Material Safety Data Sheet # 120
For Printing Inks and related Materials

Date of preparation: 1/26/90
Supersedes: 5/29/08
Updated: 2/19/2013
MSDS#: 120

I. PRODUCT IDENTIFICATION

<table>
<thead>
<tr>
<th>Manufacturer: Gans Ink and Supply Co, Inc.</th>
<th>HMIS HAZARD IDENTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address: 1441 Boyd Street</td>
<td>Health 1</td>
</tr>
<tr>
<td>Los Angeles, CA 90033</td>
<td>Flammability 2</td>
</tr>
<tr>
<td>Emergency phone: (323) 264-2200</td>
<td>Reactivity 0</td>
</tr>
</tbody>
</table>

Product Class: Lithographic Printing Ink
Manufacturer’s code: S-1305, L-3027
Trade Name: Pyroscreen Thinner, SecurFabric Viscosity Reducer

II. HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS #</th>
<th>%</th>
<th>Exposure Limits</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent Naphtha (Petroleum)</td>
<td>64742-88-7</td>
<td>100</td>
<td>ACGIH / TWA</td>
<td>100 ppm</td>
</tr>
<tr>
<td>Medium Aliphatic</td>
<td></td>
<td></td>
<td>OSHA Z1/ PEL</td>
<td>2,900 mg/m3 500 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>OSHA Z1 / TWA</td>
<td>525 mg/m3 100 ppm</td>
</tr>
</tbody>
</table>

III. HEALTH HAZARD INFORMATION

Effects of Overexposure

Inhalation: Avoid inhalation. Vapors expected to be slightly irritating. Vapors can cause drowsiness and dizziness. Acute overexposure may result in irritation of the throat and lungs. Slightly irritating to respiratory system. Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing. Breathing of high vapors concentrations may cause central nervous system (CNS) depression resulting in dizziness, light headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death. Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this material; Respiratory system.

Skin Contact: Avoid skin contact. This product may cause moderate irritation to the skin. May cause swelling, redness, a burning sensation and/or blisters. Repeated exposure may cause dryness, or cracking, to the skin upon direct contact. Prolonged or repeated contact may result in contact dermatitis which is characterized by dryness, chapping, and reddening. This condition may make the skin more susceptible to other irritants, sensitizers, and disease. Pre-existing skin conditions may make the skin more susceptible and facilitate uptake by this route.

Eye Contact: Avoid eye contact. Vapors may be may be irritating to the eyes. Eye irritation signs may include a burning sensation, redness, swelling, and/or blurred vision.

Ingestion: Do not ingest. Harmful. May cause lung damage if swallowed. If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. Heart damage may be evidenced by shortness of breath and, in severe cases, by collapse (cardiac arrest). Possibility of organ or organ system damage from prolonged exposure. Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this material; Heart. See Notes to Physician section below.

IV. FIRST AID PROCEDURES

Emergency & First Aid Procedures
### Eyes
Immediately flush eyes with large amounts of water, while holding eyelids open. Rest eyes for 30 minutes. If redness, burning, blurred vision, or swelling persists, transport to the nearest medical facility for additional treatment.

### Skin
Remove contaminated clothing. Wash contaminated area thoroughly with water then follow with soap and water. If redness or irritation occurs, seek medical attention.

### Inhalation
Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

### Ingestion
If swallowed, do not induce vomiting. Transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101 °F (37°C), shortness of breath, chest congestion or continued coughing or wheezing.

### Notes to Physician
Potential for chemical pneumonitis. Aspiration may lead to chemical pneumonitis which is characterized by pulmonary edema and hemorrhage, and may be fatal. Signs of lung involvement include increased respiration rate, increased heart rate, and a bluish discoloration of the skin. Coughing, choking, and gagging are often noted at the time if aspiration. Gastrointestinal discomfort may develop, followed by vomiting, with risk of aspiration. Consider: gastric lavage with protected airway, administration of activated charcoal. Call a doctor or poison control center for guidance. Potential for cardiac sensitization, particularly in abuse situations. Hypoxia or negative inotropes may enhance these effects. Consider oxygen therapy.

### V. FIRE AND EXPLOSION DATA

<table>
<thead>
<tr>
<th>Flash Point °F: 115-123.1 °F (46 – 50.6 C) TCC</th>
<th>Auto-ignition Temperature °F: 450 °F (232.22 °C)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flammable Limits in Air</strong></td>
<td><strong>Lower Limit:</strong> 0.6</td>
</tr>
<tr>
<td><strong>Extinguishing Media:</strong> Use water spray or fog, foam, CO₂, or dry chemical extinguishing media. Sand or earth may be used for small fires only. Do not discharge extinguishing waters into the aquatic environment. Do not use water in a jet.</td>
<td><strong>Special Fire Fighting Procedures:</strong> Wear full protective clothing and self-contained breathing apparatus. Keep adjacent containers cool by spraying with water.</td>
</tr>
</tbody>
</table>

### VI. ACCIDENTAL RELEASE

**Steps to be taken in event of spill or release:** Avoid contact with spilled or released material. Immediately remove all contaminated clothing. Shut off leaks if possible without personal risk. Remove all sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand earth, or other appropriate barriers. Attempt to disperse the vapor or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electric continuity by bonding and grounding (earthing) all equipment. Monitor area with combustible gas indicator. For small spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residue to evaporate or soak up with an appropriate absorbent material and dispose of safely. For large spills (> 1 drum) transfer by mechanical means such as vacuum truck to a salvage tank for recovery of safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residue to evaporate or soak up with an appropriate absorbent material and dispose of safely. Notify authorities if any danger to the public or the environment. Vapors may form an explosive mixture with air. U.S. regulations may require reporting release of this material to the environment which exceed the reportable quantity (refer to chapter 15) to the National Response Center at (800) 424-8802. Under Section 311 of the Clean Water Act (CWA) this material is considered an oil. As such, spills into the surface waters must be reported to the National Response Center at (800) 424-8802. This material is covered by EPA’s Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Petroleum Exclusion. Therefore, releases to the environment may not be reportable under CERCLA.
VII. HANDLING AND STORAGE

Handling and Storage: Avoid breathing vapors or contact with eyes, skin, and clothing. Only use in well-ventilated area. Wash thoroughly after handling. Use only in well-ventilated areas. Ground all electrical equipment. Avoid splash filling. DO NOT use compressed air for filling, discharging or handling operations. The vapor is heavier than air and spreads on the ground and distant ignition is possible. Extinguish all open flames. DO NOT smoke. Remove ignition sources, sparks. Do NOT empty into drains. Avoid handling above its flashpoint. Otherwise the product will form flammable/explosive vapor-air mixtures. Store in containers in a cool, well-ventilated area. Keep away from sunlight, ignition sources and other sources of heat. Keep away from aerosols, flammables, oxidizing agents, corrosives. Avoid contact with natural, butyl or nitrile rubbers. Keep containers closed when not in use. Do not use compressed air for filling, discharging or handling. Containers, even those that are empty can contain explosive vapors. Do Not cut, weld, grind or perform similar operations near containers. Consumption of food and beverages should be avoided in work areas where hydrocarbons are present. Always wash hands and face with soap and water before eating, drinking, and smoking.

Other Precautions: For industrial use only. Do not ingest. Avoid prolonged contact with skin, contact with eyes, and breathing of mist or vapor.

VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ventilation Requirements: If vapor or mist is generated when the material is heated or handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specific exposure or flammable limits. Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapors.

Personal Protective Equipment

Respirator: Respiratory protection is not required under conditions of normal use. If vapor or mist is generated when the material is heated or handled, use an organic vapor respirator with a dust and mist filter. All respirators must be NIOSH certified. Do not use compressed oxygen in hydrocarbon atmospheres.

Skin: Use protective clothing, which is chemical resistant, and PVC or neoprene rubber gloves which are chemical resistant when handling material. Safety shoes and boots should be chemical resistant also. After using material, hands should be thoroughly washed with soap and water. Safety showers are recommended.

Eye: Use chemical splash proof goggles (chemical monogoggles) or plastic face shield. Eye wash stations are recommended for emergency use.

IX. PHYSICAL AND CHEMICAL DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Range °F</td>
<td>300 – 415 °F (149 - 213 °C)</td>
</tr>
<tr>
<td>Relative Density (H₂O = 1)</td>
<td>0.77 - 0.79</td>
</tr>
<tr>
<td>Material Density Lbs./Gal</td>
<td>6.41 – 6.58</td>
</tr>
<tr>
<td>% Volatiles by Weight</td>
<td>100.0</td>
</tr>
<tr>
<td>VOC: lbs/gal</td>
<td>6.58 g/L: 790.0</td>
</tr>
<tr>
<td>Appearance/Odor</td>
<td>Lt. colored liquid/ Hydrocarbon</td>
</tr>
</tbody>
</table>

X. STABILITY AND REACTIVITY INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability (Thermal, Light, etc.)</td>
<td>Stable under normal conditions of use.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Excessive heat, sparks, open flames and other sources of ignition.</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Will not occur.</td>
</tr>
<tr>
<td>Materials to avoid</td>
<td>Contact with strong oxidizers.</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>Thermal decomposition is highly dependant on conditions. A complex mixture of airborne solids, liquids and gases, including CO₂, CO, and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.</td>
</tr>
</tbody>
</table>

XI. TOXICOLOGICAL INFORMATION

Information given is based on product testing, and/or similar products, and/or components.

Acute Oral Toxicity: This material is expected to be of low toxicity. LD₅₀ > 2000 mg/kg, Rat. Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

Acute Dermal: This material is expected to be of low toxicity. LD₅₀ > 2000 mg/kg, Rat

Skin irritation: May cause moderate skin irritation. Prolonged or repeated contact may cause defatting of the skin which can lead to dermatitis.
Acute Inhalation Toxicity: Low toxicity; LC50 greater than near-saturated vapor concentration / 1 hour Rat. Respiratory irritation: Inhalation of vapors or mists may cause irritation to the respiratory system, insufficient to classify. Exposure to very high concentrations of similar materials has been associated with irregular heart rhythms and cardiac arrest. Material caused kidney effects in male rat, which are not considered relevant to humans.

CARCINOGEN: This product has not been identified as a carcinogen by OSHA or the National Toxicology Program (NTP), or the International Agency for Research Cancer (IARC).
Mutagen: No Data
Teratogen: No Data
Reproductive Toxicity: No Data

XII. ECOLOGICAL INFORMATION

Fish: This material is expected to have low toxicity: LC/EC/IC50 > 1000 mg/l
Aquatic Invertebrates: This material is expected to have low toxicity: LC/EC/IC50 > 1000 mg/l
Algae, and Fish: This material is expected to have low toxicity: LC/EC/IC50 > 1000 mg/l
Microorganisms: Expected to be toxic: 1 < LC/EC/IC50 < = 10 mg/l.
Mobility: Absorbs to soil and has low mobility. Floats on water. Oxidizes rapidly by photo-chemical reactions in air. Expected to be biodegradable. Has the potential to bioaccumulate

In view of the high rate of loss from solution, the product is unlikely to pose a significant hazard to aquatic life.

XIII. DISPOSAL INFORMATION

Waste Disposal Method: If recycling as ink is not possible, material may be incinerated or land filled at a licensed facility in accordance with local, state, and federal regulations. Do not dispose into the environment, in drains or in water course. Waste product should not be allowed to contaminate soil or water. Drain containers thoroughly After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not puncture, cut or weld unclean drums. Send to drum recoverer or metal reclaimer.

XIV. TRANSPORT INFORMATION

Flammability Classification: Combustible Liquid
OSHA: Class III
DOT Shipping Name (Ground): Petroleum Distillates, N.O.S.
Identification Number: UN 1268
Class / Division: 3 contains Oil
Packing Group: PG- III
Emergency Response: 128

This material is an “OIL” under 49 CFR Part 130 when transported in a container of 3500 gallon capacity or greater.
IMO/IMDG (Sea): UN 1268, 3, Petroleum Distillates, N.O.S. PG- III
Marine Pollutant: No
ICAO/ IATA (Air): UN 1268, 3, Petroleum Distillates, N.O.S. PG- III
U.S. Federal Regulation:

SARA Title III Section 313:
This material may contain chemicals subject to the reporting requirements of the SARA Superfund Amendments and Reauthorization Act.

SARA Section 311/312 – Hazard Categories:
Pursuant to Section 311/312 of SARA Title III, the physical and health hazard categories for this product are identified below:

Immediate (Acute) Health Hazard: Yes
Delayed (Chronic) Health Hazard: Yes
Fire Hazard: Yes
Sudden Release of Pressure Hazard: NO
Reactivity Hazard: NO

Under Section 311 of the Clean Water Act (CWA) this material is considered to be an oil. As such, spills into surface waters must be reported to the National Response Centre at (800) 424-8802. This material is covered by EPA’s Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Petroleum Exclusion. Therefore releases to the environment may not be reportable under CERCLA.

TSCA Section 8(b) Inventory Status:
All component(s) of this product are either exempt or listed on the TSCA Inventory.

U.S. State Regulations
California Proposition 65:
This product DOES NOT contain any chemicals known by the state of California to cause cancer and/or reproductive harm.

International Inventory Status:
Unless otherwise noted, this product /or its components are in compliance with the inventory listings of the countries shown below

Notification Status:
Australia (AICS): Listed
Canada (DSL): Listed
China (IECSC): Listed
Europe (EINECS): Listed 265-191-7
Korea (KECI): Listed KE-31664
Philippines (PICCS): Listed

XVI. OTHER INFORMATION

The information herein is presented in good faith, based on the data available to us and is believed to be correct as of the date hereof. However, Gans Ink and Supply Co., Inc. make no warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Gans Ink and Supply Co., Inc. assume no responsibility for any damages of any nature directly or indirectly resulting from the use of or reliance upon the information contained herein. Users must make their own determination as to the suitability of the product for their purpose prior to use. In accordance with good practices of personal cleanliness and hygiene, handle with due care and avoid unnecessary contact with this product.
<table>
<thead>
<tr>
<th>B</th>
<th>Safety Glasses</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Gloves</td>
</tr>
</tbody>
</table>