



## WHITE MINERAL OILS AND TROUGH GREASES

# BAKERY PRODUCTS

## FOOD-SAFE LUBRICANTS

Penreco® offers multiple FDA-approved options for the baking industry. From divider oils and pan oils to trough greases, we have solutions that keep your bakery running smoothly and effectively. With our commitment to safety, you can have confidence that our products will help you deliver the quality your customers deserve.

### Features

- Meets FDA limitation of 0.15% based on total weight of bakery products
- Non-caloric and easy to clean up
- Less likely to become rancid and develop odors compared to animal or vegetable oils
- GMO and BSE free
- Safe for Kosher, Halal and Vegan use
- Included on the TSCA Inventory

Download a digital copy  
of this brochure.



**penreco**®

138 Petrolia St., Karns City, PA 16041 ■ 800.437.3188 ■ 724.756.0110 ■ [penreco@calumet.com](mailto:penreco@calumet.com)  
To request a sample, visit [penreco.com](http://penreco.com).

 CALUMET

# BAKERY PRODUCTS

## PENPURE™ MINERAL OIL

The baking industry requires a highly refined white mineral oil to function as a release agent in various types of process equipment. A colorless, odorless, tasteless white mineral oil must be used in dough handling machinery where the oil comes in contact with the dough.

Multi-pocket, high-capacity dough dividers, and roll or bun machines require a white mineral oil which is free from other oils or adulterants, and free or nearly free from fluorescence. The application of oil to the pockets, hopper, chutes or knives of a dough divider and on roll machines serves the dual purpose of preventing adhesion of the dough and inhibiting rust formation.

- PenPure™ low and medium viscosity oils are great for bread divider oil, bun machine oil, blade lubricants, rust preventatives, and simple release agents.
- PenPure heavier viscosity oils can be used as high viscosity divider oil, k-machine oil, and used in the manufacture of rolls, buns, and muffins due the high-speed application. Due to their high smoke points, they are also suggested for pan oils to lubricate the pans in which the bread is baked.

## PRODUCT SPECIFICATIONS

	VISCOSITY		SPECIFIC GRAVITY ASTM D4052 @25/25 °C	FLASH POINT ASTM D92		POUR POINT ASTM D97	
	ASTM 2161 SUS @ 100 °F	ASTM D7042 cSt @ 40 °C		°F	°C	°F	°C
<b>MINERAL OIL USP</b>							
PenPure 500	490/650	94.5/124.3	0.8600/0.8780	499	259	6	-14
PenPure 350	350/370	66.7/71.2	0.8570/0.8730	465	241	9	-13
PenPure 300	295/312	57.0/60.0	0.8520/0.8780	466	241	10	-12
PenPure 200	200/225	39.0/43.9	0.8510/0.8760	445	229	4	-16
<b>LIGHT MINERAL OIL NF</b>							
PenPure 150	140/160	27.1/31.2	0.8480/0.8740	403	206	3	-16
PenPure 90	79/89	14.2/16.5	0.8340/0.8660	378	192	-5	-21
PenPure 70	66/80	11.2/14.5	0.8354/0.8719	367	186	-9	-23

All of the above Penpure products are NSF 3H and H1 registered. Manufacturing specifications are confirmed upon request.

*Penreco specializes in Niche Product Blending to meet customer or monograph (including, not limited to USP/NF, EP, JP) specific requirements.*

### Product and Regulatory Information

- Kosher, Halal, and Vegan Certified
- The CAS number for all products listed above is 8042-47-5.
- See Safety Data sheet for additional health, safety and disposal information.
- All PenPure products are inhibited with less than 20 ppm dl-alpha tocopherol (vitamin E).
- Test methods used are current USP/ASTM or validated Penreco equivalents.
- Meets the following FDA Regulations:
  - 21 C.F.R. § 172.878 regarding direct food additives
  - 21 C.F.R. § 178.3620 (a) regarding indirect food additives
  - 21 C.F.R. § 573.680 regarding animal food additives

*Divider oils must be of USP/NF quality, and meet the United States Title 21 Code of Federal Regulations Section 172.878 requirements with the associated limitations.*

# BAKERY PRODUCTS

## TROUGH GREASES

Penreco offers unique trough greases which can be applied to the interior of the bakery troughs, where they then act as a release agent, and permit easier transfer of dough following fermentation. Our trough grease may be applied via spraying equipment or manual methods.

Trough greases are used to coat dough troughs to keep the dough from sticking. Trough greases cling to the side walls of the dough trough more effectively than a mineral oil and will not drip or pool into the bottom of the trough.

## PRODUCT SPECIFICATIONS

	VISCOSITY		API GRAVITY ASTM D1298	POUR POINT ASTM D97°F	COLOR LOVIBOND	CONSISTENCY, USP/PENETRATION
	ASTM D2161 SUS @ 210 °F	ASTM D2983 cPs @ 80 °F				D937 @ 77 °F
Spray Tro-Grees S		1000/2000	32.7	75/100	0.2	340/400
Spray Tro-Grees SS	57.9 (typical)		32.1	95/110	0.3	270/330

Manufacturing specifications are confirmed upon request.

### Product and Regulatory Information

- The CAS number for all products listed above is 8009-03-8.
- See Safety Data sheet for additional health, safety and disposal information.
- Meet the following FDA regulations:
  - 21 CFR 172.880 regarding direct food additives
  - 21 CFR 178.3700 regarding indirect food additives
  - 21 CFR 573.720 regarding animal food additives

# *penreco*®

**Formulating Lasting Partnerships**  
With Products Designed for Life