



THE CLEAN NON-OIL PASTE

980 Series

IRMCO GEL® 980-000

The 980 Series IRMCO GEL® products are designed for tube bending applications where it is critical that the lubricant remains on the surface where it is applied.

IRMCO GEL 980-000 is a mandrel tube bending gel lubricant with consistency between NLGI 0 and 00. Eliminates housekeeping issues associated with bending oils. Light amber in color and clear. For use on carbon and some stainless steels. Do not dilute.

Typical applications include bending automotive exhaust systems.

Former Designation: IRMCO 980-00M

OEM Approvals\*: Addison Tube Forming Limited

Eagle Eaton Leonard

Ford Motor Company

OPERATIONS													METALS								APPROVED IN					
Bending	Blanking	Cutting	Drawing	Extruding	Forming	Grinding	Hydroforming	Ironing	Punching & Piercing	Roll forming	Spinning	Tube bending	Aluminum	Aluminized	Brass / Copper	Steel	Stainless Steel	High Strength Steel	Zinc	Carbide Tooling	US	Canada	Mexico	Europe	Australia	
✓												✓	*	*	x	✓	✓			x	x	✓	✓	✓	✓	✓

**KEY**

- ✓ : Recommended use
- \* : Alternative use
- x : Not Recommended

Blank values indicate that this information is not currently available. Check with IRMCO for more details.

\* For more information, please request IRMCO OEM Approval list.

PRODUCT PROPERTIES

<b>Appearance:</b>	Clear, Light to dark amber	<i>Tendency</i>	<i>Stability</i>
<b>Density:</b>	8.244 lb/gal      61.67 lb/ft3      988.671 kg/m3      0.988 kg/L	<b>Foam (ml):</b>	
<b>Viscosity (40°C):</b>	--      --      --      --	<b>pH:</b>	8.01

Dilution (Water:Lubricant)	0:1	1:1	2:1	3:1	4:1	5:1	6:1	7:1	8:1	9:1	10:1	12:1	15:1	20:1	25:1	30:1
Lubricant (%)	100%	50%	33%	25%	20%	16.7%	14.3%	12.5%	11.1%	10%	9.1%	7.7%	6.3%	4.8%	3.8%	3.2%

<b>Fluid tester (0-30):</b>	19.9	9.9	6.6	5.0	4.0	3.3	2.8	2.5	2.2	2.0	1.8	1.5	1.2	0.9	0.8	0.6
<b>Brix (%):</b>	21.3	5.3	2.4	1.3	0.9	0.6	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0

**Residue:** Viscous film requiring proper removal

**Flash point:** None.

**Container Storage:** Indoor suggested. Product will freeze at 32° F (0° C).

**Application Equipment:** IRMCO GEL Ejector assembly

<b>Coverage:</b>	7,600 - 11,000 ft2/gal	180 - 280 m2/l	400 - 600 mg/ft2	4.5 - 6.5 g/m2
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**Dilution:** Do not dilute. Use neat product.

**Parts cleaning:** Plain water rinse and/or mild alkaline cleaner 110° F (43.3° C).

**Tooling clean-up:** IRMCO 819-000, IRMCO 957-000 Cleaner-Degreaser or suitable rust inhibiting, water based cleaner.

**Disposal:** Sewer with local pre-approval.

**Press Grease:** For optimum results use recommended "Water Resistant Marine Grease" available from www.chemtool.com (815-459-1250).

**Special precautions:** This product is not compatible with acid, extreme caustic, or solvent type cleaning. Equipment should be painted with alkaline resistant epoxy paint such as Sherwin-Williams Tile Clad II (B62W101) or Devco Coatings Devran 250.

**GUARANTEE:** Should you have a problem with any IRMCO item, notify your IRMCO representative for a replacement, credit or refund.

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NOTICE TO ALL IRMCO USERS:

We believe all the information contained in this document to be reliable, though the accuracy or completeness is not guaranteed. IRMCO FLUIDS®, IRMCO GEL® and IRMCO EXTREME® products have been used extensively throughout the world in a variety of manufacturing and production applications. It is the responsibility of users of IRMCO products to meet the component surface quality, process compatibility or cleanliness requirements of their customers. Given the complexity and variety of users applications and processes, IRMCO cannot predict all user conditions and results. If surface quality, process compatibility or cleanliness is a user concern, then IRMCO recommends removing/cleaning off the IRMCO product film from the components before final assembly and distribution of such components. User assumes all risk and liabilities associated with the products used.