

QUALITY BOOSTS.



High-performance grease packages

X Additin®

QUALITY WORKS.

LANXESS
Energizing Chemistry

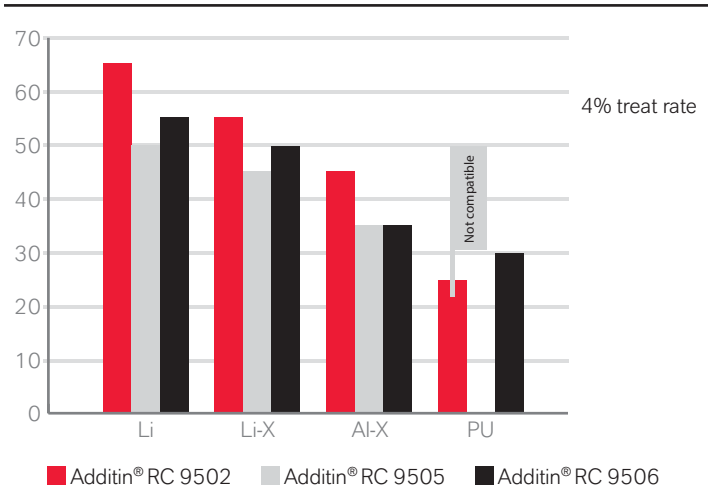
LANXESS GREASE PACKAGES AND THEIR APPLICATIONS

Additin® RC 9502, RC 9505, RC 9506, M95001 High-performance packages for grease

Our grease packages are balanced formulations of single additives and are ideally suited to formulate EP grease. Our packages should be able to run at a minimum of 120°C/140°C in a standard lithium grease. For synthetic greases and/or more stable thickened greases, the maximum temperature will be higher. For low temperature flow properties, the thickener type and base oil is important.

Additin®	Features and benefits
RC 9502	Light color. Designed to provide very high EP performance. Good corrosion inhibition for steel
RC 9505	Dark color. Designed for overall balanced good performance
RC 9506	Light color. Designed to provide very high EP properties Less sensitive to copper corrosion
M 95001	Light brown color, ashless package designed for ester based bio grease and standard greases

Additin® grease packages EP performance in several grease types ASTM D 2509 Timken OK load (lbs)



Characteristics – Additin® grease packages

	Zn	P	S	N	Viscosity at 40°C	Mineral oil content	Application for grease types	
Ash containing							Soap greases	PU greases
Additin® RC 9502	4.5	3.7	15.6	1.1	80	9	Yes	Yes
Additin® RC 9505	5.1	4.5	14.5	0.3	250	21	Yes	No
Additin® RC 9506	3.3	2.4	22.2	0.3	80	15	Yes	Yes
M 10464	6.3	5.3	15.4	–	200	17	Yes	Yes
Ashless								
M 95001		0.9	11		224	0	Yes	Yes

LANXESS GREASE ADDITIVES

A. General purpose

EP additives

Additin® RC 2522	Bright color, very low active, not aggressive to copper
Additin® RC 2545	SIB, light color, high sulfur, low active, not aggressive to copper

EP booster

Additin® RC 2540	Light color, active, aggressive to copper, suitable as EP booster
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Antiwear additives

Additin® RC 3038	Most active ZnDTP, multipurpose: antiwear, EP, secondary antioxidant
Additin® RC 3080	Thermally more stable ZnDTP, multipurpose: antiwear, EP, secondary antioxidant Additional corrosion inhibition properties
Additin® RC 3180	Mineral oil free RC 3080
Additin® RC 3580	MoDTP, same properties as RC 3080, additional friction reducer

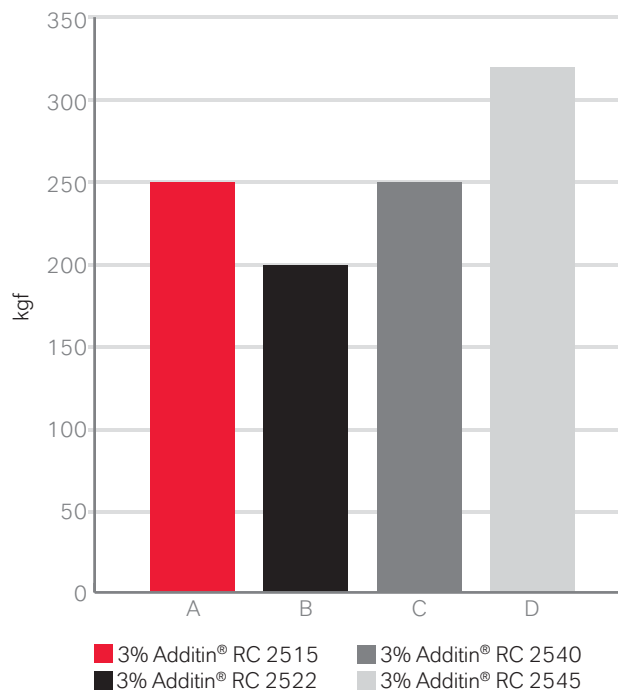
Corrosion inhibitors

Additin® RC 4530	Zn-naphtenate (most common)
Additin® RC 4580	Zn-carboxylate
Additin® RC 4220	Neutral Ca sulfonate

Antioxidants

Additin® RC 7010	TMQ, aminic, most thermally stable antioxidant
Additin® RC 7135	Liquid, aminic, suitable for high temperature applications
Additin® RC 7235	Liquid, phenolic

Additin® grease additives
Sulfur carrier - EP weld load ASTM D 2596
Lithium grease



B. EEL - LuSC listed

EP additives

Additin® RC 2515	Light color, low active, additional lubricity, antiwear, secondary antioxidant properties
Additin® RC 8210/RC 8213	Thermally more stable for high temperature applications
M 82001	Additional yellow metal inhibition

EP booster

Additin® RC 8210/8213	Thermally stable EP booster
M 82001	

Antiwear additives

Additin® RC 3890	Ashless DTP, works best in less polar base oils and thickener. Additional secondary antioxidant
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Corrosion inhibitors

Additin® RC 4803	Ashless
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Yellow metal inhibitors

Additin® RC 8210	DMTD derivative, additional EP properties at higher dosage
Additin® RC 8213	DMTD derivative, additional EP properties at higher dosage

C. EEL and/or H1

Antiwear additives

Additin® RC 3760	Ashless additive, suitable for both EEL and H1 greases
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Corrosion inhibitors

Additin® RC 4820	Ashless, most effective under severe conditions (salt water), suitable for H1 greases
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Yellow metal inhibitors

Additin® RC 8221	Tolytriazole, suitable for EEL greases
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Antioxidants

Additin® RC 7110	BHT, phenolic, less effective at higher temperatures, suitable for H1 greases
Additin® RC 7130	PANA, aminic, suitable for high temperature applications and H1 greases
Additin® RC 7201	Phenolic, suitable for H1 greases
Additin® RC 7215	Phenolic, additional secondary AO properties, suitable for H1 greases

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