



## 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.

### CHARACTERISTICS

- Light colour; neutral in smell and taste, physiologically harmless; NSF-H1 registered
- Efficient EP/AW additivation
- Reliable corrosion protection
- Neutral towards common sealing materials and paints
- Excellent air and water separation; low foaming tendency

### 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:**

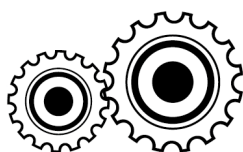
- NSF-H1 (see table for registration no.)
- Kosher
- Halal
- 21 CFR 178,3570

### REFERENCE POSSIBILITY

Delivery preferably in drums and 20L canisters.

### 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 lifetime of the sealing material**
- **Excellent safety against cavitations and foam formation**





# 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 acc. to
			15 S	32 S	46 S	68 S	100 S	150 S	
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/m <sup>3</sup>	827	838	842	845	846	848	DIN 51757
Viscosity	at 40°C	mm <sup>2</sup> /s	15,1	31,3	46,0	71,6	107	161	ASTM D 7042
	at 100°C	mm <sup>2</sup> /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	%	≤ 5						ISO 4263-4
	after 312h at 150°C		≤ 6						
Demulsifying ability	at 54°C	Min	5	20	10	15	-	-	DIN ISO 6614
	at 82°C		-	-	-	-	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, 1 min, % oil-air-mixture, 5 min, %						< 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.



# ADDINOL FOODPROOF UNI

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

### SPECIFICATIONS AND TYPICAL PARAMETERS

Feature	Test condition / unit		FoodProof UNI					Method acc. to
			220 S	320 S	460 S	680 S	1000 S	
ISO viscosity grade			220	320	460	680	1000	DIN ISO 3448
NSF registration number			155764	155765	155773	155774	155775	
Density	at 15°C	kg/m <sup>3</sup>	850	853	852	861	864	DIN 51757
Viscosity	at 40°C	mm <sup>2</sup> /s	231	308	461	619	1046	ASTM D 7042
	at 100°C	mm <sup>2</sup> /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	passed (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					ISO 14635-1
Ageing behaviour, increase in viscosity at 100°C	after 312h at 121°C	%					≤ 6	ISO 4263-4
	after 312h at 150°C		≤ 6					
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	< 50 / 0		< 150 / 50			
Foam and air separation characteristics in the Flender foam test	vol. increase, 1 min, % oil-air-mixture, 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.