



LUBRICANTS FOR FOOD INDUSTRY

ADDINOL FOODPROOF UNI

15 S, 32 S, 46 S, 68 S, 100 S, 150 S, 220 S, 320 S, 460 S, 680 S, 1000 S

PRODUCT DESCRIPTION

ADDINOL FoodProof UNI ... S are high-performance oils based on PAO. The products are characterised by its neutral smell and light colour.

All ingredients of ADDINOL FoodProof UNI ... S are physiologically harmless and meet the European guidelines, the NSF category H1 as well as the requirements acc. to Kosher and Halal. The ingredients also meet the internationally accepted FDA standards and they are free from allergens acc. to Regulation (EU) No. 1169/2011, annex II.

Application temperatures:

- -40°C up to +120°C: ISO-VG 15, 32, 46 and 68
- -35°C up to +120°C: ISO-VG 100 and 150
- -30°C up to +120°C: from ISO-VG 220

APPLICATION

- Excellent suitability as universal lubricating oil for an application in hydraulic systems, circulating systems, compressors and gears
- Ideal for applications in food, feed, cosmetics as well in pharmaceutical industry where an incidental contact with food cannot be excluded
- Application examples: bottling, packaging, transfer, fabrication plants, small gears, hydraulics, circulating systems, air compressors, fans, centralised lubrication systems, pneumatic service units, also for chains and conveyor belts.

APPROVALS / SPECIFICATIONS

Exceed the requirements for lubricating oils:

- DIN 51517-3 (CLP) from ISO-VG 32
- ISO 12925-1 / ISO 6743-6: (CKC/CKD) CKE, from ISO-VG 32 CSPR / CTPR, ISO-VG 150 to 680
- ANSI/AGMA 9005-F16
- DIN 51524-2 (HLP), ISO-VG 15 to 150
- DIN 51524-3 (HVLP), ISO-VG 32 to 150
- ISO 11158 / EN ISO 6743-4 (HM) ISO-VG 15 to 150
- ISO 11158 / EN ISO 6743-4 (HV) ISO-VG 32 to 150
- DIN 51506 (VDL), ISO-VG 32 to 150

Viscosity grading accordingly:

DIN ISO 3448

Listed and released according to:

- NSF-H1 (see table for registration no.)
- Kosher
- Halal
- 21 CFR 178,3570

REFERENCE POSSIBILITY

Delivery preferably in drums and 20L canisters.

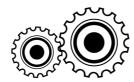
NOTE - The viscosity to be used depends largely on the application, the operating conditions and the manufacturer's instructions for the respective application.

CHARACTERISTICS

- Light colour; neutral in smell and taste, physiologically harmless; NSF-H1 registered
- Efficient EP/AW additivation
- · Reliable corrosion protection

ADVANTAGES AND BENEFITS

- Highly recommended for lubrication points where an incidental contact with food cannot be excluded
- Effective wear protection
- Also usable for higher requirements on the lubricant
- Excellent protection of machine parts and trouble-free operation
- Outstanding protection towards leakages due to a long
 History of the coefficient motorial.











Issue 05/2020

Page 1 of 3

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ADDINOL FOODPROOF UNI

15 S, 32 S, 46 S, 68 S, 100 S, 150 S

SPECIFICATIONS AND TYPICAL PARAMETERS

| Feature | Prüfbedingungen / Einheit | | FoodProof UNI | | | | | | Method |
|---|----------------------------------|------------|---------------|--------|--------|--------|--------|------------|--------------------|
| | | | 15 S | 32 S | 46 S | 68 S | 100 S | 150 S | acc. to |
| ISO viscosity grade | | | 15 | 32 | 46 | 68 | 100 | 150 | DIN ISO 3448 |
| NSF registration number | | | 155758 | 155759 | 155760 | 155761 | 155762 | 155763 | |
| Density | at 15°C | kg/m³ | 827 | 838 | 842 | 845 | 846 | 848 | DIN 51757 |
| Viscosity | at 40°C | mm²/s | 15,1 | 31,3 | 46,0 | 71,6 | 107 | 161 | ASTM D 7042 |
| | at 100°C | mm²/s | 3,6 | 6,0 | 7,9 | 11,6 | 16,1 | 22,8 | |
| Viscosity index | | | 120 | 141 | 143 | 156 | 161 | 169 | DIN ISO 2909 |
| Flash point | coc | °C | 200 | 250 | 260 | 270 | 270 | 270 | DIN EN ISO 2592 |
| Pour point | | °C | -70 | -65 | -60 | -60 | -55 | -50 | ASTM D 7346 |
| Corrosion protection against steel | Methode A/B | corr.level | Bestanden (0) | | | | | | DIN ISO 7120 |
| Corrosion effect on copper | bei 100°C, 3h | corr.level | 1 | | | | | | DIN EN ISO 2160 |
| Scuffing load capacity (FZG) | | load stage | 12 ≥ 12 | | | | | | ISO 14635-1 |
| Ageing behaviour, increase in viscosity at 100°C | after 312h at 121°C | 0/ | ≤ 5 | | | | | | 100 4000 4 |
| | after 312h at 150°C | % | ≤ 6 | | | | | ≤ 6 | ISO 4263-4 |
| Demulsifying ability | at 54°C | Min | 5 | 20 | 10 | 15 | - | - | DIN ISO 6614 |
| | at 82°C | | - | ı | - | - | 10 | 10 | |
| Air separation capacity | at 50°C | Min | < 3 | < 3 | < 5 | < 10 | < 15 | - | - DIN ISO 9120 |
| | at 75 °C | | - | - | - | - | - | < 10 | |
| Foaming characteristics | at 24°C | ml/ml | < 50 / 0 | | | | | ASTM D 892 | |
| | at 93,5°C | ml/ml | < 50 / 0 | | | | | | |
| | at 24°C after 93,5°C | ml/ml | < 50 / 0 | | | | | | |
| Foam and air separation characteristics in the Flender foam test | vol. increase oil-air-mixture | | < 15 < 10 | | | | | ISO 12152 | |

ADDINOL - The Experts for High-Performance Lubricants

We at ADDINOL develop and produce more than 600 high-performance lubricants of the new generation. Among these are automotive lubricants for highest demands and pioneering developments for industrial applications. Our customers all over the world benefit from the high and stable quality of our ADDINOL high-performance lubricants, our know-how and the individual customer advisory service of our competent experts. Our company has world-wide activities. ADDINOL high-performance lubricants are distributed by more than 90 international partners.

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ADDINOL FOODPROOF UNI

220 S, 320 S, 460 S, 680 S, 1000 S

SPECIFICATIONS AND TYPICAL PARAMETERS

| Feature | Test condition / unit | | | Method | | | | |
|--|--|------------------------------|--------------|----------|--------|--------------------|--------|--------------------|
| | | | 220 S | 320 S | 460 S | 680 S | 1000 S | acc. to |
| ISO viscosity grade | | | 220 | 320 | 460 | 680 | 1000 | DIN ISO 3448 |
| NSF registration number | | | 155764 | 155765 | 155773 | 155774 | 155775 | |
| Density | at 15°C | kg/m³ | 850 | 853 | 852 | 861 | 864 | DIN 51757 |
| Viscosity | at 40°C | mm²/s | 231 | 308 | 461 | 619 | 1046 | ASTM D 7042 |
| | at 100°C | mm²/s | 30,8 | 38,8 | 52,8 | 64,2 | 92,4 | |
| Viscosity index | | | 175 | 178 | 179 | 176 | 175 | DIN ISO 2909 |
| Flash point | coc | °C | 270 | 270 | 270 | 270 | 270 | DIN EN ISO 2592 |
| Pour point | | °C | -50 | -50 | -45 | -45 | -35 | ASTM D 7346 |
| Corrosion protection against steel | Methode A/B | corr.level | | | • | DIN ISO 7120 | | |
| Corrosion effect on copper | bei 100°C, 3h | corr.level | | | | DIN EN ISO 2160 | | |
| Scuffing load capacity (FZG) | | load stage | | | | ISO 14635-1 | | |
| Ageing behaviour, increase in viscosity at 100°C | after 312h at 121°C after 312h at 150°C | % | | ≤ | ≤ 6 | ISO 4263-4 | | |
| Demulsifying ability | at 54°C | Min | - | - | - | - | - | DIN ISO 6614 |
| | at 82°C | | 10 | 10 | 10 | 20 | 30 | |
| Air separation capacity | at 50°C | Min | - | - | - | - | - | DIN ISO 9120 |
| | at 75 °C | | < 10 | < 20 | < 20 | < 35 | < 35 | |
| Foaming characteristics | at 24°C | ml/ml | < 50 / 0 | | | < 150 / 50 | • | ASTM D 892 |
| | at 93,5°C | ml/ml | < 50 / 0 | | | < 150 / 50 | | |
| | at 24°C after 93,5°C | ml/ml | < 5 | 0/0 | | < 150 / 50 | | |
| Foam and air separation characteristics in the Flender foam test | vol. increa | se, 1 min, % re, 5 min, % | < 15 < 10 | | | | | ISO 12152 |

The data given in this product sheet represent our current level of knowledge and experience. Due to the various specific application they do, however, not discharge the user from his own examination. The information provided herein may not be used to derive a legally binding warranty of specific properties or the suitability for a certain purpose of application. Detailed security-concerning and toxicological data as well as security instructions for each product can be taken from the corresponding Material Safety Data Sheets (MSDS). High-performance lubricants from ADDINOL are under continuous development. Therefore, ADDINOL Lube Oil GmbH keeps the right to change technical data in this product data sheet without notification. In case of doubt, please do not hesitate to contact our customers' advisory service.