Material Safety Data Sheet

Section I - Chemical Product and Company Identification

Material Name: STOP 1550
Chemical Family: Phosphate
CAS Reg. No.: NA, Blend
Distributor: Danlin Industries Corporation
Physical Address: ½ miles West of Thomas on Hwy 47 Thomas, OK 73669
Mailing Address: P.O. Box 409 Thomas, OK 73669-0409
Phone Number: (580) 661-3248
Prepared By: Danlin Industries Corporation
Emergency Number: (800) 424-9300 CHEMTREC
Date Issued: October 12, 2004
HMIS Rating: 2-2-0-C

Section II - Hazardous Ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>Wt. %</th>
<th>CAS #</th>
<th>OSHA PEL</th>
<th>OSHA STEL</th>
<th>ACGIH TWA</th>
<th>ACGIH STEL</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>&lt;20</td>
<td>67-56-1</td>
<td>200ppm</td>
<td>250ppm</td>
<td>200ppm</td>
<td>250ppm</td>
<td>5,000 lbs</td>
</tr>
</tbody>
</table>

Section III - Hazards Identification

Emergency Overview: WARNING! FLAMMABLE LIQUID. VAPORS OR LIQUID MAY BE IRRITATING TO LUNGS, EYE, SKIN, AND MUCOUS MEMBRANES. AVOID INHALATION AND EYE OR SKIN CONTACT. CNS EFFECTS.

Primary Routes of Exposure: EYE CONTACT, SKIN ABSORPTION AND CONTACT, INHALATION

Eye Contact: May cause eye irritation, burns, irreversible damage.
Skin Contact: May cause skin irritation, sensitization, may be absorbed through skin and cause subsequent blindness; and tissue destruction.
Inhalation: May cause irritation of respiratory tract, nausea, headache, weakness, coughing, decreased breathing capacity and may cause blindness.
Ingestion: May be poisonous or fatal if swallowed, may cause blindness, central nervous system (CNS) depression from dizziness, confusion, drunken behavior, headache, nausea, diarrhea, vomiting to stupor, convulsions, unconsciousness, coma, and even death.

Target Organs: Eye, Skin, CNS, Liver, Kidneys, Respiratory system

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

Section IV - First Aid Measures
Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids apart to ensure flushing of entire surface. Get immediate medical attention.

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

Inhalation: Remove to fresh air. Give artificial respiration if not breathing. Give oxygen if breathing is difficult. Keep victim warm and get immediate medical attention.

Ingestion: If swallowed, do not induce vomiting. Keep victims head below knee level to prevent vomit from aspiration into lungs. Get immediate medical attention. NOTE: Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIAN:
For Methanol: Western Journal of Medicine, March 1985, page 337 reports that when plasma methanol concentrations are higher than 20 mg/deciliter, when ingested doses are greater than 30 milliliters, and when there is evidence of acidosis or visual abnormalities, a 10% solution of ethanol in 5% aqueous dextrose, administered intravenously, is a safe and effective antidote.

Section V - Fire Fighting Measures

Flash Point, °F (Setaflash) 102
Lower Flammability Limits N/D
Upper Flammability Limits N/D

Extinguishing Media: Agents approved for Class B hazards, ie, water fog, foam, dry chemical, carbon dioxide

Special Fire Fighting Procedures: Do not enter confined space without full bunker gear and self contained breathing apparatus. Treat as Class B oil fire. Keep sealed containers cool with water spray.

Unusual Fire and Explosion Hazards: Flammable liquid. Vapor may explode if ignited in enclosed area. Containers may explode from internal pressure if confined to fire. Cool with water.

Section VI - Accidental Release Measures

Steps To Be Taken In Case Material is Released or Spilled: Responders should wear PPE. Evacuate all unnecessary personnel from area. Remove or shut off all sources of ignition. Increase ventilation if possible. Stop leak if possible. Use non-sparking tools. Spilled material should be contained and removed by mechanical means, such as, absorbing with inert material and placing it in a properly labeled waste receptacle or reclaimed and recycled. Do not let run off water go to lakes, streams, etc.

Section VII - Handling and Storage

Precautions To Be Taken In Handling and Storing: Use appropriate PPE as outlined in Section VIII. Keep away from ignition sources (eg., heat, sparks, flames, etc.). Keep container closed. Ground and bond containers when transferring liquids. Use with adequate ventilation. Do not breathe vapors. Do not cut, puncture, or weld on or near this container.

Store away from oxidizer or other materials bearing a yellow "D.O.T." label.

Section VIII - Exposure Controls/Personal Protective Measures

Respiratory Protection: Use OSHA/NIOSH/MSHA approved air purifying respirator for organic vapors or supplied air respirator. Entry into confined space requires self contained positive breathing apparatus.

Ventilation: Local Exhaust: Yes, equal to fresh air
Mechanical Exhaust: Exhaust fan recommended to control exposure levels.
Special: Control airborne concentrations below exposure guidelines.

Personal Protective Equipment: Chemical resistant gloves (polyvinyl alcohol or Buna-N), chemical splash goggles, chemical resistant footwear, and chemical resistant aprons are recommended when handling the product.

Other Protective Equipment: Eye wash and safety showers should be readily available

Work and Hygienic Practices: Avoid breathing chemicals, wash hands before eating, drinking or smoking

Section IX - Physical and Chemical Properties

Appearance/odor: Clear, Amber/alcoholic odor
STOP 1550

State: Liquid
Specific Gravity: 1.01 to 1.09
Solubility in Water: Complete
Melting Point: N/D
Vapor Pressure: N/D

**Section X - Stability and Reactivity**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Stability</td>
<td>Stable</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>Ignition sources, eg., sparks and flame</td>
</tr>
<tr>
<td>Incompatible Materials</td>
<td>Strong oxidizing agents (bromine, chlorine, hydrogen peroxide, etc.) and strong bases</td>
</tr>
<tr>
<td>Decomposition Products</td>
<td>Thermal Decomposition: Carbon dioxide, carbon monoxide, smoke, oxides of nitrogen, oxides of sulfur</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Will not occur</td>
</tr>
</tbody>
</table>

**Section XI - Toxicological Information**

No specific toxicity tests have been conducted on this product. Components have shown to be toxic.

**METHYL ALCOHOL** - A human poison by ingestion. Poison experimentally by skin contact. Moderately toxic experimentally by intravenous and intraperitoneal routes. Mildly toxic by inhalation. Human systemic effects: changes in circulation, cough, dyspnea, headache, lachrymation, nausea or vomiting, optic nerve neuropathy, respiratory effects, visual field changes. An experimental teratogen. Experimental reproductive effects.

An eye and skin irritant. Human mutation data reported. A narcotic. Its main toxic effect is exerted upon the nervous system, particularly the optic nerves and possibly the retina. The condition can progress to permanent blindness. Once absorbed, methanol is only very slowly eliminated. Coma resulting from massive exposures may last as long as 2-4 days. In the body, the products formed by its oxidation are formaldehyde and formic acid, both of which are toxic. Because of the slow elimination, methanol should be regarded as a cumulative poison. Though single exposures to fumes may cause no harmful effect, daily exposure may result in the accumulation of sufficient methanol in the body to cause illness. Death from ingestion of less than 30 mL has been reported. A common air contaminant.

**TOXICITY DATA:**

<table>
<thead>
<tr>
<th>Species</th>
<th>Route</th>
<th>LD50</th>
<th>LDLo</th>
<th>TDLo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin-Rabbit</td>
<td>Adult</td>
<td>20 mg/24H</td>
<td>Moderate irritation effects</td>
<td>DNA</td>
</tr>
<tr>
<td>Eye effects-Rabbit</td>
<td>Adult</td>
<td>100 mg/24H</td>
<td>Moderate irritation effects</td>
<td></td>
</tr>
<tr>
<td>Microsomal Mutagenic Assay-Mouse</td>
<td>Lymphocyte 300 mmol/L</td>
<td>Lymphocyte 7900 mg/L</td>
<td>Oral-Rat TDLo: 7500 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Reproductive effects</td>
<td>Inhalation-Rat TCLo: 10,000 ppm/7H</td>
<td>Teratogenic effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral-Man LDLo: 6422 mg/kg</td>
<td>Central nervous system effects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulmonary system effects</td>
<td>Gastrointestinal tract effects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral-Human LTDLo: 428 mg/kg</td>
<td>Central nervous system effects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulmonary system effects</td>
<td>Gastrointestinal tract effects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral-Woman TDLo: 4 g/kg</td>
<td>Eye effects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulmonary system effects</td>
<td>Gastrointestinal tract effects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation-Human TCLo: 86,000 mg/m³</td>
<td>Eye effects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulmonary system effects</td>
<td>Central nervous system effects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral-Rat LD₅₀: 5628 mg/kg</td>
<td>Inhalation-Rat LC₅₀: 64,000 ppm/4H</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intraperitoneal-Rat LD₅₀: 7529 mg/kg</td>
<td>Intravenous-Rat LD₅₀: 2131 mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subcutaneous-Mouse LD₅₀: 4710 mg/kg</td>
<td>Oral-Mouse LD₅₀: 7300 mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intraperitoneal-Mouse LD₅₀: 10,765 mg/kg</td>
<td>Intravenous-Mouse LD₅₀: 9800 mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation-Monkey LD₅₀: 1000 ppm; Skin-Monkey LD₅₀: 393 mg/kg</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Section XII - Ecological Considerations**

Ecological testing has not been conducted on this product. Material should be considered hazardous to aquatic life.

**Section XIII - Disposal Considerations**

**Waste Classification:** Material should be disposed of by incineration or in an approved landfill in accordance with all federal, state, and local regulations. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting material hazardous.

The container of this product can present physical or health hazards, even when emptied! To avoid risk of injury, do not cut, puncture, or weld on or near this container. Since emptied containers retain product residue, follow label warnings even after container is emptied.

**Section XIV - Transportation Information**

**DEPARTMENT OF TRANSPORTATION:**

**DOT Proper Shipping Name:** Combustible Liquid, n.o.s. (Contains Methanol), 3, NA1993, PG III
STOP 1550

DOT Hazard Class: 3
DOT Identification Number: NA1993
DOT Identification Name: Combustible
DOT Packaging Group: III
RQ: Methanol (3,174 gallons or 27,932 lbs)
2000 ERG Guide Number: 128

Section XV - Regulatory Information

TSCA: Components of this product are listed on the TSCA Inventory.

CERCLA: If reportable quantity of this product is accidentally spilled the incident is subject to the provisions of the Comprehensive Environmental Response, Compensation, and Liability Act and must be reported to the National Response Center by calling (800) 424-8802.

CERCLA Component

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Wt. %</th>
<th>ROQ, lbs</th>
<th>Product ROQ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>17.9</td>
<td>5,000 lbs</td>
</tr>
</tbody>
</table>

SARA TITLE III:
This product contains the following Extremely Hazardous Substance under EPCRA section 302/304 lists.

EHS Component

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Wt. %</th>
<th>ROQ, lbs</th>
<th>TPQ, lbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Under the provisions of Title III, Sections 311/312 of the Superfund Amendments and Reauthorization Act, this product is classified into the following hazard categories:

Immediate Health X Delayed Health X Fire X Pressure Reactive

This product contains the following Section 313 Reportable Ingredients:

313 Component

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Wt. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
</tr>
</tbody>
</table>

Section XVI - Other Information

Hazardous Material Identification System Category Rating:

Health: 2
Flammability: 2
Reactivity: 0
Personal Protection: C

This rating scheme rates health, fire, and reactivity on a scale of 0 to 4.
0 = No significant hazard 1 = Slight Hazard 2 = Moderate Hazard 3 = High Hazard 4 = Extreme Hazard

Personal Protective Equipment Guide:

A = Safety Glasses  G = Safety Glasses, Gloves, Vapor Respirator
B = Safety Glasses, Gloves  H = Safety Goggles, Gloves, Apron, Vapor Respirator
C = Safety Glasses/Goggles, Gloves, Apron  I = Safety Glasses, Gloves, Apron, Dust & Vapor Respirator
D = Gloves, Apron, Faceshield  J = Splash Goggles, Gloves, Apron, Dust & Vapor Respirator
E = Safety Glasses, Gloves, Dust Respirator  K = Air Line Hood/Mask, Gloves, Full Suit, Boots
F = Safety Glasses, Gloves, Apron, Dust Respirator  X = Ask supervisor for special handling instructions


Definitions

ACGIH: American Conference of Governmental & Industrial Hygienists
ANSI: American National Standard Institute
BEI: Biological Exposure Indices - individual tests via urine or exhaled air
CERCLA: Comprehensive Emergency Response, Compensation, and Liability Act
DOT: U.S. Department of Transportation
EPA: U.S. Environmental Protection Agency
HMIS: Hazardous Materials Identification System
IARC: International Agency For Research On Cancer
LC50: Lethal Concentration 50%: A calculated concentration of the substance which is expected to cause death in 50% of an entire defined experimental animal population.
LCLo: Lethal Concentration Low: The lowest concentration of a material in air (other than LC50) that has been reported to have caused death in humans or animals.
LD50: Lethal Dose 50%: A calculated concentration of the substance which is expected to cause death in 50% of an entire defined experimental animal population.
LDLo: Lethal Dose Low: the lowest dose (other than LD50) of a material introduced by any route, other than inhalation, over any given period of time in one or more divided portions and reported to have caused death in humans or animals.
MSHA: Mine Safety and Health Administration
N/A: Not Applicable
N/D: Not Determined
NE: Not Established
NFPA: National Fire Protective Association
NIOSH: National Institute for Occupational Safety & Health
NSF: National Sanitation Foundation
NTP: National Toxicology Program
OSHA: U.S. Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
PPE: Personal Protective Equipment
RCRA: Resource Conservation and Recovery Act
REL: Recommended Exposure Limit (NIOSH)
RQ: Reportable Quantity
SARA: Superfund Amendments and Reauthorization Act of 1986 Title III
SCBA: Self Contained Breathing Apparatus
STEL: Short Term Exposure Limit
TCLo: Toxic Concentration Low: The lowest concentration of a material in air to which humans or animals have been exposed for any given period of time that has produced any toxic effect in humans or produced a carcinogenic, neoplastogenic, or teratogenic effect in animals or humans.
TLV: Threshold Limit Value: A recommended upper limit or TWA concentration of a substance to which most workers can be exposed without adverse effects.
TSCA: Toxic Substances Control Act
TWA: Time Weighted Average
Wt: Weight
<: Less Than
>: Greater Than

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