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**RIVOLTA F.L.G. MD-2** 

RIVOLTA F.L.G. 2-0 RIVOLTA F.L.G. 3-1 RIVOLTA F.L.G. 4-2 Silicone-grease

Semi-fluid grease for packing machines

Lubricating grease for gears

Lubricating grease for roller and plain bearings

# RIVOLTA F.L.G. HF-2 NSF-H1 listed

Adhesive grease

RIVOLTA F.L.G. lubricating greases are fully synthetic high performance lubricants for the food industry. Our products meet the U.S. demands: guidelines of sec. 21 CFR of FDA regulations. Our product range is qualified by a few numbers of fully synthetic high performance lubricating greases free from mineral oil for almost all grease lubricated applications in the area of the food industry. RIVOLTA F.L.G. MD-2 is a silicone-grease which eases considerably the handling of seals. Beyond this our product is the optimum lubricant for medium rotary distributors in the beverage industry. RIVOLTA F.L.G. 2-0 is the right choice for centralized lubricating systems of packing machines. RIVOLTA F.L.G. 3-1 is offered for the use of grease lubricated gears. RIVOLTA F.L.G. 4-2 is the lubricant for rolling and plain bearings.

RIVOLTA F.L.G. HF-2 is a water resistant adhesive grease for the lubrication of fittings, ring gears and gear couplings.

#### The property...

### will give the following benefits

- physiologically harmless NSF-H1 listed
- the strict demands to food hygienics will be kept. A
  grease leakage must not be followed by production
  stop. Demands of a quality assurance system will be
  fulfilled.
- aging- and oxidation resistance
- excellent long term use of the lubricant. Reduced maintenance on account of extended lubrication intervals, low labour costs.
- good resistance against water
- suitable for use in humid atmospere excellent corrosion protection properties
- high thermal stability
- will guarantee the operational safety of the systems also at high temperatures

RIVOLTA® F.L.G. Lubricating greases Your contribution to food hygienics



## RIVOLTA F.L.G. MD-2 RIVOLTA F.L.G. 2-0 / 3-1 / 4-2 / HF-2

### **NSF-H1** listed

Fully synthetic lubricant free of mineral oil for the use in the food industry.								
Colour: white Odour: neut							our: neutral	
Technical data	Unit of	Norm	F.L.G. MD-2	F.L.G. 2-0	F.L.G. 3-1	F.L.G. 4-2	F.L.G. HF-2	
	measure-							
	ment							
Density	g/ml	DIN 51757	1.3	0.85	0.87	0.88	0.83	
Viscosity of base oil at 40°C	$mm^2/s$	DIN 51562 Part 1	650	100	100	100	280	
NLGI-grade	-	DIN 51818	2-3	-	0/00	2	1-2	
Worked penetration	1/10 mm	DIN/ISO 2137	255-275	500-540	370-410	265-295	290-330	
$\Delta$ PW 100.000	1/10 mm		< 20	< 50	< 30	< 30	< 30	
Decrease of worked penetration								
after 100,000 double cycles								
Operative temperature range	°C		-40/+200	-50/+120	-40/+140	-40/+140	-40/+140	
Dropping point	°C	DIN/ISO 2176	without	-	> 200	> 200	> 200	
Corrosion stability against steel	corrgrade	DIN 51802	-	0/0	0/0	0/0	0/0	
Corrosion effect on copper	corrgrade	DIN 51811	1	1	1	1	1	
Oil separation at 40°C/18h	Vol. %	DIN 51817	< 1	< 1	< 1	< 1	< 1	
Water resistance at 90°C/3h	-	DIN 51807 Part 1	0	-	1	1	1	
FZG special test A/2.76/50	-		-	-	> 12	-	-	
S.R.Vtest*		DIN 51834						
<ul> <li>friction coefficient μ min.</li> </ul>	-		-	0.11	0.11	0.09	0.10	
μ max	-		-	0.12	0.12	0.11	0.11	
• wear rate ball	mm		-	0.51	0.58	0.49	0.55	
disc	μm		-	< 1,5	< 1,5	< 1,3	< 1,3	

\*swing friction wear tester, T = 50°C, F = 200 N, 1,000,000 load changes (5.5 hours)

F.L.G. MD-2	• fittings, e.g. spindles, cocks (glass, plastic, metal) valves, stuffing boxes, ceramic discs
	• guides, plastic/metal, plastic/plastic, ceramic/ceramic and ceramic/plastic
	• sealings, e.g. EPDM
	<ul> <li>as slip additive, sealing material and maintenance material e.g. at freezing and cooling plants, barrel inlet fittings</li> </ul>
	<ul> <li>pressing-in support and draw-up support for o-rings, packings or similar items during mounting</li> </ul>
	lubricant for medium rotary distributors
F.L.G. 2-0	• for the lubrication of e.g. packing machines with grease-/oil-inlet lubrication systems
F.L.G. 3-1	• open and closed gears, e.g. spur gear, bevel gear, helical gear, worm gear pair, axially shifted helical gear
	• denture clutches, levers, pins, joints, guidings metal/metal, e.g. at clam systems of food packing machines
F.L.G. 4-2	• rolling bearings and plain bearings e.g. deep groove ball bearings, angular contact ball bearings, cylindrical roller bearings at chargers, bottle cleaning machines, labelling machines, bottle capping machines, filling machines, cyclones etc
	• levers, pins, joints, denture clutches, guidings metal/metal e.g. at clam systems of food packing machines
F.L.G. HF-2	roller and plain bearings
	• ring gears, gear couplings, fittings

**RIVOLTA F.L.G. MD-2** is a grease based on silicone and free of mineral oil. Our product excels by a very good resistance against cold and hot water, disinfection and cleaner solutions. A test of the compatibility with beer froth of the examination and research institute Weihenstephan for brew technics can be provided.

This text contains facts and statements and is determined with our best knowledge and will be checked continuously. These statements are depending - among other reasons - on experiences gained in the industry. We only pass them on without liability. Before using our products you should test the applicability and you should convince yourself about the satisfactory performance. Our application examples and suggestions should not request to violate patent rights.