Safety Data Sheet

SECTION 1: IDENTIFICATION

SDS Number: S-1016, version 7/13/2018

(a) Product identifier

Gans Description: Gans Typwash

(b) Other means of identification
General description: Lithographic press cleaning solvent

(c) Recommended use
Product Use: Industrial use only
Restrictions on use: Not for residential use.

(d) Supplier’s details
Manufacturer: Gans Ink and Supply Co, Inc.
Address: 1441 Boyd Street
Los Angeles, CA 90033
Contact Person: Marco Ramos
Telephone: 323-264-2200 x139
Email: MSDS@gansink.com

(e) Emergency telephone numbers:
Chemical spill or physical hazard: Contact the Local Emergency Response Agency 9-1-1 or the Local Fire Department
Ingestion or health hazard: Contact the National Capital Poison Center, Poison Control: 800 222-1222; Poison.org

SECTION 2: HAZARD(S) IDENTIFICATION

(a) Classification
This mixture is hazardous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).
Physical hazards:
  o Flammable Liquid Category 1
Health hazards:
  o Specific Target Organ Toxicity, Central Nervous System - Category 2
  o Aspiration Hazard - Category 1
  o Skin Irritation - Category 3
  o Eye Irritation - Category 2A
  o Germ Cell Mutagenicity - Category 1B
  o Carcinogenicity - Category 1B
  o Reproductive Toxicity - Category 2
(b) Label elements

Signal Word: Danger

Hazard Statements: Extremely flammable liquid and vapor; May be fatal if swallowed and enters airways; May cause cancer; Causes serious eye irritation; May cause genetic defects; Suspected of damaging fertility or the unborn child; Causes mild skin irritation; May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements:
Prevention: Obtain special instructions before use; Do not handle until all safety precautions have been read and understood. Wear protective gloves, eye protection, face protection; Wash with soap and water thoroughly after handling; Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking; Keep container tightly closed; Ground/bond container and receiving equipment; Use explosion-proof electrical/ventilating/lighting equipment; Use only non-sparking tools; Take action to prevent static discharges; Do not breathe fume/gas/mist/vapors/spray.

Response: If exposed or concerned: Get medical advice/attention.
IF SWALLOWED: Immediately call a POISON CENTER or doctor; Do NOT induce vomiting.
IF ON SKIN: Take off immediately all contaminated clothing. Rinse with water or shower; If skin irritation occurs, get medical advice/attention. Get Medical advice/attention if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

In case of fire: Use CO₂, dry chemical, fire-fighting foam, or water fog to extinguish.

Storage: Store in a well-ventilated place. Keep cool. Store locked up.

Disposal: Dispose of contents/container to disposal recycling center. Waste management should be in full compliance with federal, state and local laws.

Hazard Pictograms:

(c) Hazards not otherwise classified

None known

(d) Ingredients of unknown acute toxicity

NA

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS # (TS = trade secret)</th>
<th>Conc. min. (wt. %)</th>
<th>Conc. max. (wt. %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliphatic, light hydrocarbon solvent</td>
<td>64742-89-8</td>
<td>66.8</td>
<td>73.8</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>10.8</td>
<td>12.0</td>
</tr>
<tr>
<td>Propan-2-ol</td>
<td>67-63-0</td>
<td>10.8</td>
<td>11.9</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>6.6</td>
<td>7.3</td>
</tr>
</tbody>
</table>
SECTION 4: FIRST AID MEASURES

(a) Description of first aid measures:

Inhalation: Remove source of exposure or move person to fresh air and keep comfortable for breathing. Eliminate all ignition sources if safe to do so.

Skin contact: Rinse/wash with lukewarm, gently flowing water (and mild soap) for 15-20 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice/attention.

Eye contact: Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing. Take care not to rinse contaminated water into the unaffected eye or onto the face. Get immediate medical attention.

Ingestion: Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position. Immediately call 911 POISON CENTER/doctor/. Immediately transport to the nearest medical facility for treatment.

(b) Most important symptoms and effects, both acute and delayed:

Ingestion: May be fatal if swallowed and enters airways; May cause cancer; May cause genetic defects; Suspected of damaging fertility or the unborn child; May cause damage to organs through prolonged or repeated exposure (central nervous system).

Inhalation: May cause damage to organs through prolonged or repeated exposure (central nervous system).

Skin contact: Causes mild skin irritation.

Eye contact: Causes serious eye irritation.

(c) Indication of any immediate medical attention and special treatment needed:

Symptoms such as dizziness or loss of breath, and burning or pain to eyes or skin may indicate exposure and the need for first aid.

SECTION 5: FIRE – FIGHTING MEASURES

(a) Extinguishing Media:

Suitable extinguishing media: Use CO₂, dry chemical, fire-fighting foam, or water fog to extinguish.

Unsuitable extinguishing media: Do not use water stream. Water stream or spray is OK to cool unopened containers only.

(b) Special hazards arising from the substance or mixture: Vapor is heavier than air, spreads along the ground and distant ignition is possible.

(c) Special protective equipment and precautions for fire-fighters: Wear NIOSH approved self-contained respiratory protective device, and fully protective fire-fighting suit.

SECTION 6: ACCIDENTAL RELEASE MEASURES

(a.i) Personal precautions:

Ensure adequate ventilation. Use personal protective equipment. Avoid breathing vapor. Avoid contact with skin, eye or clothing. Use explosion proof equipment. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

(a.ii) Protective equipment: Positive pressure, full-face, self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

(a.iii) Emergency procedures: If dangerous conditions exist, contact emergency response personnel, follow emergency procedures, and contact emergency response authorities.
Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Release can cause fire/explosion. Liquids/vapors may ignite. Do not touch or walk through spilled material. Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

(b) Methods for containment and cleaning up:
Dike and contain spill. For large spills remove by mechanical means and place in containers. Absorb residue or small spills with absorbent material and remove to non-leaking containers for disposal.

SECTION 7: HANDLING AND STORAGE

(a) Precautions for safe handling:
Wear protective gloves. Wear eye protection or face protection. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Avoid breathing mist/vapors/spray.

(b) Conditions for safe storage:
Keep container tightly closed in a dry and well-ventilated place. Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored. Electrically ground/bond containers and receiving equipment. Avoid static electricity by grounding. Electrostatic charges may be generated during pumping.

Incompatibilities: Keep away from strong oxidizing agents.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

(a) Permissible exposure limits

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS #</th>
<th>OSHA PEL ppm</th>
<th>Cal/OSHA PEL mg/m³</th>
<th>NIOSH REL 8-hour TWA (ST) STEL (C) Ceiling</th>
<th>ACGIH 2015 TVL 8-hour TWA (ST) STEL (C) Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliphatic, light hydrocarbon solvent</td>
<td>64742-89-8</td>
<td>500</td>
<td>2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>1000</td>
<td>2400</td>
<td>250 ppm; 590 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Propan-2-ol</td>
<td>67-63-0</td>
<td>400</td>
<td>980</td>
<td>400 ppm; 500 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>300</td>
<td>500/10 minutes</td>
<td>100 ppm; 375 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

(b) Appropriate engineering controls:
Ventilation requirements: Handle only in a place equipped with local exhaust (or other appropriate exhaust). Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

General protective measures: Ensure that eye flushing/eye wash stations, and hand washing areas are accessible.
**Personal protective equipment:**

**Inhalation:** Avoid breathing mist/vapors/spray. Where mist or aerosol is present, an organic vapor respirator is recommended.

**Skin Contact:** Wear protective gloves/protective clothing. Contaminated work clothing must not be allowed out of the workplace. Ansell Chemical Resistance Guide, 7th Edition recommends the following glove materials for Naptha VM&P (similar to Aliphatic, light hydrocarbon solvent CAS 64742-89-8 the major ingredient by weight): Laminate film, Barrier; Nitrile, Solvex; Supported Polyvinyl Alcohol, PVA. Ansell recommends Supported Polyvinyl Alcohol, PVA for Naphtha VM&P, and Toluene. Only Ansell Laminate film, Barrier glove is recommended for all ingredients in this mixture product.

**Eye Contact:** Wear eye protection/face protection. Eye and face protective devices must comply with ANSI Z87.1-1989. Recommended eye protection: Safety glasses with side-shields; Safety goggles.

**Ingestion:** Avoid eating, drinking, or smoking in work area and wash hands after handling this product.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

(a) **Appearance (physical state, color):** Liquid, clear and colorless  
(b) **Odor:** Organic solvent  
(c) **Odor threshold:** Data not available  
(d) **pH:** NA  
(e) **Melting point/ freezing point:** Data not available  
(f) **Initial Boiling point / Range:** Data not available  
(g) **Flashpoint:** - 0.8 °F (- 17.2 °C) estimate  
(h) **Evaporation Rate:** Data not available  
(i) **Flammability (solid/ gas):** Data not available  
(j) **Upper/ lower flammability explosion limits:** Data not available  
(k) **Vapor Pressure (mm Hg @ 68°F):** Data not available  
(l) **Vapor Density (Air = 1):** Data not available  
(m) **Relative Density (H₂O = 1):** .76  
(n) **Solubility:** Data not available  
(o) **Partition coefficient n- Octanol/ Water:** Data not available  
(p) **Auto-ignition temperature:** Data not available  
(q) **Decomposition temperature:** Data not available  
(r) **Viscosity:** Data not available  

**Other properties**  
VOC % (wt.): 87.8  
VOC (lbs./gal): 5.55

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**SECTION 10: STABILITY AND REACTIVITY INFORMATION**

(a) **Reactivity:** Not reactive under normal storage conditions. See Section 7.  
(b) **Chemical stability:** Mixture is chemically stable under normal storage and handling conditions, and under normal temperatures and pressures.  
(c) **Possibility of hazardous reactions:** No data available  
(d) **Conditions to avoid:** Keep away from open flames, sparks, hot surfaces and sources of ignition.  
(e) **Incompatible materials:** Strong oxidizers.  
(f) **Hazardous decomposition product:** Thermal decomposition may yield carbon dioxide and/or carbon monoxide.
SECTION 11: TOXICOLOGICAL INFORMATION

(a) Likely routes of exposure: Skin contact, eye contact, inhalation, ingestion.

(b) Symptoms related to physical, chemical, and toxicological characteristics:

- **Skin contact:** There may be irritation and redness at site of contact.
- **Eye contact:** There may be irritation and redness. Eyes may water profusely.
- **Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.
- **Ingestion:** There may be irritation and redness of the mouth and throat, and a feeling of illness.

(c) Delayed and immediate effects, and chronic effects from long-term exposure

May be fatal if swallowed and enters airways; May cause cancer; Causes serious eye irritation; May cause genetic defects; Suspected of damaging fertility or the unborn child; Causes mild skin irritation; May cause damage to organs through prolonged or repeated exposure (Central Nervous System).

(d) Numerical measures of toxicity, acute:

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS # (TS= trade secret)</th>
<th>Dermal</th>
<th>Oral</th>
<th>Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliphatic, light hydrocarbon solvent</td>
<td>64742-89-8</td>
<td>LD50 2000 mg/kg bw (rabbit)</td>
<td>LD50 5000 mg/kg bw (rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>LD50 7426 mg/kg bw (guinea pig)</td>
<td>LD50 5800 mg/kg bw (rat)</td>
<td>LC50 (8 h) 50.1 mg/L air (rat)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 9.4 mL/kg bw (guinea pig)</td>
<td></td>
<td>LC50 (4 h) 76 mg/L air (rat)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 15,800 mg/kg bw (rabbit)</td>
<td></td>
<td>LC50 (3 h) 132 mg/L air (rat)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 7426 – 15,800 mg/kg bw (rabbit)</td>
<td></td>
<td>LC50 (3 h) 55 700 ppm (rat)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 9.4 - 20 mL/kg bw (rabbit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Propan-2-ol</td>
<td>67-63-0</td>
<td>LD50 16.4 mL/kg bw (rabbit)</td>
<td>LD50 5840 mg/kg bw (rat)</td>
<td>LC50 (6 h) 10 000 ppm (rat)</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>LD50 5 000 mg/kg bw (rabbit)</td>
<td>LD50 5580 mg/kg bw (rat)</td>
<td>LC50 (4 h) 25.7 - 30 mg/L air (rat)</td>
</tr>
</tbody>
</table>

(e) Carcinogens information:

- **IARC** Group 1 (Carcinogenic to humans), Group 2A (Probably carcinogenic to humans), or Group 2B (Possibly carcinogenic to humans): This mixture does not contain listed materials.
- **NTP** (13th Report on Carcinogens): This mixture does not contain listed materials.
- **OSHA**: This mixture does not contain listed materials.

SECTION 12: ECOLOGICAL INFORMATION

(a) Ecotoxicity

Classification of mixture: Not classified

(b) Persistence and degradability: No data available

(c) Bioaccumulative potential: No data available.

(d) Mobility in soil: No data available

(e) Other adverse effects: No known adverse effects
SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with local/regional/national regulations. The hazard and precautionary statements displayed on the label also apply to any residues left in the container.

RCRA Codes
- Acetone (67-64-1): U002
- Toluene (108-88-3): U220

SECTION 14: TRANSPORT INFORMATION

US DOT (Ground):
(a) UN number: UN1993
(b) UN Proper Shipping Name: Flammable Liquids, N.O.S. (Acetone, Isopropanol)
(c) Transport hazard class: Flammable Liquids
(d) Packing Group: PG II
(e) Environmental hazards: Not regulated as a dangerous good
(f) Transport in bulk
   - MARPOL 73/78: No data available
   - IBC: No data available
(g) Special Precautions: None known

SECTION 15: REGULATORY INFORMATION

U.S. Federal Regulations

TSCA Section 8(b) Inventory Status: All ingredients of this mixture are listed on the TSCA Inventory

EPCRA, Section 302 – Extremely hazardous substances: This mixture does not contain listed materials.

CERCLA Hazardous Substances:
- Acetone (67-64-1): RQ = 5000
- Toluene (108-88-3): RQ = 1000

EPCRA Section 313 Toxic Chemicals:
- Propan-2-ol (67-63-0)
- Toluene (108-88-3)

CAA 112(r) Regulated Chemicals for Accidental Release Prevention: This mixture does not contain listed materials.

Hazardous Air Pollutants (HAP):

U.S. State Regulations

California Proposition 65: ▲ WARNING: This product can expose you to chemicals including toluene, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov. Complete list:
- Toluene, CAS 108-88-3 (developmental toxicity)

Oregon DEQ List of Air Toxic Contaminants:
- Propan-2-ol (67-63-0)
- Toluene (108-88-3)
New Jersey Right to Know
  o Acetone 67-64-1
  o Propan-2-ol 67-63-0
  o Toluene 108-88-3

Pennsylvania Right to Know
  o Acetone 67-64-1
  o Propan-2-ol 67-63-0
  o Toluene 108-88-3

Canadian Environmental Protection Act:
WHMIS Classification: No data available

European Chemical Agency (ECHA): No data available

SECTION 16: 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. makes 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. assumes 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.