

INTRODUCTION

Apiezon L grease has been specially developed for vacuum use, but is also extensively used for non-vacuum purposes in a variety of industrial and scientific applications.

KEY FEATURES

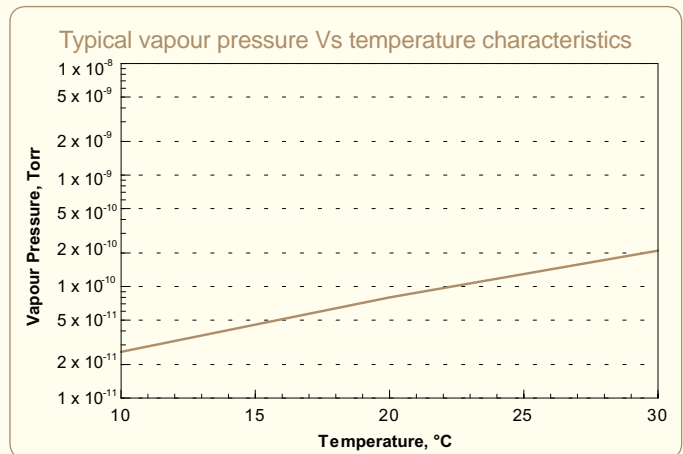
- Very high vacuum range
- Ambient temperatures
- Radiation resistant
- Added cushioning
- Excellent lubricant

ULTRA HIGH VACUUM

L grease has the best vapour pressure properties of all of the Apiezon range of greases and can be used in the ultra high vacuum range. Full information of the vapour pressures of L grease over its working temperature range can be seen in the graph opposite.

TYPICAL PROPERTIES

Dropping point – ASTM.D 566-02	42 – 52°C
Working temperature range	10 – 30°C
Vapour pressure @ 20°C	7 x 10 ⁻¹¹ Torr
Relative density @ 20°C	0.896
Radiation resistant	Yes
Outgassing Characteristics	
ASTM.E 595-93(2003)e1	
TML	<1%
CVCM	<0.1%
Lubricity 4 Ball Test	
ASTM.D 2596-97 (2002)e1	150kg
Viscosity of molten grease	
@ 50°C	766cSt
@ 100°C	62.3cSt
Coefficient of expansion per °C	
Over 20°C – 30°C	0.00076
Thermal Conductivity @20°C	0.202 w/m°C
Volume resistivity	1.2 x 10 ¹⁶ Ohm/cm
Permittivity	2.3
Loss tangent	<0.0001
Surface breakdown at flashover	24kV
Electric strength	730V/mil



AMBIENT TEMPERATURES

L grease is generally used at ambient temperatures. If you require grease for use at higher temperatures, Apiezon AP101 or H greases may well be suitable for your application.

SILICONE FREE

Being hydrocarbon based, Apiezon greases do not suffer from the problems of “creep” or “carry over” which are traditionally associated with silicone greases. This benefits scientific users because the risk of sample contamination and consequently the risk of interference in analytical techniques is avoided.

SAFETY DATA

PRODUCT NAME: Apiezon L Grease

PRODUCT CODE: **A-APG-TYPEL**

1 COMPOSITION/INFORMATION ON INGREDIENTS

Hydrocarbon grease.
No hazardous ingredients.
CAS Nos 8012-95-1.

2 HAZARD INFORMATION

This product is not classified as hazardous.

3 FIRST AID MEASURES

EYES: Irrigate with copious quantities of water.
SKIN: None envisaged.
INHALATION: None envisaged.
INGESTION: Do not induce vomiting. Seek medical attention.

4 FIRE FIGHTING MEASURES

Suitable extinguishing media:
• Carbon dioxide, dry powder, foam or water fog.
• Do not use water jets.
Special exposure hazards:
• None.
Special protective equipment:
• None.

5 ACCIDENTAL RELEASE MEASURES

Personal precautions:
• Spilt product constitutes a slip hazard.
Environmental precautions:
• None.
Decontamination procedures:
• Place in containers. See para 12 re disposal.

6 HANDLING AND STORAGE

Handling:
• No special precautions required.
Storage:
• No special precautions required.

7 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering control measures:
• None required.
Personal protection:
• Wash hands after use.
• Avoid prolonged exposure.

8 PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Semi solid
Colour	Yellow
Odour	None
Melting Point	42°C to 52°C
Flash Point	>200°C
Autoignition Point	>250°C
Explosive Limits	Not determined
Relative Density @ 20°C	0.896
Water Solubility	Insoluble

9 STABILITY & REACTIVITY

Stability	Will not polymerise
Conditions to avoid	Temp > 120°C
Materials to avoid	Strong oxidising agents
Hazardous Decomposition products	None known

10 TOXICOLOGICAL INFORMATION

Based on the product's components:
Oral LD50 (rat) >2g/kg
Dermal LD50 (rabbit) >2g/kg

Acute Health Effects:

EYES: May cause transient irritation.
INHALATION: Low volatility makes inhalation unlikely.
INGESTION: May cause nausea, vomiting and diarrhoea.

Chronic Health Effects:

SKIN: Repeated and prolonged skin contact may cause skin disorders.

11 ECOLOGICAL INFORMATION

Environmental: When used and/or disposed of as indicated no adverse environmental effects are foreseen.
Mobility: Non-volatile/ Insoluble in water.
Degradability: Slowly biodegradable in aerobic conditions.

12 DISPOSAL CONSIDERATIONS

Product and packaging must be disposed of in accordance with local and national regulations. May be incinerated.

13 TRANSPORT CLASSIFICATION

Not classified as hazardous for transport by air, sea, road or rail.

14 REGULATORY INFORMATION

All chemical substances in this material are included on the TSCA Inventory of chemical substances.