

	ALL (Fluids)	ALL (Grease)	PLL (Fluids)	PLL (Grease)	TLL (Fluids)	TLL (Grease)	EEL Biodegradation	EEL Aquatic Toxicity
<b>BASE FLUIDS</b>								
FUNCTIONAL V-5019	100	100	100	100	100	100	99% A, 1% C	100% D
FUNCTIONAL V-5048	100	100	100	100	100	100	99% A, 1% C	100% D
<b>VISCOSITY MODIFIER / POUR POINT DEPRESSANT / VISCOSITY IMPROVERS</b>								
FUNCTIONAL PD-585	6.1	18	24	18	6.1	18	18% A, 82% C	100% D
FUNCTIONAL PD-590	8	25	33	25	8	25	40% A, 60% C	100% D
FUNCTIONAL V-188P2	5.2	5.3	5.3	5.3	5.2	5.3	97% C, 3% A	100% D
FUNCTIONAL V-508	30	30	30	30	30	30	85% A, 15% C	100% D
FUNCTIONAL V-508F	25	25	25	25	25	25	70% A, 30% C	100% D
FUNCTIONAL V-508M	16	25	25	25	16	25	80% A, 20% C	100% D
FUNCTIONAL V-508S	5	10	10	10	5	10	100% C	100% D
FUNCTIONAL V-508A5	20	40	40	40	20	40	75% A, 25% C	100% D
FUNCTIONAL V-515	50	100	100	100	50	100	90% A, 10% C	100% D
FUNCTIONAL V-516	25	100	100	100	45	100	89% A, 11% C	100% D
FUNCTIONAL V-521	28	83	100	83	28	83	82% A, 18% C	100% D
FUNCTIONAL V-521L	62	100	100	100	62	100	92% A, 8% C	100% D
FUNCTIONAL V-584	20	20	20	20	20	20	95% A, 5% C	100% D
<b>GREASE THICKENER</b>								
FUNCTIONAL V-4051		45		45		45	67% A, 33% C	100% D
FUNCTIONAL V-4051F		38		38		38	60% A, 40% C	100% D
<b>ANTIFOAM / DEMULSIFIER / DISPERSANT</b>								
FUNCTIONAL DF-400	9.8		9.8		9.8		52% A, 48% C	100% D
FUNCTIONAL DF-500	20		20		20		95% A, 5% C	100% D
<b>COMPLETE ADDITIVE PACKAGE</b>								
FUNCTIONAL HF-595	2.2	2.2	2.2	2.2	2.2	2.2	80% C	78% E
FUNCTIONAL SGP-563	7.6	23	30	23	7.6	23	34% A, 65% C	99% D

**Categories:**

**PLL** = Partial Loss Lubricant  
**ALL** = Accidental Loss Lubricant  
**TLL** = Total Loss Lubricant

**Examples:**

Gear oils for open gears, stern tube oils, two-stroke oils, oils for temporary protection against corrosion  
Hydraulic fluids, metalworking fluids, gear oils for closed gears  
Chainsaw oils, wire rope lubricants, concrete release agents

**Minimum Required wt% EEL Biodegradation Totals for A/B/C/X**

Product Category:	PLL Fluids	ALL Fluids	TLL Fluids	Any Grease	Explanation of Biodegradation Category
A=	>75	>90	>95	>80	readily biodeg, non-bioaccumulative
B=	≤ 25	≤ 10	≤ 5	≤ 20	inherently biodegradable, non-biodeg
C=	≤ 20	≤ 5	≤ 5	≤ 15	not biodegradable, not bio-accumulative
X=	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1	not biodegradable, bioaccumulative

**Maximum Allowed wt% EEL Aquatic Toxicity Limits for D/E/F/G**

Product Category:	PLL Fluids	ALL Fluids	TLL Fluids	PLL Grease	ALL Grease	TLL Grease	Explanation of Toxicity Category
D=	No limit	No limit	No limit	No limit	No limit	No limit	non-toxic (>100 mg/L toxicity)
E=	≤ 10	≤ 10	≤ 2	≤ 15	≤ 20	≤ 10	harmful (10-100 mg/L acute, 1-10 mg/L chronic)
F=	≤ 0.6	≤ 2.5	≤ 4	≤ 0.6	≤ 1	≤ 0.4	toxic (1-10 mg/L acute, 0.1-1.0 mg/L chronic)
G=	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1	very toxic (<1 mg/L acute, <0.1 mg/L chronic) and apply M factor to wt%