



# Shell Gadus S5 V460KP 1.5

- Heavy-duty protection
- Long service life
- Lithium-calcium complex

*Advanced synthetic grease for wind turbines*

Shell Gadus S5 V460KP is a specialised wind turbine grease, designed to perform in demanding applications and severe operating conditions. Shell recognises that reliability is paramount, especially considering the logistical, safety and cost considerations for maintenance on installed turbines. Therefore Shell Gadus S5 V460KP is formulated to offer an impressive combination of component protection and long service life, whatever the climate or weather.

## DESIGNED TO MEET CHALLENGES

### Performance, Features & Benefits

- **Outstanding protection from wear linked to heavy loads and vibration**

With high base oil viscosity and novel additive technology, this product demonstrates excellent load-carrying performance, even in dynamic loading conditions. Shell Gadus S5 V460KP also offers good resistance to false brinelling and fretting wear.

- **Excellent anti-corrosion performance**

Shell Gadus S5 V460KP is designed for use in hostile outdoor conditions, including coastal and offshore locations. The product offers a very high degree of protection to components exposed to extreme wet conditions and salt water corrosion.

- **Reliable lubrication even in extreme cold conditions**

Shell Gadus S5 V460KP is highly suitable for use in all ambient operating temperatures, including arctic winter. The product has excellent low temperature pumpability and low temperature torque, even at -40C.

- **Long effective life**

Shell Gadus S5 V460KP performs effectively for extended periods, due to the combination of special thickener chemistry and synthetic base oil, and so offers the potential to reduce grease consumption.

### Main Applications



- Shell Gadus S5 V460KP is part of Shell's high-performance range of wind turbine greases. The product is primarily designed for lubrication of turbine main and yaw bearings, and is suitable for use in blade bearings as part of a simplified maintenance approach. Alternatively, Shell Gadus S5 V460KP can be used alongside Shell Gadus S5 V110KP, a specialized blade bearing grease.
- Shell Gadus S5 V460KP can be reliably used in equipment with a centralized lubrication system, even in extreme cold climates.

### Specifications, Approvals & Recommendations

- For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Help Desk.

### Typical Physical Characteristics

Properties			Method	Shell Gadus S5 V460KP 1.5
NLGI Consistency				1.5
Colour				Light Brown
Soap Type				LiCaCx
Base Oil Type				Fully Synthetic
Kinematic Viscosity	@40°C	cSt	ASTM D445	460

Properties			Method	Shell Gadus S5 V460KP 1.5
Cone Penetration Worked	@25°C	0.1mm	ASTM D217	295
Dropping Point		°C	IP 396	250
Emcor Rust Test			IP 220	0/0

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

### Health, Safety & Environment

- **Health and Safety**

Shell Gadus S5 V460KP 1.5 is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from [www.epc.shell.com](http://www.epc.shell.com)

- **Protect the Environment**

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

### Additional Information

- **Advice**

Advice on applications not covered here may be obtained from your Shell representative.

- **Operating Temperature**

Operating temperature range -40°C to 150 °C