Safety Data Sheet

SECTION 1: IDENTIFICATION

SDS Number: S-1634, version 3/13/2018

(a) Product identifier

Gans Description: Gans Powerkleene HFP

(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 number:
Available only during business hours.
(323) 264-2200 Monday- Friday 7:00 A.M.– 9:00 P.M.
24 Hours Response: Los Angeles County Fire Department / HazMat. Department

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 3

Health hazards:
  o Skin Irritation – Category 2
  o Eye Damage/Irritation – Category 2A
  o Germ Cell Mutagenicity – Category 1B
  o Carcinogenicity – Category 1B
  o Specific Target Organ Toxicity, Respiratory, Single Exposure – Category 3
Aspiration Hazard – Category 1

(b) Label elements

Signal Word: Danger

Hazard Statements: Flammable liquid and vapor; Causes skin irritation; Causes serious eye irritation; May cause genetic defects; May cause cancer; May cause respiratory irritation; May be fatal if swallowed and enters airways.

Precautionary Statements:


Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Avoid breathing fume/gas/mist/vapors/spray. Wash contaminated areas thoroughly after handling.

Response:

If exposed or concerned: Get medical advice/attention.

IN CASE OF FIRE: Use dry chemical, foam, carbon dioxide or fog to extinguish. Water spray is recommended to cool or protect exposed materials or structures. Sand or earth may be used for small fires only.

IF SWALLOWED: Immediately call a poison center/doctor. Do NOT induce vomiting.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.

IF ON SKIN OR HAIR: Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of water and mild soap. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. 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.


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
2.4 % of formula is of unknown acute toxicity

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture
TS = Trade Secret (as specified by substance manufacturer)

<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>Naphtha (petroleum), hydrotreated heavy</td>
<td>64742-48-9</td>
<td>40.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light aromatic</td>
<td>64742-95-6</td>
<td>30.0</td>
<td>35.0</td>
</tr>
<tr>
<td>1,2,4-trimethylbenzene</td>
<td>95-63-6</td>
<td>5.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Mesitylene, 1,3,5-trimethylbenzene</td>
<td>108-67-8</td>
<td>1.0</td>
<td>5.0</td>
</tr>
<tr>
<td>1,2,3-trimethylbenzene</td>
<td>526-73-8</td>
<td>1.0</td>
<td>5.0</td>
</tr>
<tr>
<td>(2-methoxymethylethoxy)propanol</td>
<td>34590-94-8</td>
<td>1.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Sorbitan oleate</td>
<td>1338-43-8</td>
<td>1.0</td>
<td>5.0</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

(a) Description of first aid measures:
Ingestion: Immediately call a poison center/doctor. Do NOT induce vomiting. Rinse mouth.

Inhalation: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

Skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of water and mild soap. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Eye contact: 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.

(b) Most important symptoms and effects, both acute and delayed:
Ingestion: May be fatal if swallowed and enters airways. May cause genetic defects. May cause cancer.

Inhalation: May be fatal if swallowed and enters airways. May cause respiratory irritation.

Skin contact: Causes skin irritation.

Eye contact: Causes serious eye irritation.

(c) Indication of any immediate medical attention and special treatment needed:
Symptoms such as loss of breath, and burning, pain, or irritation to lungs, eyes, or skin may indicate exposure and the need for first aid.

SECTION 5: FIRE – FIGHTING MEASURES

(a) Extinguishing Media:
Suitable extinguishing media: Dry chemical, foam, carbon dioxide or fog is recommended. Water spray is recommended to cool or protect exposed materials or structures. Sand or earth may be used for small fires only.

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.

ERG Code: 128

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). Do not touch or walk through spilled material. Isolate hazard area and keep unnecessary people away. 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.

ERG Code: 128

SECTION 7: HANDLING AND STORAGE

(a) Precautions for safe handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection, face protection. Avoid breathing fume, mist, vapors, spray. Use only outdoors or in a well-ventilated area. Wash hands and contaminated areas thoroughly after handling. Keep away from heat/sparks/open flames/hot surfaces. 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 precautionary measures against static discharge.

(b) Conditions for safe storage: Keep away from sparks, open flames – No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

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>ppm</th>
<th>mg/m³</th>
<th>8-hour TWA (ST)</th>
<th>Up to 10-hour TWA (ST)</th>
<th>8-hour STEL (C)</th>
<th>NIOSH REL</th>
<th>ACGIH 2015 TVL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,4-trimethylbenzene</td>
<td>95-63-6</td>
<td>No data available</td>
<td>No data available</td>
<td>25 ppm; 125 mg/m³</td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mesitylene, 1,3,5-trimethylbenzene</td>
<td>108-67-8</td>
<td>No data available</td>
<td>No data available</td>
<td>25 ppm; 125 mg/m³</td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2,3-trimethylbenzene</td>
<td>526-73-8</td>
<td>No data available</td>
<td>No data available</td>
<td>25 ppm; 125 mg/m³</td>
<td>No data available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2-methoxymethyleneoxy)propanol</td>
<td>34590-94-8</td>
<td>100</td>
<td>600</td>
<td>100 ppm (ST) 150 ppm</td>
<td>100 ppm (ST) 150 ppm</td>
<td>100 ppm (ST) 150 ppm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No other hazardous ingredients appear on OSHA Annotated Tables Z-1, Z-2, or Z-3

(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.

(c) Personal protective equipment:
Inhalation: Avoid breathing fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Where mist or aerosol is present, an organic vapor full facepiece respirator is recommended (to protect eyes and face as well).


Eye Contact: Wear eye protection, and face protection. Eye and face protective devices must comply with ANSI Z87.1-1989. Recommended eye protection: full face shield, enclosed goggles.

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

(a) Appearance (physical state, color): Liquid, clear and straw colored
(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: 302 °F (150 °C) estimated
(g) Flashpoint: 140 °F (40 °C) estimated
(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): .85
(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.): 97.6
VOC: 6.90 lbs./gal; 830 g/L

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, and ingestion.

(b) Symptoms related to physical, chemical, and toxicological characteristics:
   Skin contact: Causes skin irritation.
   Eye contact: Causes serious eye irritation.
   Inhalation: May cause respiratory irritation. May be fatal if swallowed and enters airways.
   Ingestion: May be fatal if swallowed and enters airways.

(c) Delayed and immediate effects, and chronic effects from long-term exposure
May cause genetic defects. May cause cancer.

(d) Numerical measures of toxicity, acute:

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS # (TS= trade secret)</th>
<th>Oral</th>
<th>Inhalation</th>
<th>Dermal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), hydrotreated heavy</td>
<td>64742-48-9</td>
<td>LD50 5 00 mg/kg bw (rat)</td>
<td>No data available</td>
<td>LD50 2 000 mg/kg bw (rabbit)</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light aromatic</td>
<td>64742-95-6</td>
<td>LD50 5000 mg/kg bw (rat)</td>
<td>No data available</td>
<td>LD50 2000 mg/kg bw (rabbit)</td>
</tr>
<tr>
<td>1,2,4-trimethylbenzene</td>
<td>95-63-6</td>
<td>LD50 6000 mg/kg bw (rat)</td>
<td>LD50 6000 mg/kg bw (rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>Mesitylene, 1,3,5-trimethylbenzene</td>
<td>108-67-8</td>
<td>LD50 6000 mg/kg bw (rat)</td>
<td>LC50 (4 h) 10.2 mg/L air (rat)</td>
<td>LD50 4 mL/kg bw (rat)</td>
</tr>
<tr>
<td>Substance</td>
<td>CAS # (TS= trade secret)</td>
<td>Oral</td>
<td>Inhalation</td>
<td>Dermal</td>
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<td>------------------------------------------</td>
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<td>No data available</td>
</tr>
<tr>
<td>(2-methoxymethylethoxy) propanol</td>
<td>34590-94-8</td>
<td>LD50 5000 - 5230 mg/kg bw (rat)</td>
<td>LC0 (7 h) 275 ppm (rat)</td>
<td>LD50 19,020 mg/kg bw (rat)</td>
</tr>
<tr>
<td>Sorbitan oleate</td>
<td>1338-43-8</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</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) by IARC: 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 as hazardous
(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: This mixture does not contain listed materials.

SECTION 14: TRANSPORT INFORMATION

US DOT (Ground):
(a) UN number: UN1268
(b) UN Proper Shipping Name: Petroleum distillates (Petroleum Naphtha), N.O.S.
(c) Transport hazard class: Class 3
(d) Packing Group: PG III
(e) Environmental hazards: No data available
(f) Transport in bulk
   MARPOL 73/78: No data available
   IBC: No data available.
(g) Special Precautions: None known
ERG Code: 128

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: This mixture does not contain listed materials.
EPCRA Section 313 Toxic Chemicals:
  1,2,4-Trimethylbenzene 95-63-6
CAA 112(r) Regulated Chemicals for Accidental Release Prevention: This mixture does not contain listed materials.
Hazardous Air Pollutants (HAP): This mixture does not contain listed materials.

U.S. State Regulations
Pennsylvania Right to Know
  o 1,2,4-trimethylbenzene CAS 95-63-6
  o (2-methoxymethylethoxy) propanol CAS 34590-94-8

New Jersey Right to Know
  o 1,2,4-trimethylbenzene CAS 95-63-6
  o (2-methoxymethylethoxy) propanol CAS 34590-94-8

California Proposition 65: This mixture does not contain listed materials.

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.