of the materials used in this product are listed in 40 CFR 261.33. The toxicity characteristic (TC) however, has not been evaluated by the Toxicty Characteristic Leaching Procedure (TCLP).

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, State and local waste disposal requirements may be more restrictive or otherwise different from Federal laws and regulations.

TSCA All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act.
<table>
<thead>
<tr>
<th>NFPA Ratings</th>
<th>Health = 1</th>
<th>Flammability = 0</th>
<th>Reactivity = 0</th>
<th>Special = 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPCA-HMIS Ratings</td>
<td>Health = 1</td>
<td>Flammability = 0</td>
<td>Reactivity = 0</td>
<td>Protective Equipment = None</td>
</tr>
</tbody>
</table>

**State Regulations:**

**Arizona**

Maricopa County: Under the definitions of Rule 331, this product is considered a Low-VOC Cleaner.

**California**

California Safe Drinking Water and Toxic Enforcement - Prop. 65: This product does not contain any materials currently listed by California as chemicals known to cause cancer or known to have reproductive toxicity under Proposition 65.

Volatile Organic Compounds (VOC): The VOC content of this product is 97 grams/liter (0.81 pounds/gallon) with a composite partial pressure at 28°C of less than 1 mm Hg.

**BAAQMD**

This product meets the requirements of the Bay Area Air Quality Management District Regulation 8, Rule 16 when used at a 1:1 dilution with water. The VOC content at this dilution is 48 grams/liter (0.40 pounds/gallon) with a composite partial pressure at 28°C of less than 1 mm Hg.

**SCAQMD**

This product, when used at normal use dilutions of 3:1 or greater meets the requirements of South Coast Air Quality Management District Rules 1122 and 1171. The VOC content at this dilution is 24 g/L (0.20 lbs/gal) with a composite partial pressure at 28°C of less than 1 mm Hg.

**Section XVI - International Regulatory Information**

Notice: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranties, express or implied, are given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with their federal, state/province, and local laws. The following specific information is made for the purpose of complying with numerous specific foreign regulations.

**Australia**

This product is not classified as hazardous according to criteria of Worksafe Australia. Merck has reviewed Australia's List of Hazardous Substances and Australia's Standard of the Uniform Scheduling of Drugs and Poisons and determined that no ingredient in this product is listed in either listing. We have also verified with NICNAS at the Australian National Occupational Health & Safety Commission (NOHSC) that all of the components in this formulation are listed in the Australian Inventory of Chemical Substances (AICS) and that no notification will be necessary under the Industrial Chemicals (Notification and Assessment) Act 1989.

**Canada**

Non-controlled under WHMIS.

**European Union**

All materials in this formulation are EINECS listed. Not a hazardous preparation according to the EC-Directive 68/311/EEC.
ACETONE
MSDS Number: A0446 — Effective Date: 8/15/02

1. Product Identification

   Synonym: Dimethyl ketone; 2-propanone; dimethyl ketone
   CAS No.: 67-64-1
   Molecular Weight: 58.08
   Chemical Formula: (CH3)CO
   Product Code:
   J.T. Baker: 5255, 5180, 5805, 9001, 9002, 9903, 9004, 9005, 9006, 9007, 9008, 9009, 9010, 9015, 9036, 9125, 9154, 9271.
   Aldrich: 0345
   Mallinckrodt: 09/18, 2434, 2483, 2437, 2418, 2440, 2441, 2491, 2430, 9411, 10583, 1091

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No.</th>
<th>Percent</th>
<th>Hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>99%</td>
<td>Yes</td>
</tr>
</tbody>
</table>

3. Hazards Identification

   Emergency Overview
   DANGER! EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM.

   J.T. Baker SAF-T-DATA® Ratings (Provided here for your convenience)
   Health Rating: 1 - Slight

http://www.jtbaker.com/msds/A0446.htm

8/15/02
Flammability Rating: 4 - Extreme (Flammable)
Reactivity Rating: 2 - Moderate
Corrosivity Rating: 1 - Slight
Lab Protective Equip: GOGGLES, LAB COAT, VENT HOOD, PROPER GLOVES, CLASS B EXTINGUISHER
Storage Color Code: Red (Flammable)

Potential Health Effects:

Inhalation:
Inhalation of vapors irritates the respiratory tract. May cause coughing, dizziness, dizziness, and headache. Higher concentrations can cause central nervous system depression, narcosis, and unconsciousness. Inhalation of small amounts is not likely to produce harmful effects. Inhalation of larger amounts may produce abdominal pain, nausea, and vomiting. Aspiration into lungs can produce severe lung damage and a medical emergency. Other symptoms are expected to parallel inhalation.

Ingestion:
Swallowing small amounts is not likely to produce harmful effects. Inhalation of larger amounts may produce abdominal pain, nausea, and vomiting. Aspiration into lungs can produce severe lung damage and a medical emergency. Other symptoms are expected to parallel inhalation.

Skin Contact:
Irritation due to direct action on skin. Causes redness, pain, drying and cracking of the skin.

Eye Contact:
Vapors are irritating to the eyes. Spashes may cause severe irritation with stinging, burning, redness, and pain.

Chronic Exposure:
Prolonged or repeated skin contact may cause severe irritation or dermatitis.

Aggravation of Pre-existing Conditions:
Use of alcoholic beverages enhances toxic effects. Exposure may increase the toxic potential of chlorinated hydrocarbons, such as chloroform, trichloroethane.

4. First Aid Measures

Inhalation:
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:
Aspiration hazard. If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below knees to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately.

Skin Contact:
Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:
Immediately flush eyes with plenty of water for at least 15 minutes. Lift upper and lower eyelids occasionally. Get medical attention.

5. Fire Fighting Measures

Fire:
Flashpoint: -20°C (-4°F)
Autoignition temperature: 465°C (869°F)
Flammable limits in air: 13% by volume
Explosive limits: 1.1% to 12.9%.
Extremely Flammable Liquid and Vapor! Vapor may cause flash fire.

Explosion:
Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Vapors can flow along surfaces to distant ignition sources and flash back. Contact with strong oxidizers may cause fire. Sealed containers may rupture when heated. This material may produce a floating fire hazard. Sensitive to static discharge.

http://www.jhbaker.com/msds/A0446.htm
8/15/02
6. Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Either liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth), and place in a hermetic waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If liquid or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposed. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll-free number for the US Coast Guard National Response Center is (800) 424-8802.

J. T. Baker® SOLUSOR(R) solvent absorber is recommended for spills of this product.

7. Handling and Storage

Protect against physical hazard. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may exist. Outside or detached storage is preferred. Segregate from incompatible materials. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid). Observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

Acetone:
-OSHA Permissible Exposure Limit (PEL): 500 ppm (TWA)
-ACGIH Threshold Limit Value (TLV): 50 ppm (TWA), 150 ppm (STEL) (HA - not classifiable as a human carcinogen)

Ventilation System:
A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation: A Manual of Recommended Practices, most recent edition, for details.

Personal Respirators (NIOSH Approved):
If the exposure limit is exceeded, a full-face organic vapor respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lower. A full-face piece organic vapor respirator may be worn up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lower. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator.

WARNING: A respirator can only protect workers in oxygen-deficient atmospheres.

Skin Protection:
Wear impenetrable protective clothing, including boots, gloves, lab coat aprons or coveralls, as appropriate, to prevent skin

http://www.jtbaker.com/msds/A0446.htm 8/15/02
9. Physical and Chemical Properties

Appearance:
Colorless or clear volatile liquid
Odor:
Musty, must-like
Solubility:
Miscible in all proportions in water.
Specific Gravity:
0.75 @ 20°C/4°C
pH:
No information found.
% Volatiles by volume @ 21°C (70°F):
100
Boiling Point:
96.5°C (209°F) @ 760 mm Hg
Melting Point:
-55°C (-67°F)
Vapor Density (Air=1):
2.0
Vapor Pressure (mm Hg):
400 @ 35°C (95°F)
Evaporation Rate (ButAc=1):
ca. 7.7

10. Stability and Reactivity

Stability:
Stable under ordinary conditions of use and storage.
Hazardous Decomposition Products:
Carbon dioxide and carbon monoxide may form when heated to decomposition.
Hazardous Polymerization:
Will not occur.
Incompatibilities:
Concentrated nitric and sulfuric acid mixtures, oxidizing materials, chloroform, amines, chlorine compounds, acids, potassium hydroxide.
Conditions to Avoid:
Heat, flames, ignition sources and incompatibilities.

11. Toxicological Information

GLC test: LC50: 5800 mg/L; Inhalation: LC50: 50, 100mg/m³; Irritation eye rabbit, Standard Draize, 20 mg severe; investigated as a tumorgen, mutagen, reproductive effector.

--- Cancer List ---------------------------

http://www.thaker.com/msds/A.0446.htm 8/15/02
12. Ecological Information

Environmental Fate:
When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material is expected to be broken down by microorganisms. When released into water, this material is expected to readily biodegrade. When released to water, this material is expected to quickly evaporate. This material has a log octanol-water partition coefficient of less than 0. This material is expected to not significantly bioaccumulate. When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material may be moderately degraded by photolysis. When released into the air, this material is expected to be readily removed from the atmosphere by wet deposition. Environmental Toxicity:
This material is not expected to be toxic to aquatic life. The LC50/96-hour values for fish are over 100 mg/L.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved reclaimer or disposed of a RCRA approved waste facility. Processing, use or consumption of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Domestic (Land, D.O.T.):  
Proper Shipping Name: ACETONE  
Hazard Class: 3  
UN/NM: UN 090  
Packing Group: I I  
Information reported for product/size: 50LB

International (Water, I.M.O.):  
Proper Shipping Name: ACETONE  
Hazard Class: 3  
UN/NM: UN 090  
Packing Group: I I  
Information reported for product/size: 350, 8

15. Regulatory Information

Ingredient  Chemical Inventory Status - Fact 1  
TSCA, EC, Japan, Australia

http://www.jibaker.com/media/A0446.htm  
8/15/02
16. Other Information

NFPA Ratings: Health: 1 Flammability: 3 Reactivity: 0
Label: Hazard Warning:
DANGER: EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPORS MAY CAUSE FLASH FIRE. HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM.
Label Precautions:
Keep away from heat, sparks and flame.
Keep container closed.
Use only with adequate ventilation.
Wash thoroughly after handling.
Avoid breathing vapor.
Avoid contact with eyes, skin and clothing.

Label Fire: A
Aspiration hazard. If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases, get medical attention.

Product Use:

Revision Information:
No changes.

http://www.jtbolker.com/msds/A0446.htm 8/15/02
MSDS for VM&P
This formula contains ac known ozone depleting chemicals.

HAZARD COMMUNICATION STANDARD
This document is prepared in accordance with the OSHA Hazard Communication Standard (29 CFR §1910.1200). This MSDS contains thirteen (13) sections.

The following effects and/or symptoms are not expected to be experienced by persons who use this product properly and according to ALL instructions, precautions, and warnings, however, should the product user experience any questionable effects or symptoms, the product user should immediately seek medical attention.

SECTION 4. HAZARDS IDENTIFICATION

INHALATION ACUTE EXPOSURE EFFECTS
May cause dizziness, headache, watering of eyes, irritation of respiratory tract, coughing, nausea, and light-headedness.
Severe overexposure may cause unconsciousness.

SKIN CONTACT ACUTE EXPOSURE EFFECTS
May cause irritation.

EYE CONTACT ACUTE EXPOSURE EFFECTS
May cause irritation.

INGESTION ACUTE EXPOSURE EFFECTS
Harmful or fatal if swallowed. May cause nausea, vomiting, gastrointestinal irritation, and diarrhea.

CEREBRAL EXPOSURE EFFECTS
Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. May cause skin irritation.

MEDICAL CONDITIONS AGGRAVATED
None known.

PRIMARY ROUTE OF EXPOSURE
Inhalation, ingestion, and dermal.

SECTION 5. FIRST AID MEASURES

INHALATION
If user experiences breathing difficulty, move to air free of vapors. Administer oxygen or artificial respiration until medical assistance can be rendered.

SKIN CONTACT
Wash with soap and water.

EYE CONTACT
Flush with large quantities of water for at least 15 minutes. If irritation from contact persists, get medical attention.

INGESTION
DO NOT INDUCE VOMITING. Call your poison control center, hospital.

SECTION 5. FIRST AID MEASURES (CONTINUED)

In emergency room, or physician immediately.

NOTE TO PHYSICIAN
This formula is registered with Poison Control.
Call your local poison control center for further information.

http://www.allprocorp.com/msds/Klean/VMP/WEB.cfm

12/1/2003
HAZARD RATING  
SOURCE  
EMERGENCY  
PREVENTION  
REACTIVITY  
OTHER  
FLASH POINT  
TSC  
FLASH POINT  
50.00 °F  
10.02 °C  
LOWER EXPLOSION LIMIT  
6.9  
GENERAL CONSIDERATIONS  
OSHA FLAMMABILITY: Class II  
EXTINGUISHING METHOD  
Use carbon dioxide, dry powder, or foam.  
FIRE FIGHTING PROCEDURES  
Self-contained respiratory protection should be provided for  
fire fighters fighting fires in buildings or confined areas. Storage  
containers exposed to fire should be kept cool with water spray to  
prevent pressure build-up. Stay away from heads of containers that  
have been exposed to intense heat or flames.  
FIRE AND EXPLOSION HAZARDS  
DANGEROUS FLAMMABLE MIXTURES FROM HEAT, SPARKS, FLAMES AND ALL OTHER  
SOUSCE OF IGNITION. DO NOT SMOK.  
Extinguish all flames and pilot lights, and turn off stoves,  
heaters, electric motors and all other sources of ignition during  
use and until all vapors are gone. Aware of static electricity that  
is generated by synthetic clothing and other sources.  

SECTION 7. ACCIDENTAL RELEASE MEASURES  
CLEAN-UP  
Keep unnecessary people away; isolate hazard area and deny entry.  
Stay upwind, out of lea areas, and ventilate closed spaces before  
entering. Shut off ignition sources; keep flares, smoking or flames  
out of hazard area. SMALL SPILLS: take up liquid with sand, earth,  
or other noncombustible absorbent material and place in a plastic  
container where applicable. LARGE SPILLS: dike for ahead of spill  
for later disposal.  
For transportation related spills contact Comtrec at 1-800-424-9300  
for emergency assistance.  

SECTION 7. ACCIDENTAL RELEASE MEASURES  
(WORKING)

WASTE DISPOSAL  
Dispose in accordance with applicable local, state and federal  
regulations.  

SECTION 8. HANDLING AND STORAGE  
STORAGE  
Keep container tightly closed when not in use. Store in a cool,  
dry place. Do not store near flames or at elevated temperatures.  
Hazard  
Read carefully all cautions and directions on product label before  
use. Since empty container retains residue, follow all label  
warnings even after container is empty. Dispose of empty container  

http://www.allprocorp.com/mds/Klean/VMPLib.cfm  
12/1/2008
according to all regulations. Do not reuse this container.

SECTION 9. TRANSPORT INFORMATION

TRANSPORTATION
For D.O.T. information, contact V.M. Barr Technical Services Department.

SECTION 10. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION PROTECTION
Use only with adequate ventilation to prevent build-up of vapors. Open all windows and doors. Use only with a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea, or eye-watering - STOP - ventilation is inadequate. Leave area immediately.

RESPIRATORY PROTECTION
For users controlled work place and other regular users - Use only with adequate ventilation under engineered air control systems designed to prevent exceeding appropriate TLV. For occasional use, where engineered air control is not feasible, use properly maintained and properly fitted NIOSH approved respirator for organic solvent vapors. A dust mask does not provide protection against vapors.

SKIN PROTECTION
Wear impermeable gloves. Gloves contaminated with product should be discarded, promptly remove clothing that becomes soiled with product.

EYE PROTECTION
Safety glasses, chemical goggles or face shields are recommended to safeguard against potential eye contact, irritation, or injury. Contact lenses should not be worn while working with chemicals.

OTHER PROTECTION
Various application methods can dictate use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure. A source of clean water should be available in the work area.

SECTION 11. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

Wear impermeable gloves. Do not eat, drink or smoke in the work area. Wash hands thoroughly after use. Before cleanup, thoroughly clean any clothing or protective equipment that has been contaminated by prior use. Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or aprons.

SECTION 12. PHYSICAL AND CHEMICAL PROPERTIES

VOLATILE %: 100.000 by weight
BOILING POINT: 212.69 F 116.66 C
INERTING WEIGHTS: 242 F - 350 F
VAPOR DENSITY: AIR = 1.0
Heavier than air
EVAPORATION RATE
Faster than ether
BULK DENSITY: 4.250
Ibs/gal at 70 F
PHOTOCHEMICALLY REACTIVE: NO
MAX V.O.C.
749 grams per liter (excluding exempt solvents & water)
MAX VAPOR PRESSURE
(of the V.O.C.) 13mm Hg at 20 degrees C

SECTION 12. STABILITY AND REACTIVITY

INCOMPATIBILITIES
Incompatible with strong oxidizing agents.

DECOMPOSITION
Decomposition may produce carbon monoxide and carbon dioxide.
POLYMERIZATION: Will not occur.
STABILITY: Stable.

SECTION 13. ADDITIONAL INFORMATION

IMPORTANT NOTE
The information contained herein is presented in good faith and
believed to be accurate as of the effective date shown above. This
information is furnished without warranty of any kind. Employees
should use this information only as a supplement to other
information gathered by them and must make independent determination
of suitability and completeness of information from all sources to
ensure proper use of these materials and the safety and health of
employees. Any use of this data and information must be determined
by the user to be in accordance with applicable federal, state and
local laws and regulations.

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MSDS 96, 1650

SECTION 13. ADDITIONAL INFORMATION

LEGEND:
PPM = parts per million
mg/l = milligrams per cubic liter
N.E. or NE = none established
GT = greater than
N/A or NA = not applicable
TCC = Tag closed cup
TGC = Tag open cup
PMCC = Panesar-Merchant closed cup
IDLH = Immediately Dangerous to Life and Health

http://www.altiprecorp.com/msds/Klein/VMPWEB.cfm

12/1/2003
MSDS for EEP
MATERIAL SAFETY DATA SHEET

Revision Date: 07/15/2004
MSDSANSIANS/EHS/15001000811119/Version 12.0

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Eastman(TM) EEP Solvent</th>
</tr>
</thead>
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<tr>
<td>Product Identification Number(s)</td>
<td>12470-00, P1247006, P1247001, P1247002, P1247003, P1247004, P1247005, P1247006, P1247007, P1247008, P1247016, P1247009, P1247012, P1247014, P1247011</td>
</tr>
<tr>
<td>Manufacturer/Supplier</td>
<td>Eastman Chemical Company</td>
</tr>
<tr>
<td></td>
<td>Eastman Road</td>
</tr>
<tr>
<td></td>
<td>Kingsport, TN 37662</td>
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<tr>
<td>MSDS Prepared by</td>
<td>Eastman Product Safety and Health</td>
</tr>
<tr>
<td>Chemical Name</td>
<td>3-ethoxypropionic acid, ethyl ester</td>
</tr>
<tr>
<td>Synonym(s)</td>
<td>12470-00</td>
</tr>
<tr>
<td>Molecular Formula</td>
<td>C7H14O3</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>169.19</td>
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<tr>
<td>OSHA Status</td>
<td>hazardous</td>
</tr>
</tbody>
</table>

For emergency health, safety & environmental information, call 800-EASTMAN.

For emergency transportation information, call CHEMTREC at 800-424-9300 or call 800-EASTMAN.

2. COMPOSITION INFORMATION ON INGREDIENTS

(Typical composition is given, and it may vary. A certificate of analysis can be provided, if available.)

<table>
<thead>
<tr>
<th>Weight %</th>
<th>Component</th>
<th>CAS Registry No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;99.25%</td>
<td>ethyl 3-ethoxypropionate</td>
<td>763-69-8</td>
</tr>
<tr>
<td>&lt;0.02%</td>
<td>formic acid</td>
<td>56-00-0</td>
</tr>
<tr>
<td>&lt;0.02%</td>
<td>butanedioic acid (as inhibitor)</td>
<td>178-37-4</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

CAUTION

COMBUSTIBLE LIQUID AND VAPOR
FORMS PEROXIDES IF MATERIAL BECOMES UNINHIBITED
HIGH VAPOR CONCENTRATIONS MAY CAUSE DROWNING

HMIS® Hazard Ratings:
- Health: 1
- Flammability: 2
- Chemical Reactivity: 1

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.
4. FIRST-AID MEASURES

Inhalation: Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.
Eye: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist.
Skin: Wash with soap and water. Get medical attention if symptoms occur.
Ingestion: Seek medical advice.

5. FIRE FIGHTING MEASURES

Extinguishing Media: water spray, carbon dioxide, dry chemical foam
Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.
Use water spray to keep fire-exposed containers cool. USE WATER WITH CAUTION. Material will melt and may ignite on surface of water. Water may be ineffective in fighting the fire. The fire could easily be spread by the use of water in an area where the water could not be contained.
Hazardous Combustion Products: carbon dioxide, carbon monoxide
Unusual Fire and Explosion Hazards: Forms peroxides of unknown stability if material becomes unstable. Combustible.

6. ACCIDENTAL RELEASE MEASURES

Use personal protective equipment. Eliminate all ignition sources. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.
For Large Spills: Flush spill area with water spray. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

7. HANDLING AND STORAGE

Personal Precautionary Measures: Avoid breathing high vapor concentrations. Use only with adequate ventilation. Wash thoroughly after handling.
Prevention of Fire and Explosion: Keep away from heat and flames. Keep from contact with oxidizing materials. Keep Inhibited. Minimize exposure to air. After opening, purge container with nitrogen before reclosing. Periodically test for peroxide formation on long-term storage. If peroxide formation is suspected, do not open or move container. Do not allow to evaporate to near dryness. Do not dissolve in near dryness.
Storage: Keep container closed.
Additional Information: Store away from heat and light.

8. EXPOSURE CONTROLS/PERSOAL PROTECTION

Country-specific exposure limits have not been established or are not applicable unless listed below.
ETHYL 3-ETHOXYPROPIONATE

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EASTMAN

MATERIAL SAFETY DATA SHEET

Revision Date: 07/15/2004
MSDSANSI/ANSIEN/1500000149/Version 12.0

Eastman Chemical Company occupational exposure limit
Time Weighted Average (TWA): 50 ppm.
Eastman Chemical Company occupational exposure limit
Short Term Exposure Limit (STEL): 100 ppm.

Ventilation: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosure, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 29 CFR 1152. January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Eye Protection: It is a good industrial hygiene practice to minimize eye contact.

Recommended Decontamination Facilities: eye bath, washing facilities

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: liquid
Color: colorless
Odor: ester, pungent
Odor Threshold: 0.02 ppm
Specific Gravity: 0.95 (20 °C)
Vapor Pressure: 25 °C; 2.0 mmHg
Vapor Density: 5.0
Freezing Point: < -80 °C
Boiling Point: 105 °C
Evaporation Rate: 9.12 (n-hexyl acetate = 1)
Viscosity: 1.20 mPa.s (25 °C)
Solubility in Water: 23 g/l
Octanol/Water Partition Coefficient: P; 22.4, log P: 1.36
Flash Point: 69 °C (Bath flash closed cup)
Autoignition Temperature: 377 °C (ASTM E659)
Thermal Decomposition Temperature: (HPDTA) No exotherm to 400°C

10. STABILITY AND REACTIVITY

Stability: Stable. Forms peroxides if material becomes uninhibited.
Incompatibility: Material reacts with strong oxidizing agents.
Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION
MATERIAL SAFETY DATA SHEET

Revision Date: 07/15/2004
MSDSANSIANS/EN/1500008/1145/Version 12.0

Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.

   Oral LD-50 (male rat)   >6,000 mg/kg (highest dose tested)
   Oral LD-50 (female rat) 4,300 mg/kg
   Inhalation LC-50 (rat)  6 hours: >1000 ppm (highest concentration tested)
   Dermal LD-50 (guinea pig)  > 20 ml/kg (highest dose tested)
   Skin Irritation (guinea pig) slight
   Eye Irritation (rabbit) slight
   Skin Sensitization (guinea pig) none

12. ECOLOGICAL INFORMATION

Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.

This material is readily biodegradable and is not likely to bioconcentrate.

Oxygen Demand Data:
   BOD-5: 370 mg/l
   BOD-20: 560 mg/l
   COD: 1,920 mg/l
   TNBOD: 1,070 mg/l

Acute Aquatic Effects Data:
   96 h LC-50 (fathead minnow): >60 mg/l NOEC: 25 mg/l
   48 h EC-50 (Daphnia magna): >480 mg/l NOEC: 470 mg/l
   72 h EC-50 (Sesamia nonagriognoma): >115 mg/l

13. DISPOSAL CONSIDERATIONS

Discharge, treatment, or disposal may be subject to national, state, or local laws. Incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company’s Hazardous Materials/Dangerous Goods expert for information specific to your situation.
MATERIAL SAFETY DATA SHEET

Revision Date: 07/15/2004
MSDSANS/ANSI/EN/16749/Version 1.0

DCT (USA)

Class combustible liquid, Packing group II for quantities of 450 litres (110 gallons) or more, not regulated for smaller quantities.

Marine pollutant:

Possible Shipping Description(s):

not regulated

Esters, n.o.s. (ethyl 3-ethoxypropionate)
combustible liquid UN III

Esters, n.o.s. (ethyl 3-ethoxypropionate)
combustible liquid UN 3272 II

Sea - IMDG (International Maritime Dangerous Goods)

Possible Shipping Description(s):

ESTERS, N.O.S. (ethyl 3-ethoxypropionate)
3 UN 3272 II

Air - ICAO (International Civil Aviation Organization)

Possible Shipping Description(s):

Esters, n.o.s. (ethyl 3-ethoxypropionate)
3 UN 3272 III

15. REGULATORY INFORMATION

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 the Controlled Products Regulations.

WHMS (Canada) Status: controlled

WHMS (Canada) Hazard Classification: 8/3
MATERIAL SAFETY DATA SHEET

Revision Date: 07/15/2004
MSDSANS/ANE/ER01680000011440/Version 12.0

SARA 311/312 Hazard Classification(s):
- fire hazard
- reactive hazard

SARA 315: none, unless listed below

Carcinogenicity Classification (components present at 0.1% or more): none, unless listed below

TSCA (US Toxic Substances Control Act): This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): This product is listed on the DSL. Any impurities present in this product are exempt from listing.

EINECS (European Inventory of Existing Commercial Chemical Substances): This product is listed on EINECS or otherwise complies with EINECS requirements.

ACGIH/NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): This product is listed on AICS or otherwise complies with NICNAS.

MHL (Japanese Handbook of Existing and New Chemical Substances): This product is listed in the Handbook or has been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): This product is listed on the Korean Inventory or otherwise complies with the Korean Toxic Substances Control Act.

15. OTHER INFORMATION


The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customers, and the protection of the environment.

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Page 6
MSDS for Brulin GD 1990
PRODUCT NAME: BRULIN 1950 GD
PRODUCT NUMBER: 30:108

MATERIAL SAFETY DATA SHEET

Page 1 of 2

SECTION I.

BRULIN & COMPANY, INC. P.O. BOX 270, INDIANAPOLIS, IN 46208-0270 (317) 923-3211

WEST COAST FACTORY
Richmond, California

24 HOUR EMERGENCY NUMBER
CHEMTREC 1-800-424-9300

IDENTITY (As listed on label):
BRULIN 1950 GD

HMIS HAZARD RATINGS:
Flammability: 1
Reactivity: 0

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

The product contains no hazardous chemical substances at 0.1% or more listed in 29 CFR 1910.1200 or NTP or IRIS Listed Hazardous Substances. Also, this product contains no hazardous substances that may cause a health hazard. Symptoms may not be immediately apparent. Get medical attention. Water may be used to cool and protect closed containers exposed to extreme heat.

Unusual Fire and Explosion Hazards: None known. Closed containers may explode (due to build-up of pressure) when exposed to extreme heat.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: 212 F
Vapor Pressure (mmHg): Approx. 17 @ 68 F
Vapor Density (Air = 1): Approx. 0.6
Solubility in Water: Complete
Appearance and Odor: Water white, mild odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): None
Flammable Limits LEL NA UEL NA
Extinguishing Media: None
Special Fire Fighting Procedures: Full protective equipment including self-contained breathing apparatus should be used. During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Get medical attention. Water may be used to cool and protect closed containers exposed to extreme heat.

Unusual Fire and Explosion Hazards: None known. Closed containers may explode (due to build-up of pressure) when exposed to extreme heat.
SECTION V. REACTIVITY DATA

Stability: Unstable __ Stable __X__

Conditions to Avoid: Freezing

Incompatibility (Materials to Avoid): Strong acids and oxidizers

Hazardous Decomposition or Byproducts: Carbon monoxide, Carbon dioxide, and oxides of sulfur

Hazardous Polymerization: May Occur __ May Not Occur __X__

Conditions to Avoid: None

SECTION VI. HEALTH HAZARD DATA

Route(s) of Entry: Ingestion? No Skin? Yes Inhalation? No Eyes? Yes

Health Hazards (Acute and Chronic): Direct eye contact and prolonged or repeated skin contact may cause irritation similar to redness.

Mutagenicity: NTP? No IARC Monographs? No OSHA Regulated? No

Signs and Symptoms of Exposure: Irritation as noted above.

Medical Conditions Generally Aggravated by Exposure: None Known

Emergency & First Aid Procedures:

Eye Contact: Flush with large amounts of water for 15 min. Lift upper & lower lids occasionally. Get medical attention.

Inhalation: Remove to fresh air.

Skin Contact: Wash with mild soap and water. Remove contaminated clothing and launder before reuse. If irritation persists, consult a physician.

Ingestion: If conscious, dilute by giving 2 glasses of water. Get immediate medical attention.

SECTION VII. PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled: Absorb on solid absorbent and shovel into containers for disposal.

Waste Disposal Method: Dispose according to Federal, State and Local Laws and 40 CFR.

Precautions to be Taken in Handling and Storage: Store between 40 and 110 F.

SECTION VIII. CONTROL MEASURES

Respiratory Protection (Specify Type): Not normally required. However, if potential for overexposure exists, wear a NIOSH/OSHA approved respirator.

Ventilation: Mechanical (General): Sufficient

Protective Gloves: Recommended (Rubber)

Eye Protection: Safety glasses, safety goggles, or full face shield recommended.

Other Protective Clothing or Equipment: Sufficient to minimize skin contact.

Work/Hygienic Practices: Use only with adequate ventilation. Avoid breathing vapor and mist. Avoid contact with skin and eyes. Do not take internally. Wash thoroughly after handling.
MSDS for Ardrox 405-V
Chemetall Oakite

ARDOX 405-V
GENERAL PURPOSE CLEANER

OAKITE PRODUCTS, INC.
A MEMBER OF THE CHEMETALL GROUP
50 VALLEY ROAD, BERKELEY HEIGHTS, NJ 07922
(800) 552-4473/(908) 464-6900

CHEMETALL EMERGENCY TELEPHONE: 800-424-9300

I. HAZARDOUS INGREDIENTS:

<table>
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<tr>
<th>COMPONENT(S)</th>
<th>WT %</th>
<th>CAS NO.</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
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<tbody>
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<td>Propylene Glycol</td>
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<td>5131-05-8</td>
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<td>ND</td>
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<tr>
<td>n-Butyl Ether</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Tall Oil</td>
<td>3-5</td>
<td>8002-26-4</td>
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<td>1-2</td>
<td>141-43-5</td>
<td>3 ppm</td>
<td>3 ppm</td>
</tr>
</tbody>
</table>

*Subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40CFR Part 372.

II. PHYSICAL DATA:

- MELTING POINT: APPROX. 32°F
- SPECIFIC GRAVITY: 1.01
- BOILING POINT: APPROX. 213°F
- SOLUBILITY IN WATER: Complete
- VAPOR PRESSURE (mm Hg): Similar to water
- EVAPORATION RATE [BuAc=1]: <1
- VAPOR DENSITY (Air=1): >1
- PH (50% SOLN): >12.6
- ODOR: Mild solvent odor
- APPEARANCE: Blue liquid
- VOC (GM/L): 76
- VAPOR PRESSURE OF VOC (MMHG): <1

III. FIRE AND EXPLOSION HAZARD DATA:

- FLASH POINT: >200°F
- METHOD USED: P.M.C.C.
- AUTOIGNITION TEMPERATURE: ND
- FLAMMABLE LIMITS: UPPER: ND  LOWER: ND
- EXTINGUISHING MEDIA: Dry Chemical, CO₂.

FIRE AND EXPLOSION HAZARDS:
Moderate fire hazard when exposed to heat or flame.

SPECIAL FIRE FIGHTING PROCEDURES:
Wear self-contained breathing apparatus. Use water to keep fire-exposed containers cool and to flush spills away from fire. In the case of large fires also cool surrounding equipment and structures with water.

IV. REACTIVITY:

- STABILITY: Stable
- CONDITIONS TO AVOID: See Below

MATERIAL SAFETY DATA SHEET
ARDROX 405-V
GENERAL PURPOSE CLEANER

HAZARDOUS POLYMERIZATION: Will Not Occur

INCOMPATIBILITY:
Strong oxidizing and reducing agents. Strong acids. Strong alkalies (such as sodium hydroxide), and alkali metals. Reactive metals.

HAZARDOUS DECOMPOSITION PRODUCTS:
Acid smoke. Toxic fumes of carbon oxides and nitrogen oxides on combustion. Organic compounds on combustion.

V. ENVIRONMENTAL AND DISPOSAL INFORMATION:

ACTION TO TAKE FOR SPILLS/LEAKS

CAUTION:
Use appropriate protective and safety equipment. See Section VIII of this Material Safety Data Sheet for handling precautions.

SMALL SPILL:
Mop up or soak up with non-combustible absorbent inorganic material. Transfer to DOT-approved container.

LARGE SPILL:
Evacuate spill area of unprotected personnel. Contain by digging with non-combustible absorbent inorganic material. Prevent runoff from entering sewers, storm drains, surface water, and soil. Transfer contaminated absorbent to a DOT-approved container.

WASTE DISPOSAL INFORMATION:
Consult appropriate federal, state and local regulatory agencies to ascertain proper disposal procedures.

NOTE:
Comply with all applicable government regulations on spill reporting and handling and disposal of waste. Empty containers can have residues, gasses, and mists, and are subject to proper waste disposal.

VI. HEALTH HAZARD DATA:

ROUTES OF ENTRY:
BREATHE:
A single prolonged (hours) exposure of one component may cause respiratory irritation. High vapor concentrations are irritating to the nose, throat, mucous membrane, and lungs. May cause headaches, dizziness, sleep (anesthesia) and may have other CENTRAL NERVOUS SYSTEM effects.

SKIN CONTACT:

SKIN ABSORPTION:
Component(s) are readily absorbed through the skin and are moderately toxic. Effects may be similar to those described under other categories in this section.

MATERIAL SAFETY DATA SHEET -3-
ARDROX 405-V
GENERAL PURPOSE CLEANER

EYE CONTACT:
May cause severe irritation with corneal injury which may result in permanent impairment of vision or even blindness.

SWALLOWED:
A component(s) of this product is toxic. Swallowing a component(s)
may cause burns of the mouth and throat and irritation or ulceration
to the stomach and intestines. Swallowing a component(s) may cause
headache, nausea, vomiting, weakness.

SYSTEMIC AND OTHER EFFECTS:
Repeated excessive exposure may injure the LIVER and KIDNEY.

MEDICAL CONDITIONS AGGRAVATED:
Component(s) of this product may aggravate pre-existing lung
(pulmonary) disease. Persons with pre-existing skin conditions may be
susceptible to the effects of a component(s) of this product.

SUSPECTED CANCER AGENT: No

FEDERAL OSHA CA OSHA NTP IARC
No No No No

TARGET ORGANS. OTHER THAN THOSE IMPLIED BY ROUTES OF ENTRY (I.E.,
BREATHED, INCLUDES RESPIRATORY TRACT AND LUNGS) ARE CAPITALIZED.
CALIFORNIA ONLY: PROPOSITION 65
This product contains a chemical(s) known to the State of California
to cause cancer or reproductive toxicity. These are trace amounts
found in normal technical grade industrial materials and are not
deliberately added to the product.

VII. FIRST AID:

BREATHED:
Remove victim to fresh air at once. If not breathing, give
mouth-to-mouth resuscitation. If breathing is difficult, GET
IMMEDIATE MEDICAL ATTENTION. Keep victim warm and at rest.

SKIN:
Wash skin immediately with lots of soap and water. If clothes and
shoes are contaminated, remove and wash before reuse. Get medical
attention if ill effect or irritation develops.

EYES:
Wash eyes immediately with running water for at least 20 minutes. Use
fingers to assure that eyelids are separated and that eye is being
washed. Lift the lower and upper lid occasionally. GET IMMEDIATE
MEDICAL ATTENTION.

SWALLOWED:

MATERIAL SAFETY DATA SHEET -3-
DO NOT INDUCE VOMITING. If vomiting spontaneously occurs, do not allow vomitus to be breathed into lungs. Keep victim's head below his hips. Call a physician and/or transport to emergency medical facility immediately. The decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Corrosive: May cause stricture. If victim is conscious, give large amounts of water. Do not attempt to give fluids to unconscious victim.

NOTE TO PHYSICIAN:
Supportive care: Treatment based on judgement of physician in response to reactions of patient. If burn is present, treat as thermal burn after decontamination. No specific antidote.

VIII. HANDLING PRECAUTIONS:

VENTILATION:
Control airborne concentrations below exposure guidelines (Section I) with MECHANICAL VENTILATION, if necessary. Local explosion-proof EXHAUST VENTILATION may be necessary for some operations.

RESPIRATORY PROTECTION:
Atmospheric levels should be maintained below exposure guidelines. When respiratory protection is required for certain operations, use a MSHA/NIOSH approved filter type respirator used in accordance with the requirements of 29 CFR 1910.134. In confined or poorly ventilated areas or for emergency and other conditions where the exposure guidelines may be greatly exceeded, use an approved positive-pressure, self-contained breathing apparatus or air line supplied respirator.

EYE PROTECTION:
Contact lenses should not be used. Suggested protection is safety glasses, but where contact with liquid is likely, chemical goggles and face shields are recommended.

SKIN PROTECTION:
Impermeable gloves are recommended. When prolonged or frequently repeated contact could occur, use protective clothing. Selection of specific items such as boots, apron, or full-body suit will depend on operation. Wash thoroughly after handling chemicals.

SPECIAL EQUIPMENT:
Suitable laboratory safety equipment includes safety showers, eye washes, and proper fire extinguishing media.

II. STORAGE AND HANDLING:

MATERIAL SAFETY DATA SHEET -4-
ARDROX 405-V
GENERAL PURPOSE CLEANER

Train all employees on all special handling procedures in this section before they work with this product. Exercise reasonable care and caution. Personnel should avoid breathing vapors and/or mists and getting product in the eyes or on the skin. DO NOT CONSUME food, drink, or tobacco in areas where they may become contaminated with this material. Keep containers cool, dry, and away from sources of ignition. DO NOT STORE product in direct sunlight, high temperature, or below freezing areas. Keep product container tightly closed when not in use. Protect containers from physical damage. Use and store with adequate ventilation. DO NOT cut, grind, weld or drill on or near this container. Wash thoroughly after using. Concentrated vapors of this product are heavier than air and will collect in low areas such as pits, degreasers, storage tanks, and other confined areas. DO NOT ENTER these areas where vapors of this product are suspected unless special breathing apparatus is used and an observer similarly equipped is present for assistance.

X. DOT INFORMATION

NON-REGULATED BY CFR 49 172.101

XI. OTHER SAFETY AND REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>HMIS CODES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2: HMIS HEALTH</td>
</tr>
<tr>
<td>0: HMIS REACTIVITY</td>
</tr>
<tr>
<td>C: HMIS PERSONAL PROTECTION</td>
</tr>
</tbody>
</table>

SARA TITLE III, SECT 302-304:
THRESHOLD LIMIT VALUE (TLV): None
REPORTABLE QUANTITY (RQ): None

SARA TITLE III, SECTION 311-312:
CHEMICAL NAME: ARDROX 405-V
ACUTE DANGER LEVEL: None
ACUTE EXPOSURE: None
CHRONIC DANGER LEVEL: Chronic

XII. NAME OF PREPARES-DATE FIRST PREPARED-DATE REVISED

| NAME OF PREPARES: MICHAEL CHANG |
| DATE PREPARED: Oct 29, 1993 |
| REVISED DATE: June 10, 1996 |

None: NOT Applicable; ND: Not Determined.
THE INFORMATION HEREIN IS GIVEN IN GOOD FAITH, BUT NO WARRANTY, EXPRESS OR IMPLIED, IS MADE. Since buyer's conditions of use are beyond Oakite's control, Oakite does not warrant any recommendations and information for the use of such products.
MSDS for White Oil
CITGO Duoprime® Oil 70
Material Safety Data Sheet

IMPORTANT: Read and understand this product before handling, using, or disposing of this product. This information is to be used by employees, customers, distributors of this product.

<table>
<thead>
<tr>
<th>Emergency Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
</tr>
<tr>
<td>Color</td>
</tr>
<tr>
<td>Odor</td>
</tr>
<tr>
<td>Characteristics</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

SECTION 1: IDENTIFICATION

<table>
<thead>
<tr>
<th>Trade Name</th>
<th>CITGO Duoprime® Oil 70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Number</td>
<td>68534-7061</td>
</tr>
<tr>
<td>CAS Number</td>
<td>852247-4</td>
</tr>
<tr>
<td>Product Family</td>
<td>White Mineral Oil</td>
</tr>
<tr>
<td>Synonyms</td>
<td>White Mineral Oils</td>
</tr>
<tr>
<td></td>
<td>CITGO SAP Product Code No: 039347061 and 995347</td>
</tr>
</tbody>
</table>

SECTION 2: COMPOSITION

<table>
<thead>
<tr>
<th>Component Name(s)</th>
<th>CAS Registry No.</th>
<th>Composition (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Mineral Oil</td>
<td>85-02-0</td>
<td>130</td>
</tr>
<tr>
<td>Oil of White Oils</td>
<td>E (Stabilizer)</td>
<td>&lt;0.1</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARDS IDENTIFICATION

Also see Emergency Overview and Hazard Ratings on the top of Page 1 of the MSDS.

<table>
<thead>
<tr>
<th>Major Route(s) of Entry</th>
<th>Not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signs and Symptoms of Acute Exposure</td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td>No significant adverse health effects are expected to occur upon short-term exposure.</td>
</tr>
<tr>
<td>Eye Contact</td>
<td>Minimal eye irritation may result from short-term contact with liquid, mist, and/or vapor.</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>No significant irritation is expected to occur upon short-term exposure.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>If swallowed, no significant adverse health effects are anticipated. Ingestion can cause a laxative effect. If liquid material enters into the lungs, it can cause severe damage.</td>
</tr>
</tbody>
</table>

MSDS No. 685347061
Revision Date 05/02/2002
Continued on Next Page
Page Number 1
SECTION 4: FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.

Inhalation:  Vapostation is not expected at ambient temperatures. This material is not expected to cause inhalation-related disorders under anticipated conditions of use. In case of overexposure, move the person to fresh air.

Eye Contact:  Flush eyes with cool, clean, low-pressure water while occasionally inverting and lowering eyelids. Seek medical attention if excessive tearing, redness, or pain persists.

Skin Contact:  Remove contaminated shoes and clothing. Wash exposed skin with soap and water. Seek medical attention if excessive tearing, redness, or pain persists.

Ingestion:  Do not induce vomiting or give anything by mouth. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drooling or unconscious, place the left side with head down. Never give anything by mouth to a person who is not fully conscious. Do not leave without medical attention immediately.

Notes to Physician:  This material presents a significant aspiration hazard. Aspiration may produce pneumonitis. Induction of emesis is not recommended because of the potential for aspiration. Treatment may involve cautious gastric lavage if performed soon after ingestion or in patients who are comatose or at risk of ventilating. Standard airway for placement in Trendelenburg and left lateral decubitus position or by cuff-inflated endotracheal intubation. Supplemental or intubator injection requires prompt surgical debridement.

SECTION 5: FIRE FIGHTING MEASURES

NFPA Flammability Classification:  NFPA Class IIIA combustible material. Slightly combustible.

Flash Point Method:  OPEN CUP: 100°C (212°F) (Cleveland.)

Lower Flammable Limit:  No data.

Autoignition Temperature:  AP 450°C (AP 842°F)

Hazardous Combustion Products:  Carbon dioxide, carbon monoxide, smoke, fumes, and unburned hydrocarbons.
CITGO Unleaded® Oil 70

Special Properties
This material can burn but will not readily ignite. This material will release vapors when heated above the flash point temperature that can ignite when exposed to a source of ignition. In extreme spaces, heated vapor can ignite with explosive force. Mists or sprays may burn at temperatures below the flash point.

Extinguishing Media
Use dry chemical, foam, Carbon Dioxide or water fog.

Protection of Fire Fighters
Firefighters must use full leather gear, including NIOSH-approved positive pressure, self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Take proper precautions to ensure your own health and safety before attempting spill control or cleanup. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this SDS.

Do not touch damaged containers or spilled material. Wear appropriate protective equipment. Spilled material may cause rust or other deteriorative action material and should be flushed into drain. Do not flush materials to minimize physical habitat damage. This material will float on water. Absorbent pads and similar materials can be used. Comply with all laws and regulations.

SECTION 7: HANDLING AND STORAGE

Handling
Avoid water contamination and extreme temperatures to minimize product deactivation. Ensure containers are tight, clean, and dry. Keep containers and equipment free of water. Do not exceed maximum recommended temperatures for storage and operation. Do not exceed exposure limits for inhalation or skin contact.

Storage
Keep containers closed. Do not store with strong oxidizing agents. Do not store at temperatures above 120°F or in direct sunlight for extended periods of time. Keep away from sources of ignition. Do not store near incompatible materials. Keep containers and equipment free of water. Do not exceed exposure limits for inhalation or skin contact.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls
Provide exhaust ventilation or other engineering controls to keep the air concentrations of mist and/or vapor below the recommended exposure limits (see below). An eye wash station and safety shower should be located near the work station.

Personal Protective Equipment
Personal protective equipment should be selected based on the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following precautions represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.

Eye Protection
Safety glasses equipped with side shields should be adequate protection under normal conditions of use. Wear goggles and/or face shield if splashing or spraying is anticipated. Wear goggles and use shield if material is heated above 125°F (51°C). Have suitable eye wash water available.
**CITGO Diaprim® OI 70**

**Hand Protection**
Use gloves constructed of chemical resistant materials such as neoprene or latex nitrile rubber if frequent or prolonged contact is expected. Use heat protective gloves when handling product at elevated temperatures.

**Body Protection**
Use clean and impervious protective clothing (e.g., neoprene or Tyvek®) if splashing or spaying conditions are present. Protective clothing may include long-sleeve outer garment, pants or toe cover. If significant contact occurs, remove all contaminated clothing as soon as possible and promptly shower. Launder contaminated before reuse or discard. Wear heat protective boots and protective clothing when handling material at elevated temperatures.

**Respiratory Protection**
Vaporization is not expected at ambient temperatures. Therefore, the need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipment with a dual-filter prefilter should be used. Protection factors will depend upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).

**General Comments**
Use good personal hygiene practices. Wash hands and other exposed skin areas with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities, or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleansers. Since specific exposure standards/control limits have not been established for this product, the "Oil Mist, Mineral" exposure limits shown below are suggested as minimum control guidelines.

**Occational Exposure Guidelines**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Applicable Workplace Exposure Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Oil Mist, Mineral</td>
<td>ACCIH (United States), TWA: 5 mg/m³, STEL: 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>OSHA (United States), TWA: 5 mg/m³</td>
</tr>
</tbody>
</table>

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>pH</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.84 (Water = 1)</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>&lt;0.1 mm Hg (at 20°C)</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble in cold water.</td>
</tr>
<tr>
<td>Additional Properties</td>
<td>G氏 ASTM D287 = AP 14.0 @ 20°F</td>
</tr>
<tr>
<td></td>
<td>Density = AP 7.0 Lbs/gal.</td>
</tr>
<tr>
<td></td>
<td>Viscosity (ASTMD2191) = AP 72 SUS @ 100°F</td>
</tr>
</tbody>
</table>

**SECTION 10: STABILITY AND REACTIVITY**

- **Chemical Stability**: Stable.
- **Hazardous Polymerization**: Not expected to occur.
- **Conditions to Avoid**: Keep away from extreme heat, sparks, open flame, and strongly oxidizing conditions.
- **Materials Incompatibility**: Strong oxidizers.
- **Hazards**: No additional hazardous decomposition products were identified other than the combustion products identified in Section 5 of this MSDS.
SECTION 11: TOXICOLOGICAL INFORMATION

For other health-related information, refer to the Emergency Overview on Page 1 and the Hazards Identification in Section 1 of this MSDS.

Toxicity Data

White Mineral Oil:
- Oral (LD50): Acute: >3000 mg/kg (Rat).
- Dermal (LD50): Acute: >2000 mg/kg (Rabbit).

White Mineral Oil:
- Low-viscosity and High-viscosity White Mineral Oils
  - Oral (LD50): Acute: >5000 mg/kg (Rat).
  - Dermal (LD50): Acute: >3000 mg/kg (Rabbit).
- Draize Eye: Non-irritating (Rabbit).
- Draize Dermal: Acute: Non-irritating (Rabbit).
- Bleuler: Acute: Non-sensitizing (Guinea Pig).
- 28-Day Dermal: Sub-Chronic: Non-irritating (Rabbit).
- 28-Day Oral: Chronic: No skin tumors at site of application (Mouse).
- Mutagenicity:
  - Modified Ames Assay: Negative (Salmonella typhimurium).
  - In vitro lymphoma assay: Negative or no toxicity (Mouse).

Ultima mouse skin painting studies indicated that while mineral oils are not mutagenic or carcinogenic. Mineral oil moieties derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil may well exceed acceptable workplace exposure levels include lung inflammatory reaction, lipid granuloma formation and lipid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mist or oil near current workplace exposure levels produced no significant toxicological effects. In long-term studies (up to two years) no carcinogenic effects have been reported in any animal species tested.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Analysis for ecotoxicological effects has not been conducted on this product. However, if spilled, this product and any contaminated soil or water may be harmful to humans, animals, and aquatic life. Also, the cutting action associated with petroleum and petroleum products can be harmful to fish, wildlife, and waterfowl.

Environmental Fate

An environmental fate analysis has not been conducted on this product. Plants and animals may experience harmful or fatal effects when contacted with petroleum-based products. Petroleum-based (mineral) fuel oils will normally float on water. In stagnant or slow-moving waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway might be enough to cause a fish kill or ecosystem anoxia.

SECTION 13: DISPOSAL CONSIDERATIONS

Hazard characteristics and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposal.

Conditions of use may cause this material to become a "hazardous waste", as defined by federal or state regulations. It is the responsibility of the user to determine if the material is a RCRA "hazardous waste" at the time of disposal. Transportation, treatment, storage and disposal of waste material must be conducted in accordance with RCRA regulations (40 CFR 261 through 266) and/or local regulations may be more restrictive. Contact the RCRA Superfund hotline at (800) 42H-0546 or your regional USEPA office for guidance concerning these specific disposal issues.
### SECTION 14: TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>DOT Status</th>
<th>Not a U.S. Department of Transportation regulated material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name</td>
<td>Not regulated</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>Not regulated</td>
</tr>
<tr>
<td>Packing Group(s)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>UNNA ID</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Reportable Quantity</td>
<td>A Reportable Quantity (RD) has not been established for this material</td>
</tr>
<tr>
<td>Placards</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Emergency Response Guide No.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>HAZMAT STEC No.</td>
<td>Not assigned</td>
</tr>
<tr>
<td>MARPOL III Status</td>
<td>Not a DOT &quot;Marine Pollutant&quot; per 40 CFR 191.3</td>
</tr>
</tbody>
</table>

### SECTION 16: REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>TSCA Inventory</th>
<th>This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARA 302/304</td>
<td>The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for &quot;Extremely Hazardous Substances&quot; listed in 40 CFR 355. No components were identified.</td>
</tr>
<tr>
<td>SARA 311/312</td>
<td>The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to the submittal of aggregate information on chemicals in &quot;hazard categories&quot; as defined in 40 CFR 302.2. This material would be classified under the following hazard categories: No SARA 311/312 hazard categories identified.</td>
</tr>
<tr>
<td>SARA 310</td>
<td>This product contains the following components in concentrations above the minimal levels that are listed as toxic chemicals in 40 CFR Part 355 pursuant to the requirements of Section 310 of SARA. No components were identified.</td>
</tr>
<tr>
<td>CERCLA</td>
<td>The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of &quot;hazardous substances&quot; equal to or greater than the reportable quantities (RQs) listed in 40 CFR 302.4. As defined by CERCLA, the term &quot;hazardous substance&quot; does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. This product or refinery stream is not known to contain chemical substances subject to this statute. However, it is recommended that you contact state and local authorities to determine if there are any other reporting requirements in the event of a spill.</td>
</tr>
<tr>
<td>CWA</td>
<td>This material is classified as all under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges as spills which produce a visible sheen or sheen of the United States, their adjoining waters, or areas adjacent to such waters must be reported to the EPA's National Response Center at (800) 424-8802.</td>
</tr>
<tr>
<td>California</td>
<td>This product is not known to contain any components for which the State of California has found to cause cancer, birth defects or other reproductive harm.</td>
</tr>
<tr>
<td>Proposition 65</td>
<td>Petroleum Oil.</td>
</tr>
<tr>
<td>New Jersey</td>
<td>Petroleum Oil.</td>
</tr>
<tr>
<td>Rights-Know Label</td>
<td>Federal Hazardous Substances Act, retail chemicals, and Consumer Product Safety Commission regulations, as defined by 40 CFR 1500.14(b)(1) and (b)(2), require specific labeling on any product containing &quot;Petroleum Distillates&quot; which may require special labeling if distributed in a manner intended or packaged in a form suitable for use by children. The product label should display the following: DANGER: Contains Petroleum Distillates. Contact Poison Control Center Immediately. KEEP OUT OF REACH OF CHILDREN!</td>
</tr>
</tbody>
</table>

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MSDS No. 6003-7002   | Revision Date 6002-2002   | Continued on Next Page   | Page Number 5
SECTION 16: OTHER INFORMATION

Refer to the top of Page 1 for the HMIS and NFPA Hazard Ratings for this product.

REVISION INFORMATION

Version Number 1.2
Revision Date 06/02/2002
Print Date Printed on 06/02/2002.

ABBREVIATIONS

AP: Approximately
EO: Equal
> : Greater Than
< : Less Than
NA: Not Applicable
ND: No Data
NE: Not Established

ACGIH: American Conference of Governmental Industrial Hygienists
IARC: International Agency for Research on Cancer
NIOSH: National Institute of Occupational Safety and Health
NFPA: National Fire Protection Association
NHEM: Hazardous Materials Information System
CSHA: Occupational Safety and Health Administration
NIH: National Institute of Health
EPA: US Environmental Protection Agency

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THE CONDITIONS OR METHODS OF HANDLING, STORAGE, USE, AND DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

END OF MSDS
MSDS for Soy Gold 2500
Material Safety Data Sheet

SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION
Identity (As Used on Label and List)
Soygold 2500 Rinseable Solvent - Experimental

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Synonym Name:
Rinseable Solvent, Soy Methyl Ester/Surfactant Cleaner Concentrate

Another Exclusive Product of:
AG Environmental Products, LLC

Address (Number, Street, City, State, and ZIP Code)
12700 West Dodge Road
Omaha, NE 68154

Date Prepared
February 4, 2005

SECTION II - COMPOSITION INFORMATION AND INGREDIENTS
Hazardous Components (Specific Chemical Identity, Common Name(s))

CAS No.

OSHA PEL

ACGIH TLV

Other Limits

Recommended

% (Opt.)

In accordance with 49 CFR 1910.1200, this product does not contain sufficient concentrations of any substances defined as hazardous by this standard.

There are no exposure limits established for this product.

SECTION III - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW - Caution: May Cause Eye Irritation. A light yellow liquid that may cause eye and skin irritation. No hazard if spilled and no unusual hazard if involved in a fire. Slippery, can cause fall if spilled and walked on.

POTENTIAL HEALTH EFFECTS -

EYES - May cause eye irritation.

SKIN - May cause skin irritation.

INHALATION - Exposure via inhalation not likely. No hazard in normal industrial use.

INGESTION - No significant adverse effects are expected upon ingestion of the product.

SECTION IV - FIRST AID MEASURES

EYES - In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists get medical attention.

SKIN - In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. If irritation persists get medical attention. Wash clothing before reuse.

INHALATION - No need for first aid is anticipated not likely exposure route.

INGESTION - No need for first aid is anticipated if material is swallowed.

SECTION V - FIRE FIGHTING MEASURES

Flammable Limits

No Data

LEL

No Data

UEL

No Data

Flash Point (Method Used)

190°C (374°F) Flash Point - Pensky-Martens Closed Cup

Extinguishing Media:

Not usually necessary as this product does not readily support combustion. Use media appropriate for flammable fuel source. CO2, dry chemical, foam.

Special Fire Fighting Procedures - Cool exposed equipment with water spray until well after fire is out. Do not scatter spilled material with high pressure water streams. Dike fire control water for later disposal. Self contained breathing apparatus and structural firefighter’s clothing will provide limited protection.

Unusual Fire and Explosion Hazards - None Expected.

SECTION VI - ACCIDENTAL RELEASE MEASURES

SMALL SPILL - Caution, slip hazard. Wire up small spills promptly. Use a cloth or other absorbent material.

LARGE SPILL - before area. Dike area to prevent spreading. Stay upwind. Wear protective gear as required. Pick up or absorb material. Put in suitable container for proper disposal.

SECTION VII - HANDLING AND STORAGE

HANDLING: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

STORAGE: Store indoors in a dry area. Follow label directions carefully. Keep out of reach of children. Keep container tightly sealed when not in use. Do not contaminate water or food by use or storage. Use from original container only. Do not store with fertilizers, seeds, insecticides or fungicides.

SECTION VIII - EXPOSURE CONTROLS PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection (Specify Type) - Use with adequate ventilation. Use NIOSH/MSHA approved respirator if PEL or TLVs are exceeded.

Engineering

Local Exhaust

Not usually needed

Special

None

Controls

Mechanical/General

Yes

Other

None

Protective Gloves - Impervious

Eye Protection - Safety glasses or goggles

Other Protective Clothing or Equipment -

Not especially necessary. If direct contact is possible, wear apron, boots, face shield, etc. as needed.

Wash/Hygiene Practices -

Follow label instructions. Wash hands after use and before eating, drinking, smoking, using restrooms, etc.
## SOYGOLD 2500 Rinseable Solvent

**February 4, 2005**

### Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>No Data</td>
</tr>
<tr>
<td>Specific Gravity (H₂O = 1)</td>
<td>57°F / 25°C</td>
</tr>
<tr>
<td>Melting Point</td>
<td>No Data</td>
</tr>
<tr>
<td>Vapor Density (AT% = 1)</td>
<td>No Data</td>
</tr>
<tr>
<td>Evaporation Rate (Butyl Acetate = 1)</td>
<td>No Data</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Partially Soluble</td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td>A yellow liquid with a faint sweet odor.</td>
</tr>
<tr>
<td>VOCs</td>
<td>No Data</td>
</tr>
<tr>
<td>NA</td>
<td>10 g/L</td>
</tr>
</tbody>
</table>

### Stability and Reactivity

<table>
<thead>
<tr>
<th>Condition to Avoid</th>
<th>None known</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incompatibility (Materials to Avoid)</td>
<td>-</td>
</tr>
<tr>
<td>Strong oxidizing and reducing agents, strong alkalies and strong acids</td>
<td>-</td>
</tr>
<tr>
<td>Carbon dioxide, carbon monoxide, smoke, soot and various organic oxidation by-products.</td>
<td>-</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Will Not Occur</td>
</tr>
</tbody>
</table>

### Toxicological Information

<table>
<thead>
<tr>
<th>Route of Exposure</th>
<th>Acute Dermal LD₅₀</th>
<th>Acute Inhalation LC₅₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion L₅₀</td>
<td>No Data</td>
<td>No Data</td>
</tr>
<tr>
<td>Acute Oral L₅₀</td>
<td>No Data</td>
<td>No Data</td>
</tr>
</tbody>
</table>

### Ecological Information

<table>
<thead>
<tr>
<th>Route of Exposure</th>
<th>Acute Dermal LD₅₀</th>
<th>Acute Inhalation LC₅₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion L₅₀</td>
<td>No Data</td>
<td>No Data</td>
</tr>
<tr>
<td>Acute Oral L₅₀</td>
<td>No Data</td>
<td>No Data</td>
</tr>
</tbody>
</table>

### Disposal Considerations

This product as supplied becomes a waste; it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

### Transportation Information

Domestic Highway

<table>
<thead>
<tr>
<th>Proper Shipping Name</th>
<th>Hazardous Waste Category</th>
<th>UN/NA No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Hazardous Substance, Liquid, n.o.s. (Formaldehyde)</td>
<td>Class 9</td>
<td>UN/NA No.</td>
</tr>
</tbody>
</table>

### Regulatory Information

<table>
<thead>
<tr>
<th>NFPA Rating</th>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### U.S. Federal Regulations

<table>
<thead>
<tr>
<th>CERCLA: SARA TITLE III 311/312 HAZARD CLASSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire</td>
</tr>
<tr>
<td>Acute Health</td>
</tr>
<tr>
<td>Reacute</td>
</tr>
<tr>
<td>Chronic Health</td>
</tr>
<tr>
<td>Release of Pressure</td>
</tr>
</tbody>
</table>

### International Regulations

**Canadian Warning**

<table>
<thead>
<tr>
<th>Canadian Environmental Protection Act (CEPA): All components of this product are on the Domestic Substances List (DSL), and acceptable for use under the provisions of CEPA.</th>
</tr>
</thead>
</table>

### State Regulations

**State Right-To-Know Regulations**

Any substance listed as hazardous under labor statutes by the States of California, Florida, Illinois, Michigan, New Jersey, Ohio, Pennsylvania, Texas is described in Section II above if known present in regulated concentrations.

### Proposition 65

This product is not known to contain any material listed under California's Proposition 65.

### Other Information

MSDS Status: Revised Section(s)

**WARNING:** The use of this product is beyond the control of the manufacturer and distributor. Therefore, we guarantee, express or implied, is made as to the effects of each or the results obtained from it are used in accordance with directions or established safe practices. The user must assume responsibility, including injury or damage, resulting from the use of such, or a combination with other materials. The manufacturer and distributor waive any and all claims or liabilities for any personal injury or property damage resulting from the failure to follow directions or the inconsistencies of this product. This warranty is limited to the materials and workmanship of this product and shall be in no way responsible for the proper use of this product. The warranty is not transferred to the ultimate user. THE MANUFACTURER AND DISTRIBUTOR SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES FOR INJURY TO PERSON OR PROPERTY OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSSES WHATSOEVER.
MSDS for Kyzen 6521M
MATERIAL SAFETY DATA SHEET
METALNOX® M6521

1. COMPANY NAME AND ADDRESS:

Kyen Corporation
430 Harding Industrial Drive
Nashville, TN 37211
PHONE: 615-831-0888

[24 HOUR] EMERGENCY PHONE:
CHEMTREC
800-424-9300

www.kyzen.com

Effective: August 20, 2004
Supersedes: NEW

2. INGREDIENTS:

29CFR1910.1200:

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS Number</th>
<th>Approximate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>No ingredients are hazardous as defined by OSHA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

See Section 8 for exposure limits (if applicable).

3. HAZARDS IDENTIFICATION:

EMERGENCY OVERVIEW

Clear straw colored liquid. May be mildly irritating to eyes and skin following prolonged exposure. Repeated ingestion may cause mild abdominal upset.

Eyes: Contact may cause irritation.
Skin: Prolonged exposure to the skin may cause irritation, redness and pain.
Inhalation: Not likely. Hot mist may be mildly irritating to lungs, nose and throat.
Ingestion: May be harmful if ingested. Repeated ingestion may cause mild abdominal upset.

4. FIRST AID:

Eyes: Immediately flush eyes with plenty of water for 15 minutes. If irritation develops, get medical attention.
Skin: Remove contaminated clothing and shoes. Wash affected area with plenty of soap and water. Get medical attention. Wash contaminated items before reuse.
Inhalation: Remove victim from area of exposure. If unconscious, give oxygen. Give artificial respiration if not breathing. Get medical help.
Ingestion: If conscious, give person 1 to 2 glasses of water. Get medical help.

5. FIRE AND EXPLOSION HAZARD DATA:

Flash Point: None to boiling
Flammability Limits in Air: None established
Extinguisher Media: Standard methods including dry chemical, carbon dioxide, foam and water fog
Special Fire Fighting Procedures: Water should be used to keep fire-exposed containers cool. Prevent runoff from fire control from entering streams, sewers or drinking water supply.
Combustion Products: Oxides of carbon.
6. ACCIDENTAL RELEASE MEASURES:

Small Spill: Use proper personal protective equipment. Dike area to contain spill. Pick up spill on absorbent, non-combustible material. Place into a chemical waste container. Don’t flush into sewers or natural waterways. Wipe area with water to remove last traces.

Large Spill: Contain material as described above. If necessary, call the local fire or police department for immediate emergency assistance.

7. HANDLING AND STORAGE:

Handling: Do not drink, smoke or eat in handling area. Wear proper eye protection. Follow proper handling procedures.

Storage: Keep container tightly closed. Store in cool (60-80°F) ventilated area. Keep separate from strong acids and oxidizers and away from heat, sparks and open flame.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION:

<table>
<thead>
<tr>
<th>Exposure Guidelines</th>
<th>OSHA PEL, ppm</th>
<th>ACGIH TLV, mg/m³ (TWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous Component</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Respiratory Protection</td>
<td>None</td>
<td>NA</td>
</tr>
<tr>
<td>Ventilation</td>
<td>Use in well-ventilated area with local exhaust.</td>
<td>NA</td>
</tr>
<tr>
<td>Protective Gloves</td>
<td>Impervious chemical, etc.</td>
<td>NA</td>
</tr>
<tr>
<td>Eye Protection</td>
<td>Glasses, goggles or face shield, etc.</td>
<td>NA</td>
</tr>
<tr>
<td>Other Protective Equipment</td>
<td>Eye fountain, safety shower</td>
<td>NA</td>
</tr>
<tr>
<td>Work Hygiene Practices</td>
<td>Do not eat, drink, or smoke when handling industrial materials.</td>
<td>NA</td>
</tr>
</tbody>
</table>

9. PHYSICAL AND CHEMICAL PROPERTIES:

<table>
<thead>
<tr>
<th>Physical Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>212°F approx.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Chemical Oxygen Demand (COD)</td>
<td>TDD (at 0.25%)</td>
</tr>
<tr>
<td>Volatile Organic Compound (VOC)</td>
<td>80-100 g/L</td>
</tr>
<tr>
<td>EPA Method 24.</td>
<td>Appearance</td>
</tr>
<tr>
<td>Vapor Pressure, VOC Components</td>
<td>&lt;0.01 mmHg @ 20°C</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.996 typical</td>
</tr>
<tr>
<td>pH</td>
<td>pH 100%</td>
</tr>
<tr>
<td>TDI (at 0.1%)</td>
<td>pH 10%</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Clear colorless liquid</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY:

| Stability                           | Stable        |
| Hazardous Polymerization            | Will not occur|
| Incompatibility                     | Strong acids, oxidizers |
| Hazardous Decomposition             | Oxides of carbon |

11. TOXICOLOGICAL INFORMATION:

Acute Toxicology: No data is available on product as a whole.

Chronic Toxicology: No established on product as a whole.

Carcinogenicity: Contains no known or suspected carcinogens.

12. ECOLOGICAL INFORMATION:

Environmental Fate and Effects:

Ecotoxicity: Not established.

Mobility: Not established.

Persistence and Degradability: Not established.

Bioaccumulative Potential: Not established.
13. DISPOSAL INFORMATION:

Disposal of Material: Conditions of use may cause this material to become a hazardous waste as defined by state or federal law. Use approved treatment, transporters and disposal sites. USEPA guidelines for the classification determination are listed in 40 CFR Parts 261.3.

Empty Containers: Keep containers closed when not in use. Do not reuse empty containers.

14. TRANSPORTATION:

Not regulated.

US DOT: 49CFR172.101

Proper shipping name: Compounds, Clearing liquid
Hazard class or division: Non-hazardous, Non-flammable
Identification No.: None
Packing Group: None
LABEL: None
Placard: None

15. REGULATORY INFORMATION:

OSHA 29CFR 1910.1200: None
States RIGHT-to-KNOW: None
TSCA Listed: Yes
SARA 302: None
SARA 311/312: Health: Acute
SARA TITLE III, Section 313: None
California Proposition 65: None
Canada WHMIS: D26
CERCLA: Not reportable

16. OTHER INFORMATION:

NFPA CODES: HEALTH: 1 FIRE: 0 REACTIVITY: 0
HMIS CODES: HEALTH: 1 FIRE: 0 REACTIVITY: 0 PROTECTION: X

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