Shell GadusRail *S4 WFB 000*

Technical Data Sheet

- EU Ecolabel Certified: NL/027/019
- Swedish Standard SS 15 54 70
- Biodegradability Profile: See Specifications and Approvals

Environmentally Acceptable Synthetic Ester Railway Wheel Flange Grease

Shell GadusRail S4 WFB 000 is a synthetic ester based grease designed for usage in onboard lubricators in the railway business requiring a thin grease meeting EN 16028 requirements. Biodegradable as per the requirements of EU Ecolabel.
Good anti-wear and anti-corrosive properties are combined with pump ability in a wide range of temperatures.
Shell GadusRail S4 WFB 000 is building up an adhesive lubricating coating on the wheel flange.

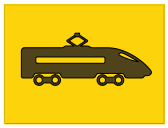
DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- Good anticorrosive properties
- Favorable flow property at low temperatures
- Highly adhesive coating
- Compatible with standard seals and painting, as normally used with mineral oil based products
- Biodegradability profile:

  Biodegradable as per the requirements of EU Ecolabel. At least 80% by mass of this grease's components are ready biodegradability, achieving a passing result of ≥60% according to OECD 301B.

Main Applications



- On board lubrication of trams and railways, for electrically or air pressure operated lubricators.
- Nozzle selection according OEM recommendation. Volume range of 10 - 40 mg

Specifications, Approvals & Recommendations

- EU Ecolabel Certified: NL/027/019
- Swedish Standard SS 15 54 70
- Biodegradable as per the requirements of EU Ecolabel

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

Typical Physical Characteristics

Properties			Method	Shell GadusRail S4 WFB 000
NLGI Consistency				000
Colour				Light brown
Soap Type				Ca
Base Oil (type)				Synthetic and vegetable based
Cone Penetration Worked	@25°C	0.1mm	ASTM-D217	445 - 475
Dropping Point		°C	IP 396	140
Low Temp Flow	@-20°C	mbar	DIN 51805	46
DB Ruehr Test	@-30°C	mNm	DBTL 958103	<10
Copper Corrosion		rating	ASTM D4048	1a

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 GadusRail S4 WFB 000 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 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

- **Operating Temperature Range**

  -30°C/+60°C.

- **Advice**

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