

**INTRODUCTION**

Apiezon H grease is the ideal choice grease for use at higher temperatures in a wide variety of applications in both science and industry.

**KEY FEATURES**

- High temperature
- Thermally conducting
- Good “stiction”
- Low to medium vacuum range
- Silicone free

**HIGHER TEMPERATURES**

H grease can be used over a wide range of temperatures from -10 to +240°C, while optimum consistency is retained at between +10 and +110 °C.

H grease is relatively stiff grease which does not melt, but in fact becomes stiffer as the temperature increases. It is specifically recommended for sealing and lubrication in high temperature applications, but not for highly stressed bearings.

**THERMALLY CONDUCTING**

H grease is a filled hydrocarbon grease which exhibits excellent heat transfer properties.

Allowing heat to conduct away from a site of operation, H grease will reduce the danger of overheating and hence will limit the risk of damage to heat sensitive components.

**TYPICAL PROPERTIES**

Working temperature range	-10 – 240°C
Dropping point – ASTM.D 566-02	Does not melt
Vapour pressure @ 20°C, Torr	$1.7 \times 10^{-9}$ Torr
Relative density	0.918
Thermal conductivity @ 20°C,	0.216w/m.°C
Specific heat @ 25°C,	1.7J/g
Lubricity 4 Ball Test	
ASTM.D 2596-97(2002)e1	250kg
Outgassing Characteristics	
ASTM.E 595-93(2002)e1	
TML	<1%
CVCM	<0.1%

**STICKING POWER**

H grease is a very tenacious grease conferring excellent cohesive strength. With H grease, gone are the days of loose fitting glassware and mated joints working loose.

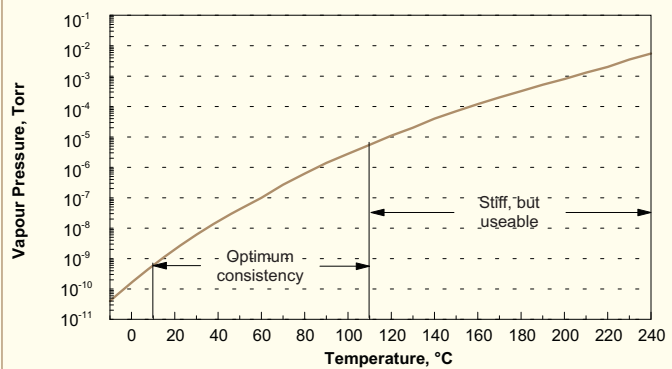
“Stiction” power not only makes H grease ideal for use with laboratory glassware, but combined with properties of high thermal conductivity, it is the perfect choice for the electronics and space industries where heat sink media require adhesion.

**“GETTERING” ACTION**

H grease is manufactured from a unique feedstock containing a high proportion of branched and unsaturated hydrocarbons. These complex structures give Apiezon H grease a very high molecular weight and consequently strong powers of absorption, particularly for other hydrocarbon molecules. Strong absorption properties ensure that Apiezon H grease has powerful “gettering” action, i.e. the power to absorb greasy or chemical impurities on metal and glass surfaces. This is of value in the electronics industry where scrupulous cleanliness is required.



Typical vapour pressure Vs temperature characteristics



**SAFETY DATA**

PRODUCT NAME: Apiezon H Grease

PRODUCT CODE: **A-APG-TYPEH**

**1 COMPOSITION/INFORMATION ON INGREDIENTS**

Hydrocarbon grease  
No hazardous ingredients  
CAS Nos 8012-95-1, 68953-58-2

**2 HAZARD INFORMATION**

This product is not classified as hazardous.

**3 FIRST AID MEASURES**

EYES: Irrigate with copious quantities of water.  
SKIN: Wash with soap and water.  
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.  
• Avoid contact with eyes.  
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.  
• For prolonged or repeated skin contact gloves are recommended.

**8 PHYSICAL AND CHEMICAL PROPERTIES**

Physical State	Semi solid
Colour	Brown
Odour	Faint oily
Melting Point	Does not melt
Flash Point	>260°C
Autoignition Point	>320°C
Explosive Limits	Not determined
Relative Density @ 20°C	0.918
Water Solubility	Insoluble

**9 STABILITY & REACTIVITY**

Stability	Will not polymerise
Conditions to avoid	Temp > 250°C
Materials to avoid	Strong oxidising agents
Hazardous Decomposition products	Trace amounts of polycyclic hydrocarbons

**10 TOXICOLOGICAL INFORMATION**

Based on the products 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.