

INDUSTRIAL LUBRICANTS & SERVICES LIMITED

Technical Data sheet

ILS WRP 150

Corrosion Preventative Grease for High Voltage Overhead Conductors.

Description

ILS WRP 150 grease is used to prevent corrosion of high voltage overhead conductors manufactured from aluminium, aluminium alloy, or steel wires or a combination of these materials.

Applications

Specifically designed for use with high voltage overhead conductors and exposed power lines manufactured from a combination of aluminium, aluminium alloy and steel components, where high temperatures of up to $150 \,^{\circ}$ C may be encountered and a product meeting the requirements of EN 50326 is required.

Benefits

- Reduces friction between the strands
- Stops Galvanic corrosion and extends conductor life
- Dampens vibration and noise generation during energy transfer
- Suitable for use over a wide temperature range
- Does not crack or flake off at low temperatures
- · Long-term stability

Typical Characteristics

Parameter	Test Method	Typical Properties
Description	Visual	Smooth Brown
Thickener		Inorganic
NLGI Grade	ISO 2137	2 to 2.5
Drop Point	ISO 2176	>240 °C

Performance against EN 50326 Standard – Type A

EN 50326 Standard § - type A	Test	Specification	Results Comments
4 Designation 4.1 Type A		Application without heating Values 20 A 150	Protection grease made of inorganic thickener (soap) and a mix of mineral oils.
<u>6.6 Stability High T°</u> 6.6.2 Oil separation	IP 121	1h at 110℃ = 0,2% max. 1h at 125℃ = 0.2% max. 1h at 150℃ = 0.2% max.	Loss = 0% Loss = 0% Loss = 0%
6.6.3 Oil separation on 3 month (new specification)	IP 121	90 days at 110 ℃< 1.5%	Loss = 0.96%
6.6.4 Dropping point	ISO 2176	110℃ + 20℃ = 130℃	>240 <i>°</i> C
6.7 Penetrability			
6.7.2 / 60 cycles 6.7.2 / no cycle Unworked penetration	ISO 2137 ISO 2137	Average value > 70 (in 1/10 mm at 25℃) No specification (in 1/10 mm at 25℃)	259 Sample value 250 – 270 Average value (< 20% of sample value) 249
6.9 Low T° 6.9.3 Low temperature adherence	6.9.1 - 6.9.2	0,5 mm - 1 h at - 20℃	Adherence to the plate No crevice – No separation

Values given are typical values and do not constitute specifications

EN 50326 Standard § - type A	Test	Specification	Results		
6.11 – Ageing test			Comments		
Ageing Procedure (B2) carried out by Christol Grease and sent to CETIM (Technical Centre of Mechanical Industries) 3 plates and 3 cupels of 500 g introduced into an oven at the following temperatures: -72 h at 70 °C (moisture < 30%) - 24 h at 55 °C (moisture > 90%) - 3 period of 24 h from -20 °C to +55 °C					
Penetrability at 25°C after ageing of the cupels					
Method 6.7.2 - 60 cycles - no cycle (unworked penetration)	ISO 2137 ISO 2137	Average value ± 20% Average value ± 20%	270 258		
6.12 – <u>Corrosion test</u> 6.12.2 Test on plates	EN 50326	7 cycles of 24 h at 40 ℃ Relative humidity > 90% SO2 content = 0,067% followed by saline fog 168 h – water sprinkling 35 ℃ - NaCl = 5%	6.12.2.5 Corrosion performance Complies The evaluation zone is clear from corrosion Cotation > 8		

6.12.3 Tests on wires	6.12.3.1 EN 50326 6.12.3.2 EN 50326	Wire 150 mm - Ø=3,1 mm Bare steel – zinc-coated steel – Al – 3 Alu alloys Layer of product	
	6.12.3.4		6.12.2.5 Corrosion performance
	EN 50326	Fog H2O	Complies
		5 % Nacl - 35℃ - 1000 h	No signs of etching, corrosion or discolouration
	6.12.4.1 EN 50326 6.12.4.2	Wire 75 mm - Ø=3,1 mm Bare steel – zinc- coated steel – Al – 3	
	EN 50326	Alu alloys	Complies
	6.12.4.3 EN 50326	Layer of product	No signs of etching, corrosion or discolouration
		Temperature = 90 ℃ ± 5 ℃ for 24 h into the air	

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