

MATERIAL SAFETY DATA SHEET

PRODUCT NAME : DIFFUSION PUMP FLUID - EDWARDS L9

1. Product and Company Identification

Product name: Edwards L9
 Synonyms: Lion L9 fluid
 Item Numbers: H115-01-016

European Contact Details

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General enquiries

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 Toll Free: 1-800-848-9800

24 h Emergency telephone number:

Chemtrec: 1-800-424-9300

2. Hazards Identification

EMERGENCY OVERVIEW

This material when properly handled according to good working and hygienic practices is not dangerous to human health or the environment.

For short and long term exposure effects, refer to Section 11 Toxicological data.

Eye Effects: Prolonged or repeated contact with the eye may cause irritation.
 Skin Effects: Prolonged or repeated contact with the skin may cause irritation.
 Ingestion/Oral Effects: No information available.
 Inhalation Effects: May cause irritation. Extremely low volatility makes inhalation an unlikely hazard at room temperature.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

| NFPA Hazard codes | | HMIS Hazard codes | | Rating System |
|-------------------|---|-------------------|---|---------------------|
| Health | 1 | Health | 1 | 0 = No Hazard |
| Flammability | 1 | Flammability | 1 | 1 = Slight Hazard |
| Instability | 0 | Reactivity | 0 | 2 = Moderate Hazard |
| | | | | 3 = Serious Hazard |
| | | | | 4 = Severe Hazard |

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3. Composition/Information on Ingredients

| Ingredient | % Weight | CAS No | Hazard class* | Risk phrase* |
|--------------------------|----------|------------|----------------|----------------|
| Alkyl-naphthalene (C:20) | 100 | 56388-48-8 | Not applicable | Not applicable |

*Hazard class & Risk phrase. These columns are only completed for ingredients which are classified as hazardous under EU Directive No 1272/2008 (as amended) and are present in sufficient concentration to make the overall substance hazardous. In all other situations, the column will be completed as "Not applicable".

4. First Aid Measures

| | |
|--------------------|--|
| Eyes: | Immediately flush eyes with water for at least 15 minutes. Seek immediate medical attention. |
| Skin: | Wash with soap and water. If irritation occurs, or if the appearance of the affected area changes, seek medical attention. |
| Ingestion/Oral: | Thoroughly wash out the mouth with plenty of water. Provide the affected person with one or two glasses of water or milk to drink. Seek immediate medical attention. Do not give anything by mouth to an unconscious person. |
| Inhalation: | If overcome by fumes, remove the affected person to fresh air and allow to rest. If breathing problems occur, a qualified individual should administer oxygen or artificial respiration as indicated and medical attention should be sought immediately. |
| Other Information: | None. |

5. Firefighting Measures

| | |
|--|--|
| Extinguishing Media: | Carbon dioxide, foam, dry chemical/powder or water spray. |
| Fire and Explosion Hazard: | Toxic gases (including carbon monoxide) are given off during combustion. |
| Special Protective Equipment for Firefighters: | In confined spaces or for large fires, firefighters should wear a Self-Contained Breathing Apparatus (SCBA) which meets appropriate standards operated in positive pressure mode, and full turnout gear. Wear suitable skin protection (gloves and spectacles or masks). |

For Flammability Properties - refer to Section 9.

6. Accidental Release Measures

Use personal protective equipment recommended in Section 8. Prevent material from spreading and entering drains or watercourses. Clean up spilt material with suitable equipment (e.g. cloth, mop, absorbent) and dispose of saturated absorbent or cleaning materials appropriately. Store recovered material in suitable container.

Clean the area since the product may present a slip hazard.

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7. Handling and Storage

Handling: Wear suitable protective equipment (refer to Section 8). Handle away from sources of ignition. Handle carefully to avoid small spills.

Storage: Store in sealed containers, in a cool, well-ventilated area, away from sources of ignition.

8. Exposure Controls/Personal Protection

Exposure Limits:

| Ingredient | ACGIH - TLV | OSHA - PEL | Occupational Exposure Limits EH40 (UK) |
|------------|----------------|----------------|--|
| None | Not applicable | Not applicable | Not applicable |

Personal Protection:

Engineering Measures: Area where the product is to be handled must be fully ventilated. Provide handwash and eye-wash facilities. Use explosion-proof instruments and take anti-static electricity measures for facilities.

Respiratory Protection: Not required under normal operating conditions.

Hand/Skin Protection: Wear rubber gloves.

Eye/Face Protection: Wear safety glasses/goggles.

Hygiene Measures: Practice good workplace hygiene. Do not eat or smoke when handling. Wash hands after handling and before eating.

Other/General Protection: Wear anti-static long-sleeve working clothes.

9. Physical and Chemical Properties

| | | | | |
|----------------------------|----------------------------------|------------------------|-------------------|-------|
| Appearance and Odour | Pale yellow liquid, slight odour | Boiling Point | No data available | °C/°F |
| pH (as supplied) | No data available | Freezing Point | No data available | °C/°F |
| Solubility in Water | Insoluble | Auto Ignition | 282/540 | °C/°F |
| Volatile Content by Volume | No data available | Flash Point | 235455 | °C/°F |
| Specific Gravity | 0.903 to 0.906 | | | |
| Vapour Pressure (mbar) | No data available | Vapour Pressure (Torr) | No data available | |

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10. Stability and Reactivity

Stability: Stable under normal conditions of handling.

Material/Conditions to Avoid: Strong oxidising agents, heat and sources of ignition.

Hazardous Decomposition: Toxic gases (including carbon monoxide) are given off during combustion.

Hazardous Polymerisation: No data available.

11. Toxicological Information

For a comprehensive description for the various toxicological (health) effects which may arise if the user comes into contact with the substance or preparation, refer to Section 2 Hazards Identification.

Animal data:

LD50 value: >70 ml/kg (C16).

LC50 value: No data available.

Carcinogenicity:

No known carcinogenic effects.

12. Ecological Information

No data available.

13. Disposal Considerations

The product and its packaging must be disposed of in accordance with local and national regulations.
The product can be disposed of by burning, but only by a licensed waste contractor.

14. Transport Information

This product is not classified as dangerous under transport regulations.

| PARAMETER | EUROPEAN | CANADIAN TDG | UNITED STATES DOT |
|-----------------------|----------------|----------------|-------------------|
| Proper Shipping Name | Not applicable | Not applicable | Not applicable |
| Hazard Class | Not applicable | Not applicable | Not applicable |
| Identification Number | Not applicable | Not applicable | Not applicable |
| Shipping Label | Not applicable | Not applicable | Not applicable |

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15. Regulatory Information

European Regulatory Information

This product has been classified in accordance with EU Regulation No 1272/2008 (as amended) on the Classification, Labelling and Packaging of Substances and Mixtures.

Classified as dangerous to supply: No.

Risk Phrases: Not applicable.

Safety Phrases: Not applicable.

Symbols: None.

United States Regulatory Information

All materials contained in this product are on the US Toxic Substances Control Act (TSCA).

SARA TITLE III - SECTION 313 SUPPLIER NOTIFICATION:

This product does not contain toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 and 40 CFR Part 372.

California Proposition 65: This product does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.

Canadian Regulatory Information

WHMIS Classification: Not Classified.

16. Other Information

This MSDS is compiled in accordance with ANSI Z400.1 and Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Sources of information for this data sheet:

- Lion Corporation "Lion Diffusion Pump Oil S" Chemical Substances Safety Data Sheet. Date prepared: May 20 2003.



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Glossary:

ACGIH - American Conference of Governmental Industrial Hygienists; ANSI - American National Standards Institute; Canadian TDG - Canadian Transportation of Dangerous Goods; CAS - Chemical Abstracts Service; Chemtrec - Chemical Transportation Emergency Center (US); EEC - European Economic Community; EH40 (UK) - HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA - Emergency Planning and Community Right-to-Know Act; EU - European Union; HMIS - Hazardous Material Information Service; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OSHA - Occupational Safety and Health Administration, US Department of Labour; PEL - Permissible Exposure Limit; SARA (Title III) - Superfund Amendments and Reauthorization Act; SARA 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self-Contained Breathing Apparatus; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; US DOT - US Department of Transportation; WHMIS - Workplace Hazardous Materials Information System.

Revisions:

Nov. 2008 - Data Sheet updated to reflect the latest supplier safety information.

June 2010 - Data Sheet updated to reflect current regulatory information.

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