Technical Data Sheet

Formerly Known As: **Shell Naturelle S5 Grease V120P 2**

Shell **PANOLIN** *S5 Grease EAL V120P 2*

- EU Ecolabel Certified
- USA EPA VGP compliant
- Synthetic

Advanced Synthetic Biodegradeable Extreme Pressure Grease

A fully synthetic biodegradeable grease for use in applications where environmental acceptability is required. This grease is based upon a lithium hydroxystearate soap thickener and is fortified with extreme pressure, anti-oxidant, anti-wear and anti-rust additives.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Good oxidation and mechanical stability**

  Resists the formation of deposits caused by oxidation at high operating temperatures and maintains consistency, reducing leakage.

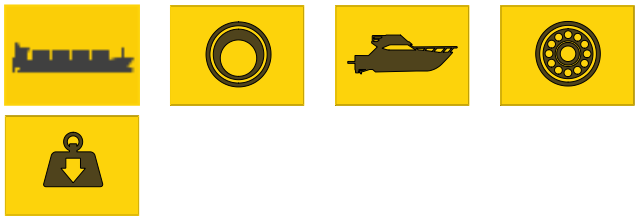
- **Good corrosion resistance characteristics**

  Effective protection in hostile environments.

- **Lower Environmental Impact**

  Recommended for use in environmentally sensitive areas: An 'environmentally acceptable lubricant' as defined by the USA EPA 2013 Vessel General Permit and offers reduced impact of leak or accidental spillage into the environment when used in marine environments compared to conventional mineral oils. Readily biodegradable - biodegraded by over 60% after 28 days in the OECD 301 B carbon dioxide evolution test. Low Ecotoxicity - Classified as 'not harmful' to bacteria, algae, freshwater and marine invertebrates, and fish when tested as water-accommodated fractions (WAFs) according to OECD and EPA test guidelines.

Main Applications



- Plain and rolling element bearings and general industrial lubrication.
- Operation over the temperature range -35°C to 100°C for bearings operating at 75% of the maximum rated speed (can withstand up to 120°C intermittently).

Specifications, Approvals & Recommendations

- EU Ecolabel: NL/027/019
- Meets USDA Bio-preferred programme
- Meets requirement of United States Environmental Protection Agency's (EPA) 2013 vessel general permit (VGP)
- Rolls Royce Marine
- Becker Marine Systems

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

Typical Physical Characteristics

Properties			Method	Shell PANOLIN S5 Grease EAL V120P 2
NLGI Consistency				2
Soap Type				Lithium Hydroxystearate
Base Oil (type)				Ester
Kinematic Viscosity	@40°C	cSt	IP 71 / ASTM D445	120
Kinematic Viscosity	@100°C	cSt	IP 71 / ASTM D445	19
Cone Penetration, Worked	@25°C	0.1mm	IP 50 / ASTM D217	280
Dropping Point		°C	IP 132 / ASTM D566 - 76	180

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**

  This product 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 Safety Data Sheet, which can be obtained from https://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.

- **Additional Technical Advice**

  The information and guidance offered for use of Shell PANOLIN products is based on experience and understanding gained through the development and manufacturing of lubricants. The performance of the products can be influenced by a number of variables, not limited to, contamination, operating temperature, equipment application, external environment and material type. It is recommended that you discuss application with both your OEM and local Shell technical representative before the product is used. Advice given is non binding and Shell will not be held liable for any consequence as a result of or through misuse of the product.

- **Re-greasing Intervals**

  For bearings operating near their maximum recommended temperatures, re-greasing intervals should be reviewed.