



## Product Data

# NUCLEOL G121

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### ***Radiation Resistant Grease***

#### DESCRIPTION

Castrol Nucleol G121 is a radiation resistant grease based upon a high viscosity mineral oil with an inorganic thickener system, which gives outstanding thermal and radiation stability.

#### APPLICATION

Castrol Nucleol G121 also provides a high level of corrosion protection for components exposed to hostile environments. Due to the high viscosity of the base oil of Nucleol G121 it gives good performance in low speed bearings but is not suitable for use at moderate or high speeds. Nucleol G121 is ideally suited for the lubrication of control rod mechanisms.

Nucleol G121 comfortably exceeds the UKAEA Schedule I requirements for radiation resistance and is fully approved for use within nuclear installations.

#### FEATURES

- ◆ Stable at high temperatures
- ◆ Stable at high radiation doses
- ◆ Very low volatility

#### BENEFITS

- ◆ Long life at high temperatures
- ◆ Long life at high radiation doses
- ◆ Long life at high temperatures
  
- ◆ Provides maximum corrosion protection for equipment during storage and in humid conditions, such as those encountered during reactor commissioning



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### TYPICAL PHYSICAL CHARACTERISTICS

Appearance	Amber/brown, soft grease
Worked Penetration	265
Drop Point, °C	Indefinite
Base Oil Viscosity @ 40°C, cSt	475
Thickener Type	Inorganic
Radiation Stability (after 10 <sup>9</sup> rads)	
Penetration Change	+56
Drop Point Change, °C	NIL
Loss by Evaporation (modified ASTM D972)	
After 400 hrs at 150°C with CO <sub>2</sub> flow of 1 litre/min	1.5% Loss

Nucleol G121 meets the Schedule I volatility limit of 4% after 400 hrs at 150°C with CO<sub>2</sub> flow of 1 litre/min.

Health and Safety information sheets are available for all Castrol products from the address below:  
**Castrol (U.K.) Limited, Pipers Way, Swindon, Wiltshire SN3 1RE, England, Telephone:  
Orders/Enquiries (08459)645111, Technical Enquiries (01793)452111, Fax (01793)486083**

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