

# SYN HD & IDO

## Heavy Duty Synthetic Gear Oil



### Features

#### Meets or exceeds the following and other specifications:

##### SYN HDH 75W90:

- API MT-1
- API GL-5
- Mack GO-J Plus
- SAE J2360

##### SYN IDO 50:

- Eaton PS-164 REV 7
- Mack TO-A Plus
- ARVIN MERITOR 0-81
- INTERNATIONAL TMS 6816

### Benefits

- Extreme protection
- Long life . enhanced fluid and equipment durability
- Excellent stability
- Improved economy
- Improved Component Protection
- Reduces heat

\*API : American Petroleum Institute

These lubricants are intended for the lubrication of transmissions, transfer cases, differentials and planetary gear sets found in trucks and construction equipment. They use a synthetic base for excellent stability, long life, extreme temperature operation, improved fuel economy, reduced wear and cleaner components.

**SYN HDH** and **SYN IDO** are suitable alternatives for use where an Eaton Roadranger<sup>®</sup> product is recommended. Mack Trucks Inc approves **SYN HDH** for use under its GO-J and GO-J Plus programs, and also approves **SYN IDO** under its TO-A Plus program. The US Military also approves the use of **SYN HDH** under its Mil-PRF-2105E program.

Irving **SYN HDH** has a complete protection package for the extreme pressure (EP) conditions of differentials, including limited slip, and planetaries working under the heaviest load conditions. It meets the performance requirements of API\* GL-5, Rockwell Corporation and Dana Corporation.

Irving **SYN HDH** is available in 2 multi-grades to cover the broadest possible temperature ranges. The use of synthetic base rather than mineral oil reduces friction in extreme conditions, increasing fuel economy by making more horsepower available to the driving wheels.

**SYN IDO** is specially formulated for manual transmissions in class 6, 7 and 8 trucks where straight mineral oils (non-EP) or SAE 50 diesel engine oil is usually recommended. Irving **SYN IDO** has wider operating temperature range than the alternatives. At low temperatures, this gives easier shifting with less drag and gear wear, and lubricating vital transmission parts quickly. At high temperatures, this oil provides a thicker protective oil film than mineral oil lubricants, reducing friction and wear. Taken together, these advantages mean better fuel economy and transmission life.

**NOTE: SYN IDO IS NOT APPROVED FOR USE AS ENGINE OIL.**

When switching from mineral to synthetic lubricants, the two may not be compatible so it is important to drain the unit completely before refilling with the synthetic lubricant. After the change, all seal areas should be checked for the first 20,000 Km.

# SYN HDH & IDO

## Typical performance results

NAME	SYN HDH	SYN IDO
SAE GRADE	75W90	50
VISCOSITY (D-445)		
cSt @ 40°C	137	132
cSt @ 100°C	17.5	17.5
VISCOSITY INDEX (D-2270)	152	146
BROOKFIELD VISC. (D-2602)		
cP @ -18°C	7125	--
cP @ -26°C	--	24250
cP @ -40°C	140000	104000
POUR POINT (°C) (D-97)	< -45	< -45
CHANNEL POINT (°C) (FTMS 3456)	< -51	--
FLASH POINT (°C) (D-92)	205	221
FOAM PREVENTION (D-892)		
SEQUENCE I	PASS	PASS
SEQUENCE II	PASS	PASS
SEQUENCE III	PASS	PASS
COPPER STRIP CORROSION (D-130)		
3 Hrs. @ 121°C	PASS	PASS

## Available sizes & part numbers

	18.9 L (5.0 US Gal)	60L (15.85 US Gal)	205L (54.2 US Gal)	500L (132 US Gal)	1000L (264 US Gal)	1200L (317 US Gal)	Bulk
<b>SYN HDH 75W90 R</b>			F0076450				
<b>SYN HDH 75W90</b>	F0085940	F0020045	F0073650				
<b>SYN IDO 50</b>	F0086040	F0020245	F0074750				

Check with sales representative or website for the latest product approvals.



Lubricants

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