

## SAFETY DATA SHEETS

**This SDS packet was issued with item:**

075184486

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

078926134

## Safety Data Sheet (SDS)

## Section 1: Identification

Product name: AR Spray  
Manufacturer: J. Morita Mfg. Corp.  
680 Higashihama Minami-Cho, Fushimi-Ku, Kyoto  
J. Morita USA, Inc.  
9 Mason, Irvine, CA 92618, USA  
Distributor:  
Emergency phone number: CHEMTREC 1-800-424-9300 (US & Canada)  
CHEMTREC 1-703-527-3887 (Outside US & Canada)

## Section 2: Hazard(s) Identification

Classification: High pressure gas, combustible gas  
Hazardous nature: Combustible  
Explosive if mixed with air

## Section 3: Composition/Information on Ingredients

Single product/mixture: mixture

Chemical name or generic name	Propane	Butane
Content	23.5 wt%	54.9 wt%
Chemical formula	C <sub>3</sub> H <sub>8</sub> (CH <sub>3</sub> CH <sub>2</sub> CH <sub>3</sub> )	C <sub>4</sub> H <sub>10</sub> (CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>3</sub> )
CAS No.	74-98-6	106-97-8

## Section 4: First-Aid Measures

In case of inhalation:

- Move to a place with fresh air and keep warm and at rest.
- Give artificial respiration in case of respiratory arrest, or give oxygen in case of respiratory difficulty. Get medical attention.
- Unconscious, injured persons should be held and carried in a stable lateral recumbent position.

In case of contact with skin:

- Take off contaminated clothes and shoes.
- Flush with plenty of water for at least 15 minutes.
- Any frostbitten part should be covered with a sterile bandage without rubbing it.

In case of contact with eyes:

- Flush with plenty of water for at least 15 minutes. Get medical attention.
- Do not cool the injured person.

## Section 5: Fire-Fighting Measures

Extinguishing media: Foam, carbon dioxide, dry chemical, and water spray.

Special fire fighting procedures:

- Do not extinguish a fire before sealing the leak, otherwise an explosive mixture with air may be caused.
- After the leak is sealed, extinguish a small scale fire with dry chemical or carbon dioxide, or a large scale fire with foam.
- For a small scale fire, use dry chemical or carbon dioxide.
- For a large scale fire, use foam or other extinguishing media intended for chemical industries.

Protection of fire fighting personnel:

- Protective clothing, self-contained breathing apparatus and rubber boots.

## Section 6: Accidental Release Measures

- Ventilate
- Seal a leak when it can be done without risk.
- Stop a machine if in a dangerous area.
- Remove fire generating sources, inhibit smoke, put out open flames, and prevent electric apparatuses and/or switches that may otherwise cause sparking or arcing from operating.

## Section 7: Handling and Storage

Handling:

- Heat source, sparks and/or open flames are strictly prohibited (no igniting sources allowed).
- No igniting sources are allowed because flashing may be caused over a distance if evaporated.
- Do not inhale gases.
- Contact with eyes, skin, and clothing is to be avoided.
- Long or repetitive exposure is to be avoided.
- Complete washing is required after handling.
- Be sure to handle and store under well-ventilated conditions.
- Prevent containers from falling, tumbling, or receiving shock.

Storage:

- Store in a place away from heat sources, sparks, or open flame.
- Container temperature shall not exceed 40°C/104°F.
- Store under well-ventilated conditions.
- Prevent containers from falling, tumbling, or receiving shock.

## Section 8: Exposure Controls/Personal Protection

Standard control concentration: not specified

Permissible concentration:

	Propane	Butane
ACGIH TLV	2500 ppm_TWA_	Max. 800 ppm
OSHA PEL	1000 ppm_TWA_	

Protective equipment:

- Respiratory protection - respiratory protective device
- Hand protection - protective gloves
- Eye protection - safety goggles

**Section 9: Physical and Chemical Properties**

	Propane	Butane
Status	Gas (under atmospheric pressure) or liquid (in pressure vessel)	
Color	Clear and colorless	
Odor	Slight ether-like odor	
Boiling point	-42.04°C	-0.50°C
Melting point	-187.69°C	-138.4°C
Vapor pressure	0.476 (0°C) 0.810 (20°C)	0.104 (0°C) 0.203 (20°C)
Specific gravity	0.5005 (20°C)	0.579 (20°C)
Gas density	2.020 kg/m <sup>3</sup>	2.599 kg/m <sup>3</sup>
Liquid density	0.501 kg/L (20°C)	0.579 kg/L (20°C)
Flash point	-90°C	-76°C
Firing point	493°C	427°C
Explosive limits	2.2 - 9.5%	1.8 - 8.5%
Solubility	Slightly soluble in water	Insoluble in water

**Section 10: Stability and Reactivity**

Heating/combustion:

- Extremely inflammable
- Explosive if mixed with air

Contact with water:

- Not hazardous

Contact with air:

- The phase of the product left in a liquid state changes very quickly to gas.
- Releasing the product in a gaseous state generates a large amount of cold mist and explosive mixture, spreading extensively.
- The product in a vaporous state is heavier than air, moves crawling along the ground surface, and may cause remote backfiring.

Mixing and contacting:

- May heavily react to strong oxidant.

**Section 11: Toxicological Information**

Acute toxicity: No data available

Local effect: No data available

Sensitization: No data available

Chronic toxicity/long-term toxicity: No data available

Carcinogenicity: No data available

Mutagenicity: No data available

Reproductive toxicity: No data available

Others:

Inhalation:

- Gas with low toxicity and a weak anesthetic effect.
- Quick transition to a gaseous state eliminates air (possibly causing choking hazard).
- Dizziness, nausea, drowsiness, muscle weakness, an excited condition, and unconsciousness

Skin contact:

- Contact with the product in a liquid state causes frostbite.
- Frostbitten parts discolor to white.

Eye contact:

- Contact with the product in a liquid state causes frostbite.

**Section 12: Ecological Information\* (non-mandatory)**

Mobility: No data available

Persistence/degradability: No data available

Teratogenicity: No data available

Ecotoxicity, fish toxicity: No data available

**Section 13: Disposal Considerations\* (non-mandatory)**

- Use it fully before disposal. (Emission to the air in the liquid state is prohibited.)
- If releasing the product to the air is inevitable, it should be performed little by little in a fireless and well-ventilated environment.
- Use an authorized subcontractor for disposing industrial waste.

**Section 14: Transport Information\* (non-mandatory)**

UN Hazard Code: Class 2.1

UN No.: UN 1950

- Others:
- Prevent containers from falling, tumbling, or receiving shock.
  - Container temperature shall not exceed 40°C.
  - No igniting sources are allowed.
  - Delivery vehicles shall be equipped with warning signs, disaster prevention tools, and fire extinguishers.

**Section 15: Regulatory Information\* (non-mandatory)**

N/A

**Section 16: Other Information**

Date prepared: 05/19/15

References:

- LP Gas Technology A to Z
- LP Gas Data Handbook by the Natural Sources Survey of Science and Technology Agency
- National Laboratory Animal Society Research Report 1979, Bethesda, MD, USA
- Occupational Health Journal (2001.7) by Japan Society for Occupational Health
- "TLV and Bels" 2001 \_ ACGIH
- IARC MONOGRAPHS ON THE EVALUATION OF THE CARCINOGENIC RISK OF CHEMICALS TO HUMANS VOLUME 33

The information, which is contained in this document, is based on available data. However, as such has been obtained from various sources, including independent laboratories, it is given without warranty or representation that it is complete and accurate and can be relied upon. J. Morita USA, Inc. has not attempted to conceal in any way the deleterious aspects of the product listed herein, but makes no warranty as to such.

\*Note: Since other Agencies regulate this information, OSHA will not be enforcing Sections 12 through 15 (29 CFR 1910.1200(g)(2)).