Safety Data Sheet

SECTION 1: IDENTIFICATION
SDS Number: S-1643, version 3/7/2018

(a) Product identifier
Gans Item ID: S-1643, S-1643D, S-1643G, S-1643P

Gans Description: Gans MRC (Metering Roller Cleaner)

(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:
- Flammable Liquid Category 1

Health hazards:
- Eye Irritation - Category 2A
- Germ Cell Mutagenicity - Category 1B
- Carcinogenicity - Category 1B
- Specific Target Organ Toxicity, Single Exposure, Central Nervous System - Category 3
- Aspiration Hazard - Category 1
(b) Label elements

Signal Word: Danger

Hazard Statements: Causes serious eye irritation. May cause genetic defects. May cause cancer. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. Extremely flammable liquid and vapor

Precautionary Statements:
Prevention: 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. Wash hands and contaminated areas thoroughly after handling.

Avoid breathing mist, vapors, or spray. Use only outdoors or in a well-ventilated area. 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.

Response: If exposed or concerned: Get medical advice/attention.

IF ON SKIN OR HAIR: Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor 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.
IF INGESTED: Immediately call a poison center/doctor. Do NOT induce vomiting.

In case of fire: Use dry chemical, alcohol-resistant foam, water spray/fog or carbon-dioxide to extinguish.

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
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>Aliphatic, light hydrocarbon solvent</td>
<td>64742-89-8</td>
<td>71.38</td>
<td>87.17</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>9.3</td>
<td>11.4</td>
</tr>
<tr>
<td>Propan-2-ol</td>
<td>67-63-0</td>
<td>9.3</td>
<td>11.4</td>
</tr>
</tbody>
</table>
SECTION 4: FIRST AID MEASURES

(a) Description of first aid measures:
Inhalation: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

Skin contact: Rinse/wash with lukewarm, gently flowing water (and mild soap) for 15-20 minutes or until product is removed.

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.

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

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

Inhalation: May be fatal if swallowed and enters airways; May cause damage to organs through prolonged or repeated exposure (central nervous system).

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 extinguishing media
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:
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.
Wash hands and contaminated areas thoroughly after handling.
Wear eye protection/face protection.
Avoid breathing mist, vapors, or spray. Use only outdoors or in a well-ventilated area.

(b) Conditions for safe storage:
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.

Incompatibilities: Keep away from strong oxidizing agents.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS #</th>
<th>OSHA PEL</th>
<th>Cal/OSHA PEL</th>
<th>NIOSH REL</th>
<th>ACGIH 2015 TVL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliphatic, light hydrocarbon solvent</td>
<td>64742-89-8</td>
<td>ppm</td>
<td>mg/m³</td>
<td>8-hour TWA (ST)</td>
<td>Ceiling</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>1000</td>
<td>2400</td>
<td>500 ppm (ST)</td>
<td>750 ppm (C)</td>
</tr>
<tr>
<td>Propan-2-ol</td>
<td>67-63-0</td>
<td>400</td>
<td>980</td>
<td>400 ppm (ST)</td>
<td>500 ppm</td>
</tr>
</tbody>
</table>

(b) Appropriate engineering controls:
Ventilation requirements: Handle only outdoors, or 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 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. Only Ansell Laminate film, Barrier glove is recommended for all ingredients in this mixture product.


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 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: 10.0 °F (-12.2 °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.): 89.6
VOC (lbs./gal): 5.67

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. Keep away from heat sources.
(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:** Data not available
- **Eye contact:** Causes serious eye irritation. There may be irritation and redness. Eyes may water profusely.
- **Inhalation:** May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.
- **Ingestion:** May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. 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 cause genetic defects. May cause cancer.
- Aliphatic, light hydrocarbon solvent (64742-89-8): This substance may be fatal if swallowed and enters airways, may cause genetic defects and may cause cancer.
- Acetone (67-64-1): This substance causes serious eye irritation and may cause drowsiness or dizziness
- Propan-2-ol (67-63-0): This substance causes serious eye irritation and may cause drowsiness or dizziness.

(d) Numerical measures of toxicity, acute:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Substance 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 (8h) 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 (4h) 76 mg/L air (rat)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 7426 – 15,800 mg/kg bw (rabbit)</td>
<td>LC50 (3h) 132 mg/L air (rat)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 9.4 - 20 mL/kg bw (rabbit)</td>
<td>LC50 (3h) 55 700 ppm (rat)</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 (6h) 10 000 ppm (rat)</td>
</tr>
</tbody>
</table>

(e) Carcinogens information:
- **IARC Group 1 (Carcinogenic to humans), Group 2A (Probably carcinogenic to humans), 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
- **Persistence and degradability:** No data available
- **Bioaccumulative potential:** No data available.
- **Mobility in soil:** No data available
- **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

SECTION 14: TRANSPORT INFORMATION

US DOT (Ground):
(a) UN number: UN1993
(b) UN Proper Shipping Name: Flammable Liquids, N.O.S. (Petroleum Naphtha, 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

EPCRA Section 313 Toxic Chemicals:
- Propan-2-ol (67-63-0)

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

Hazardous Air Pollutants (HAP):

U.S. State Regulations

Pennsylvania Right to Know
- Acetone 67-64-1
- Propan-2-ol 67-63-0

New Jersey Right to Know
- Acetone 67-64-1
- Propan-2-ol 67-63-0

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

Oregon DEQ List of Air Toxic Contaminants:
- Propan-2-ol 67-63-0
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.