

INTRODUCTION

Apiezon M 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

- High vacuum range
- Ambient temperatures
- Radiation resistant
- Added cushioning
- Excellent lubricant

HIGH VACUUM

M grease has good vapour pressure properties and can be used in the high vacuum range. Full information of the vapour pressures of M grease over its working temperature range can be seen in the graph opposite.

TYPICAL PROPERTIES

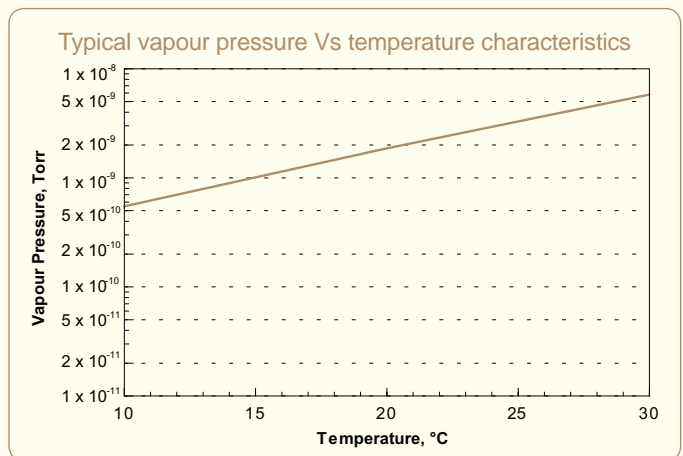
Dropping point – ASTM.D 566-02	40 - 48°C
Working temperature range	10 – 30°C
Vapour pressure @ 20°C	1.7×10^{-9} Torr
Relative density @ 20°C	0.894
Radiation resistant	Yes
Outgassing Characteristics	
- ASTM.E 595-93(2003)e1	
TML	n/a
CVCM	n/a
Lubricity 4 Ball Test	
ASTM.D 2596-97 (2002)e1	140kg
Coefficient of expansion per °C	
Over 20°C – 30°C	0.00075
Thermal Conductivity @20°C	0.192 w/m°C
Volume resistivity	2.6×10^{16} Ohm/cm

AMBIENT TEMPERATURES

M 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 M Grease

PRODUCT CODE: **A-APG-TYPEM****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	40°C to 48°C
Flash Point	>200°C
Autoignition Point	>250°C
Explosive Limits	Not determined
Relative Density @ 20°C	0.894
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.