

FUNCTIONAL V-4064

Food Grade Grease Polymer in Pellet Form

Application:

FUNCTIONAL V-4064 is a solid polymer for use in greases. Unlike pre-dissolved polymers, the absence of diluent oil permits formulating flexibility and does not alter customary manufacturing processes for grease. Greases made with **FUNCTIONAL V-4064** have increased cohesive tack and better water spray-off. Adding liquid tackifiers like **FUNCTIONAL V-176** or food grade **FUNCTIONAL V-422** will improve adhesive tack.

Composition:

FUNCTIONAL V-4064 is a proprietary polyolefin polymer.

Typical Properties	
Appearance	Translucent to white pellets
Specific Gravity	0.90 – 0.95

Treatment Level:

Typical treatment is 1.0 to 2.0wt% in H1 greases to confer tack and improved water resistance.

FUNCTIONAL V-4064 performs best in low polarity base oils like PAO/mPAO or PAO/PB blends. For more 'polar' white oil or Group III base oils in H1 grease use **FUNCTIONAL V-211**.

Polyisobutylenes like **FUNCTIONAL V-422** (HX-1) or grease polymers like **FUNCTIONAL V-211** (HX-1) can be used in combination with **FUNCTIONAL V-4064** to improve water resistance.

	Base Greases	#2 Calcium Sulfonate, in Group II				#2 Hydrated Calcium, in PAO (H1)		
wt% V-4064		1.0	1.0	2.0	2.0	2.0	3.0	1.4
wt% V-422			0.5		0.5			
wt% V-211								0.6
WSO % (D4049)	70%	35%	24%	20%	13%	34%	17%	18%

Handling:

FUNCTIONAL V-4064 should be incorporated into the batch during saponification or following the addition of the cooling oil to allow sufficient time and high enough temperature for dissolving. A temperature of at least 100-120°C is necessary for blending. Higher temperatures will substantially reduce the time required for dissolution. **FUNCTIONAL V-4064** is non-hazardous material; see the current Safety Data Sheet.



Nonfood Compounds Program Listed
 Category Codes: HX-1 and HX-2
 Registration No. **158171**

This Technical Data Sheet and the Safety Data Sheet contain information believed to be accurate and reliable. No warranty is made, however, to information beyond the control of FUNCTIONAL PRODUCTS INC. The engineering and management personnel of the user are responsible for determining the suitability of this or any product for any specific application, and this information is offered to them for that purpose.

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