

Material Safety Data Sheet

1. Identification of substance

- Product name : LS Spray
- Application of the substance / the preparation : Maintenance

- Manufacturer : J. MORITA MFG. CORP.
680, Higashihama Minami-cho Fushimi-ku, Kyoto, Japan
ZIP : 612-8533
TEL 075-611-2141 FAX 075-605-2354
homepage : <http://www.jmorita-mfg.co.jp/>

2. Composition / Data on components

- Description : Active substance with propellant
- Components :

CAS-No.	Name	Ratio of content (%)
8042-47-5	Refined Hydrocarbon oil	15~25
-	Fatty acid ester oil	1-10
74-98-6	Propane	45~50
106-97-8	Butane	
75-28-5	Isobutane	

3. Hazards identification

- Hazard designation : F+ Extremely flammable
- Information pertaining to particular dangers for man and environment :
The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
Warning! Pressurized container
R12 Extremely flammable.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 40°C. Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition – No smoking.
Build up of explosive mixtures possible without sufficient ventilation.
Keep out of the reach of children.
- Classification system :
The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

4. First aid measures

- After inhalation : Supply fresh air; consult doctor in case of symptoms.
- After skin contact : Wash with water and soap and rinse thoroughly.
- After eye contact : Rinse opened eye for several minutes under running water.
- After swallowing : Seek immediate medical advice.

5. Fire fighting measures

- Suitable extinguishing agents : CO2, Extinguishing agent, Water fog
- For safety reasons unsuitable extinguishing agents : Water with a full water jet.
- Protective equipment : Water self-contained breathing apparatus.

6. Accidental release measures

- Person-related safety precautions : Keep away from ignition sources.
- Measures for environmental protection :
Do not allow product to reach sewage system or water bodies.
Inform respective authorities in case product reaches water or sewage system.
- Measures for cleaning / collecting :
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents.

7. Handling and storage

Handling designation

- Information for safe handling : Open and handle container with care.
- Information about protection against explosions and fires :
Keep away from ignition sources – Do not smoke.
Protect against electrostatic charges.
Beware: Container is pressurized. Keep away from direct sun exposure and temperatures over 40°C. Do not open by force or throw into fire even after use.
Do not spray on flames or red-hot objects.

Storage

- Requirements to be met by storerooms and containers :
Store in cool location
Observe official regulations on storing packaging with pressurized container.
- Information about storage in one single storage facility :
Store away from food
- Further information about storage conditions :
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Protect from heat and direct sunlight.

8. Exposure controls and personal protection

- Additional instructions about design of technical systems : No further data
- Components with critical values that require monitoring at the workplace
Liquefied petroleum gas
OES : 1810mg/m³, 1000ppm
- Additional information
The lists that were valid during the compilation were used as basis.

Personal protective equipment

- **General protective and hygienic measures** :
Wash hands during breaks and at the end of the work.
- **Breathing equipment** : Use breathing protection in case of insufficient ventilation.
- **Protection of hand** : Protective gloves
- **Eye protection** : Safety glasses

9. Physical and chemical properties

- **General information**
 - Form : Aerosol
 - Color : Colorless
 - Smell : Odorless
- **Change in condition**
 - Melting point / Melting range : N/E
 - Boiling point / Boiling range : -42.1 ~ -0.5°C (Liquefied petroleum gas)
- **Flash point** : -104.4 ~ -73.8°C (Liquefied petroleum gas)
- **Ignition temperature** : 392°C (Ethanol)
- **Critical value for explosion** :
 - Lower : 1.8Vol% (Liquefied petroleum gas)
 - Upper : 9.5Vol% (Liquefied petroleum gas)
- **Steam pressure at 20°C** : 0.5MPa

10. Stability and reactivity

- **Thermal decomposition/conditions to be avoided** : No decomposition
- **Dangerous reactions** : Extremely flammable
- **Dangerous products of Decomposition** : N/E

11. Toxicological information

- **Acute toxicity** : N/E
- **Primary irritant effect** : N/E
 - on the skin : Irritant effect.
 - on the eye : Irritant effect.
- **Sensitization** : N/E

12. Ecological information

- **General notes** : N/E

13. Disposal considerations

- **Recommendation** : Use it fully before disposal.
- **European waste catalogue** : For empty packaging
 - EU-waste catalogue : 15 01 04
 - Metallic packaging

Product name : LS Spray
Manufacturer : J. MORITA MFG. CORP.
No : 7541-E01

Publication : Dec/ 16 / 2010

14. Transport Information

- UN-Number : 1950
- Packaging group : —
- Label : 2.1
- Designation of goods : 1950 AEROSOLS

15. Regulatory information

- Designation according to EC guidelines :
The product has been classified and labeled in accordance with EC Directives /
Ordinance on Hazardous Materials
- Code letter and hazard designation of product : F+ Extremely flammable
- Risk phrases : 12 Extremely flammable

16. Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.