



John Deere Merchandise – Maintenance Fluids



JOHN DEERE

John Deere Maintenance Products



Our reputation is in our Engines, Transmissions, & Equipment

- Competitive fluids are for general markets and on-road
- We set the standard for our engines and develop or maintenance products for our off-road specifications
- Provide a better customer experience



Grease

Why use a Grease?

Where lubricating oil would not stay in position

- To decrease dripping, spattering & leakage of lubricants
- To seal out contaminants
- When oil circulation is impractical
- To suspend solid additives
- For intermittent operation
- When sealed for life
- For extreme & special operating conditions

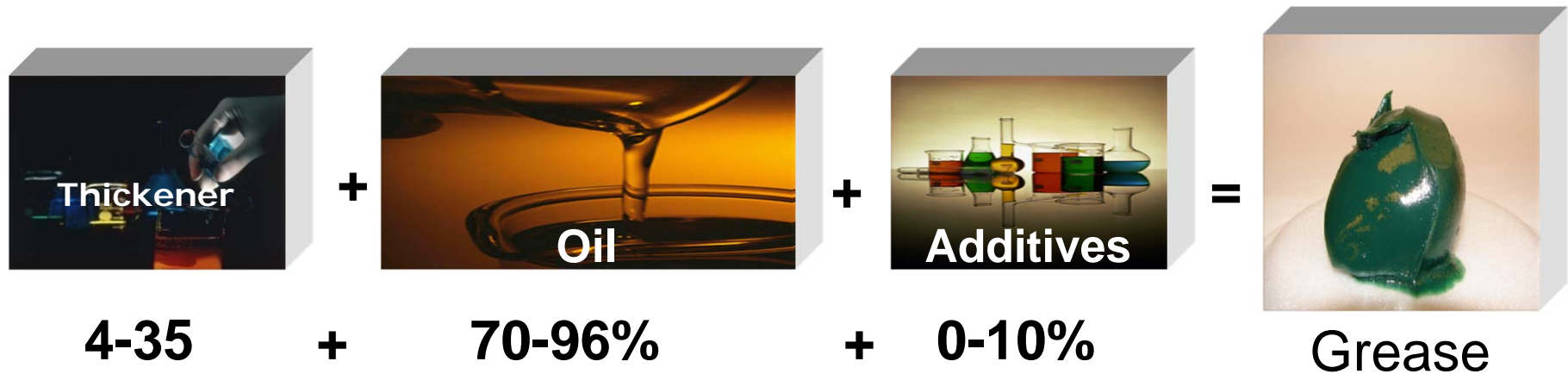


Greased Assembly Trends

- Machine elements are seeing
 - Heavier loads
 - Increased operating temperatures
 - Increased use of sealed for life applications



Components of Grease



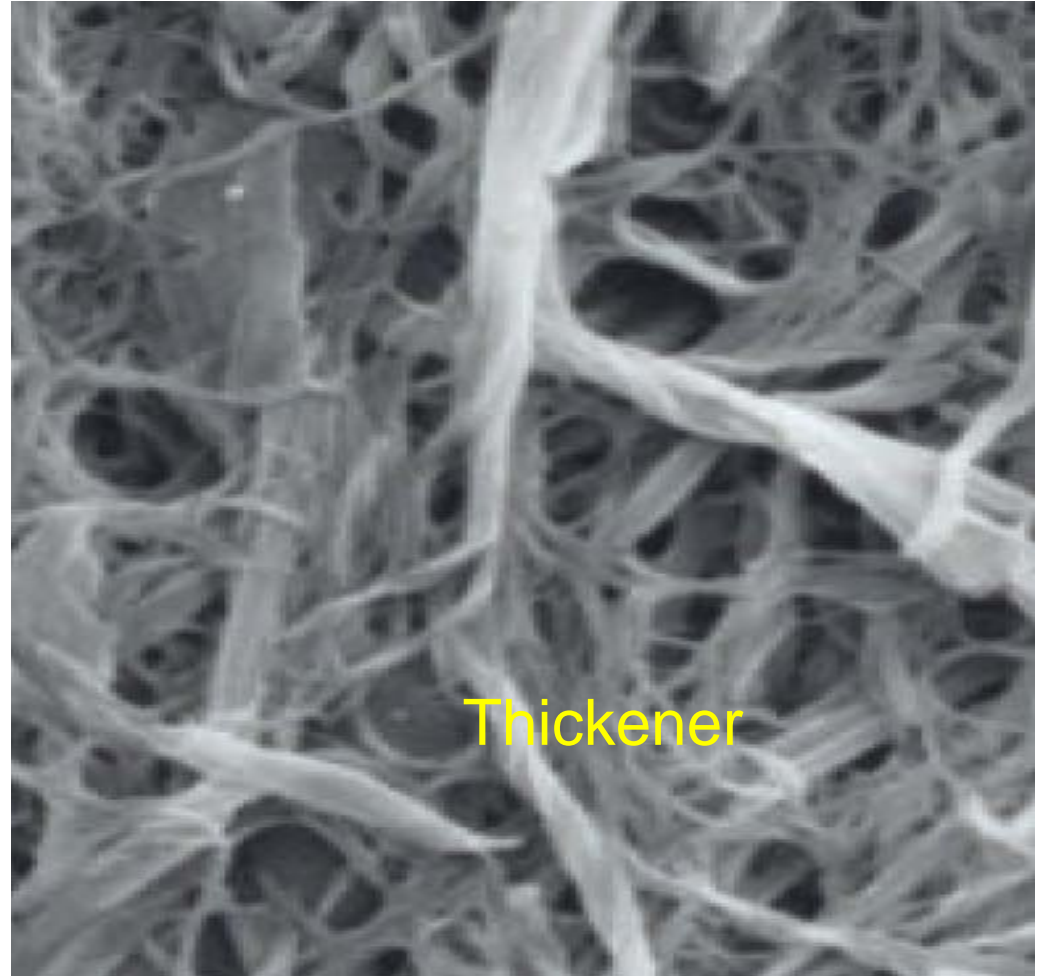
Two Types

- Soap
 - Lithium, Lithium Complex
 - Calcium, Calcium Sulfonate
- Non-soap
 - Polyurea
 - Other

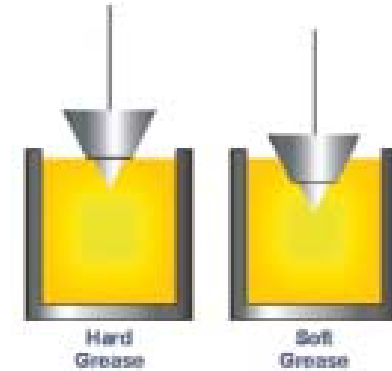
*Note:

- Do not use clay (bentonite) or barium thickened grease
- Compatibility is a concern

Grease thickener can be thought of as a sponge



NLGI Consistency Numbers



NLGI Grade	Worked penetration after 60 Strokes at 25 °C (0.1 mm)	Appearance	Consistency food analog
000	445-475	fluid	cooking oil
00	400-430	semi-fluid	applesauce
0	355-385	very soft	brown mustard
1	310-340	soft	tomato paste
2	265-295	"normal" grease	peanut butter
3	220-250	firm	vegetable shortening
4	175-205	very firm	frozen yogurt
5	130-160	hard	smooth pate
6	85-115	very hard	cheddar cheese

National Lubricating Grease Institute

Multi-purpose Greases

Multi-purpose Grease	14 oz. Cartridge	NLGI no	EP	High Temp	Service Recommendation
SD Polyurea	TY6341	2	Yes	Yes	Common factory fill, High temp, heavy duty applications, exceptional oxidation resistance, GC-LB
HD Lithium Complex	TY24416	2	Yes	Yes	High temp, heavy duty applications, close to SD Polyurea performance, GC-LB
MP Lithium	PT507	2	-	-	Light to medium duty applications
Extreme Duty Synthetic	TY25744	2	Yes	Yes	Incidental food contact, non-staining, GC-LB



Special Purpose Greases

Special Purpose Grease	14 oz. cartridge	NLGI #	EP	High Temp	Service Recommendation
HD Moly	TY6333	2	Yes	Yes	Heavy loads, slow relative movement, shock loading
Water Resistant	TY24425	2	Yes	Yes	Wet conditions, like rice paddy leveling
Corn Head	AN102562	0	Yes	Yes	For low speed gearboxes where oil leakage can be an issue
Golf and Turf Cutting Unit	TY25083	0	Yes	Yes	Equal performance range to Corn Head Grease



TY24425



Grease Summary



- SD Polyurea grease is the top performance grease and is widely used for factory fill applications
- HD Moly grease is used where slow relative movement and shock loading is encountered
- Corn Head grease is used for slower speed gearbox applications
- Follow the operator's manual recommendations
- Compatibility can be a problem
 - If changing greases, it is preferred to remove all of the old grease
 - If the old grease can't be removed, purge as much as possible and grease twice as often until the old grease is out of the assembly.



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