Safety Data Sheet

SECTION 1: IDENTIFICATION

SDS Number: S-1903, version 5/18/2016

(a) Product identifier
Gans Item ID: S-1903

Gans Description: Gans Anti Skin Spray

(b) Other means of identification
General description: Lithographic ink additive/ anti-oxidant

(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 aerosol Category 1
- Health hazards:
  - Eye Irritation - Category 2A
  - Skin Irritation – Category 2
  - Germ Cell Mutagenicity - Category 1B
  - Carcinogenicity - Category 1B
  - Reproductive toxicity (fertility) – Category 2
(b) Label elements

Signal Word: Danger

Hazard Statements: Extremely flammable aerosol. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause genetic defects. May cause cancer. Suspected of damaging fertility. 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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing gas. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves, protective clothing, eye protection, face protection.

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

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: 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.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

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
2.2% of formula is of unknown acute toxicity
SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance / Mixture: Mixture</th>
<th>Conc. min. (wt. %)</th>
<th>Conc. max. (wt. %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Butane</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>2. Distillates (Petroleum), Hydrotreated Light</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>3. Isopropyl Alcohol</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>4. Propane</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>5. Butylated Hydroxytoluene</td>
<td>2.5</td>
<td>10</td>
</tr>
<tr>
<td>6. Naphtha (petroleum), hydrotreated light</td>
<td>2.5</td>
<td>10</td>
</tr>
<tr>
<td>7. n-Hexane</td>
<td>2.5</td>
<td>10</td>
</tr>
<tr>
<td>8. Cyclohexane</td>
<td>.1</td>
<td>1</td>
</tr>
<tr>
<td>9. Methyl Ethyl Ketoxime</td>
<td>.1</td>
<td>1</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. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Aspiration may cause pulmonary edema and pneumonitis. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

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

Skin contact: If on skin (or hair): 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. Suspected of damaging fertility. May cause damage to organs through prolonged or repeated exposure.

Inhalation: May be fatal if swallowed and enters airways.
Skin contact: Causes skin irritation.
Eye contact: Data not available.

(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: Use CO2, dry chemical, or fire-fighting foam.
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: Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

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:
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid breathing gas. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained.

(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). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid breathing gas. Ventilate closed spaces before entering them.

Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Collect spillage. Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.. Local authorities should be advised if significant spillages cannot be contained.

(b) Methods for containment and cleaning up:
Pressurized aerosol contents are not expected to be containable. Dike and contain spill. 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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing gas. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

(b) Conditions for safe storage:
Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Incompatibilities: Keep away from sources of high heat.
### 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>Butane</td>
<td>106-97-8</td>
<td>ppm</td>
<td>mg/m(^3)</td>
<td>8-hour TWA (ST)</td>
<td>Up to 10-hour TWA (ST)</td>
</tr>
<tr>
<td>Distillates (Petroleum), Hydrotreated Light</td>
<td>64742-47-8</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>67-63-0</td>
<td>400</td>
<td>980</td>
<td>400 ppm (ST) 500 ppm</td>
<td>400 ppm (ST) 500 ppm</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>1000</td>
<td>1800</td>
<td>1000 ppm</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Butylated Hydroxytoluene</td>
<td>128-37-0</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>10 mg/m(^3)</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>64742-49-0</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>110-54-3</td>
<td>500</td>
<td>1800</td>
<td>50 ppm</td>
<td>50 ppm</td>
</tr>
<tr>
<td>Cyclohexane</td>
<td>110-82-7</td>
<td>300</td>
<td>1050</td>
<td>300 ppm</td>
<td>300 ppm</td>
</tr>
<tr>
<td>Methyl Ethyl Ketoxime</td>
<td>96-29-7</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</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.

(c) **Personal protective equipment:**

Inhalation: Do not breathe 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).

Skin Contact: Wear protective gloves, and protective clothing. Take off contaminated clothing and wash it before reuse. Ansell Chemical Resistance Guide, 7th Edition recommends the following glove materials for alkanes (propane gas, cyclohexane), and isopropyl alcohol: Laminate film, Barrier; Nitrile, Sol-Vex.

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): Gas, 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: -156.0 °F (-104.4 °C) Propellant 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: 43 - 53 psig @ 70F estimated
(l) Vapor Density (Air = 1): Data not available
(m) Relative Density (H2O = 1): 0.654 estimated estimated
(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.): 100

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: Hazardous polymerization does not occur.
(d) Conditions to avoid: Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point.
(f) Hazardous decomposition product: Data not available

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 be fatal if swallowed and enters airways. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure.
   - Ingestion: May be fatal if swallowed and enters airways. May cause genetic defects. May cause cancer. Suspected of damaging fertility. May cause damage to organs through prolonged or repeated exposure.
(c) Delayed and immediate effects, and chronic effects from long-term exposure
May cause genetic defects. May cause cancer. Suspected of damaging fertility. May cause damage to organs through prolonged or repeated exposure.

(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>Butane</td>
<td>106-97-8</td>
<td>No data available</td>
<td>No data available</td>
<td>LC50 (15 min) 1442.738 - 1443 mg/L air (rat); LC50 (15 min) 800,000 ppm (rat); LC50 (2 h) 1237 mg/L air (mouse); LC50 (2 h) 520,400 – 539,600 ppm (mouse)</td>
</tr>
<tr>
<td>Distillates (Petroleum), Hydrotreated Light</td>
<td>64742-47-8</td>
<td>LD50 2000 mg/kg bw (rabbit)</td>
<td>LD50 5000 mg/kg bw (rat)</td>
<td>LC50 (4 h) 5.28 mg/L air (rat)</td>
</tr>
<tr>
<td>Isopropyl Alcohol</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>Propane</td>
<td>74-98-6</td>
<td>No data available</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Butylated Hydroxytoluene</td>
<td>128-37-0</td>
<td>LD50 2000 mg/kg bw (rat)</td>
<td>LD50 2930 - 6000 mg/kg bw (rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>64742-49-0</td>
<td>LD50 2000 - 5000 mg/kg bw (rabbit)</td>
<td>LD50 2000 - 5580 mg/kg bw (rat)</td>
<td>LC50 (4 h) 25.7 - 43,767 mg/L air (rat); LC50 (4 h) 13,700 ppm (rat)</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>110-54-3</td>
<td>LD50 5 mL/kg bw (rabbit)</td>
<td>LD50 24 - 49 mL/kg bw (rat)</td>
<td>LC50 (24 h) 5000 ppm (rat); LC50 (4 h) 73 860 ppm (rat)</td>
</tr>
<tr>
<td>Cyclohexane</td>
<td>110-82-7</td>
<td>LD50 2000 mg/kg bw (rabbit)</td>
<td>LD50 5000 mg/kg bw (rat)</td>
<td>LC50 (4 h) 32.88 mg/L air (rat); LC50 (4 h) 5 540 ppm (rat)</td>
</tr>
<tr>
<td>Methyl Ethyl Ketoxime</td>
<td>96-29-7</td>
<td>LD50 1 000 mg/kg bw (rabbit)</td>
<td>LD50 900 – 2.326 mg/kg bw (rat); LD0 1 500 mg/kg bw (rat)</td>
<td>LC50 (4 h) 4.83 mg/L air (rat)</td>
</tr>
</tbody>
</table>

(e) Carcinogens information:
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as Group 1 (Carcinogenic to humans), Group 2A (Probably carcinogenic to humans), or Group 2B (Possibly carcinogenic to humans) by IARC.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP (13th Report on Carcinogens).

OSHA: No data available

SECTION 12: ECOLOGICAL INFORMATION

(a) Ecotoxicity
Classification of mixture:
- Aquatic toxicity, Acute - Category 2
- Aquatic toxicity, Long Term - Category 2

(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
- Cyclohexane 110-82-7: U056

SECTION 14: TRANSPORT INFORMATION

US DOT (Ground):
(a) UN number: UN19550
(b) UN Proper Shipping Name: Aerosols, flammable, 2.1
(c) Transport hazard class: Aerosols, flammable, 2.1
(d) Packing Group: NA
(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

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:
- n-Hexane 110-54-3 RQ = 5000
- Cyclohexane 110-82-7 RQ = 1000

EPCRA Section 313 Toxic Chemicals:
- Isopropyl alcohol 67-63-0
- n-Hexane 110-54-3
- Cyclohexane 110-82-7

CAA 112(r) Regulated Chemicals for Accidental Release Prevention:
- Butane 106-97-8: TQ = 10,000
- Propane 74-98-6: TQ = 10,000
Hazardous Air Pollutants (HAP):
  o n-Hexane 110-54-3

U.S. State Regulations
Pennsylvania Right to Know
  o Butane (CAS 106-97-8)
  o Butylated Hydroxytoluene (CAS 128-37-0)
  o Cyclohexane (CAS 110-82-7)
  o Isopropyl Alcohol (CAS 67-63-0)
  o n-Hexane (CAS 110-54-3)
  o Propane (CAS 74-98-6)

New Jersey Right to Know
  o Butane (CAS 106-97-8)
  o Butylated Hydroxytoluene (CAS 128-37-0)
  o Cyclohexane (CAS 110-82-7)
  o Isopropyl Alcohol (CAS 67-63-0)
  o n-Hexane (CAS 110-54-3)
  o Propane (CAS 74-98-6)

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.