Technical Data Sheet

Formerly Known As: **Naturelle S2 Wire Rope Lubricant A**

Shell **Naturelle** *S2 Grease A600P 1.5*

- US EPA VGP COMPLIANT

Environmentally Acceptable Synthetic Ester Wire Rope and Open Gear Lubricant

Shell Naturelle S2 Grease A600P 1.5 is an advanced ester-based grease formulated with a carefully selected additive system to deliver effective corrosion protection and high load-carrying performance. It offers excellent resistance to water wash-off, supported by strong adhesion properties. The product is particularly well suited for use on open gears, wire ropes, and cables. Meeting the requirements for Environmentally Acceptable Lubricants (EAL) as defined by the US EPA 2013 Vessel General Permit (VGP).

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Excellent resistance to wash off**

  Excellent adhesion properties results in reduced lubricant consumption and reduced labour time for re-application

- **Extreme pressure and anti wear**

  Selected additives ensure longer component life and reduced wear

- **Excellent Corrosion Protection**

  Formulated to include special anti corrosion additives to offer the best possible protection from corrosion, even under the influence of seawater

- **Lower Environmental Impact**

  An ‘environmentally acceptable lubricant’ as defined by the US EPA 2013 Vessel General Permit (VGP).

  Offers reduced impact of leaks or accidental spillage into aquatic and marine environments compared to conventional mineral grease thanks to their higher biodegradability* (*Publication EPA 800-R-11-002)

  At least 75% by mass of this grease's components are readily biodegradable, achieving a passing result of ≥60% according to OECD 301B.

  Particularly suited for applications mandating compliance with US EPA 2013 Vessel General Permit (VGP) requirements for environmentally acceptable lubricants.

- **Operating Temperature Range**

  Operation over the temperature range -20°C to 100°C

- **Dispensing**

  Shell Naturelle S2 Grease A600P 1.5 can be dispensed through standard lubrication equipment or by brush

Main Applications



- Wire ropes and cables, fair leads, crane and davit wires
- Open gears, and low speed plain bearings (less than 500 rpm)
- Rudder stocks, rudder trunk voids, propeller caps
- Dredger bucket wheels

  Can be used in a variety of equipment that requires the lubricant to have good water resistance and load carrying ability

Specifications, Approvals & Recommendations

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

Typical Physical Characteristics

Properties			Method	Shell Naturelle S2 Grease A600P 1.5
NLGI Consistency				1 - 2
Colour				Straw
Soap Type				Calcium
Base Oil Type				Renewable ester
Base Oil Kinematic Viscosity	@40°C	cSt minimum	IP 71 / ASTM D445	550
Base Oil Kinematic Viscosity	@100°C	cSt minimum	IP 71 / ASTM D445	80
Cone Penetration, Worked	@25°C 0.1mm		IP 50 / ASTM D217	290
Dropping Point		°C	IP 132 / ASTM D566 - 76	120
Water Resistance	3 hours @ 90°C		DIN 51807	0 - No change

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 Naturelle S2 Grease A600P 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 Safety Data Sheet which can be obtained from https://www.epc.shell.com

- **Protect the Environment**

  When used in marine applications, ensure used fluids are disposed of in accordance with IMO MARPOL 73/78 Annex V (as amended) regulations to a Port waste reception facility. For non-marine applications, take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Additional Information

- **Additional Technical Advice**

  The information and guidance offered for use of Shell Naturelle 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 and fluid recommendations 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 fluid.

- **Advice**

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