



TECHNICAL DATA

GB DEFIANCE MULTIGRADE RANGE

APPLICATIONS

The GB DEFIANCE MULTIGRADE RANGE has been formulated using the highest quality virgin mineral base oils and multifunctional additives for use in mixed fleets under moderate operating conditions. It is suitable for use in turbo-charged diesel engines, naturally aspirated diesel engines and most petrol engines.

PERFORMANCE FEATURES

The GB DEFIANCE MULTIGRADE RANGE has been developed for use in mixed fleets under moderate operating conditions and offers the following features:

- Excellent anti-wear protection
- Rust and corrosion protection
- Effective control of soot, sludge and piston deposits
- Excellent oxidation and thermal stability

PERFORMANCE DETAILS

At the viscosity of 15W-40, the following performance claims have been met:

ACEA A3/B3/B4/E2 API CG-4/CF-4/CF/SJ MAN 271	MACK EO-L MERCEDES BENZ p228.1/229.1	MTU Type 1 VOLVO VDS VW 505 00
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A division of Goodall Bates & Todd Ltd



Q 06093
ISO 9001



EMS 72776
ISO 14001



OHS 88475
OHSAS 18001

GB DEFIANCE MULTIGRADE RANGE

CHARACTERISTICS

TEST	TYPICAL PHYSICAL CHARACTERISTICS			UNIT	METHOD
SAE	15W-40	10W-30	20W-40		
Appearance	Clear amber liquid	Clear amber liquid	Clear amber liquid	-	-
Kinematic Viscosity @ 100°C	13.3	9.4	14.0	cSt	-
Kinematic Viscosity @ 40°C	98.7	58.2	120.5	cSt	-
Viscosity Index	133	144	115	-	-
Density	881	871	880	kg/m ³	-
CCS @ -15°C	-	-	8810	cP	-
CCS @ -20	6500	-	-	cP	-
CCS @ -25°C	-	5150	-	cP	-
HTHS @ 150°C	3.70	2.87	3.93	mPa.s	-
Noack	11.1	19.3	7.8	%	-
KO AftVisc	12.53	9.06	13.30	cSt	-
KO % ShLoss	5.59	4.01	4.86	%	-
L38 AftVisc	12.82	9.26	13.63	cSt	-
L38 % ShLoss	3.36	1.90	2.55	%	-
Flash Point	211	201	188	°C	IP 34
Pour Point	-30	-30	-24	°C	IP 15

STORAGE AND HANDLING

The GB DEFIANCE MULTIGRADE RANGE should be stored under cover to avoid water collecting in the rim of upturned barrels.

HEALTH, SAFETY AND THE ENVIRONMENT

The GB DEFIANCE MULTIGRADE RANGE is not classified as hazardous under current UK Health & Safety and Environmental Legislation when used in the application for which it is intended.

For guidance on storage and handling of all lubricants and related products, GB Lubricants recommend the Environment Agency, www.environment-agency.gov.uk, as an excellent source of advice.

If you have any queries, please do not hesitate to contact either your local Technical Sales Representative or our Technical Department.

The Company policy is to ensure that a range of products is supplied which complies with the latest specifications and codes within the relevant industry. As part of this development process, we therefore reserve the right to amend formulations and specifications, without prior notice.