FUNCTIONAL PRODUCTS INC.

Innovative Chemistry for Lubricants

Technical Data Sheet

FUNCTIONAL V-572

Economical Thickener/Tackifier for Biobased Lubricants with Extra Tack

APPLICATION:

FUNCTIONAL V-572 is an enhanced version of **FUNCTIONAL V-515 (**economical thickener/tackifier for biobased lubricants) with additional built-in tackiness that can eliminate the need to add **FUNCTIONAL V-584** tackifier for anti-mist, anti-fling, and tackiness behavior. **FUNCTIONAL V-572** is used to provide adherence in chain or saw oils and drip resistance in other fluids used in environmentally sensitive locations. **FUNCTIONAL V-572** may also be used to provide tack in ester-based cutting oils and metalworking fluids.

FUNCTIONAL V-572 is compatible vegetable oils, biobased PAO, white oils, and blends thereof.

COMPOSITION:

The active component in **FUNCTIONAL V-515** is a polymer selected for its ability to provide high thickening efficiency and shear stable tack. **FUNCTIONAL V-515** is biodegradable under all widely used standards.

Typical Properties	
Specific Gravity	0.93
Lbs per Gallon	7.75
Flash Point	>150°C (300°F)
Kinematic Viscosity	6,000-9,000 cSt at 100°C
Color	Yellow-orange (<4 ASTM)
Biodegradable Content, wt%, Approximate	90%
Shear Stability Index (PSSI), ASTM D6278 (10wt% in Canola)	>50 SSI
20hr KRL Shear Stability, CEC L-45-A-99 (10wt% in Canola)	>90%

TREATMENT LEVEL:

Use 13.5wt% **FUNCTIONAL V-572** in vegetable oil for ISO 100 and 18.5wt% for ISO 150. See more details on next page.

HANDLING:

While warming **FUNCTIONAL V-572** to about 65°C (150°F) may facilitate pumping and handling, extended storage of this or any other vegetable oil derived product at elevated temperatures is not recommended. Safe handling precautions are the same as those to be taken with vegetable oils; see the current Safety Data Sheet. Avoid mechanical shearing during handling and blending to minimize possible loss in tackiness.

Version: 11/12/2025

Functional Products, Inc. 8282 Bavaria Rd. Macedonia, Ohio 44056

Ph: 330.963.3060 Fax: 330.963.3322

Technical Data Sheet

FORMULATION GUIDE:

FUNCTIONAL V-572 is ideal for economically thickening vegetable oils and synthetic esters to make lubricants with low demand on shear stability, i.e. bar and chain oil, rock drill oil, saw guide oils, wireline, and chain oils.

FUNCTIONAL V-584 tackifier is recommended when additional tack is required.

FUNCTIONAL V-572 Treat Rates in Canola Oil (Starting From ISO 32-36)

ISO VG	46	68	100	150	220	320	460	680	1000	1500
wt%	4.5	9.0	13.5	18.5	23	27	41.5	36	41	45.5

Between 0.5% and 1.0% of **FUNCTIONAL PD-585** can inhibit the freezing of the base oil, extending downward the temperature range of the chain saw oil. Minimization of hydrocarbon aerosol escape from mist-lubricated and pneumatic equipment requires approximately 1.0%. Since there are no standardized test methods for tackiness or stray-mist inhibition, the required treatment level is best determined by experimentation.

Recommended **FUNCTIONAL** additive packages are:

- FUNCTIONAL BC-15 – biobased bar & chain oils
- FUNCTIONAL RD-540 – biobased emulsifying rock drill oils
- FUNCTIONAL RD-540CP – biobased demulsifying rock drill oils
- FUNCTIONAL SGP-567 – biobased saw guide oils

Version: 11/12/2025

Functional Products, Inc. 8282 Bavaria Rd. Macedonia, Ohio 44056
Ph: 330.963.3060 Fax: 330.963.3322