



Product Data

Castrol Cooledge BI

General purpose chlorine free soluble oil

Description

Castrol Cooledge BI™ is a general purpose, chlorine free, soluble metal cutting oil with good lubricity characteristics, has good bacterial resistance and forms a stable milky emulsion when mixed with water..

Applications

Cooledge BI has good lubricity characteristics which makes it suitable for multi-metal machining applications including aluminium alloys. Cooledge BI can be used for most machining applications including turning, milling, drilling and tapping.

Cooledge BI is suitable for all machine shops requiring a general purpose stable product which offers versatility in use. Cooledge BI is suitable for most single sump machine applications, but would not be the primary recommendation for large central or high pressure (15 bar) coolant systems.

Advantages

- Is suited to multi-metal applications. Its versatility allows cutting fluids to be rationalized through most machine tools.
- High stable emulsion in both soft and hard waters, and offers long service life and improved economy of operational costs.
- Formulation free from chlorinated paraffins, nitrite and phenols and is readily acceptable for disposal.
- The effective biocide system provides resistance to degradation from bacterial attack, which improves operator acceptance.

Typical Properties

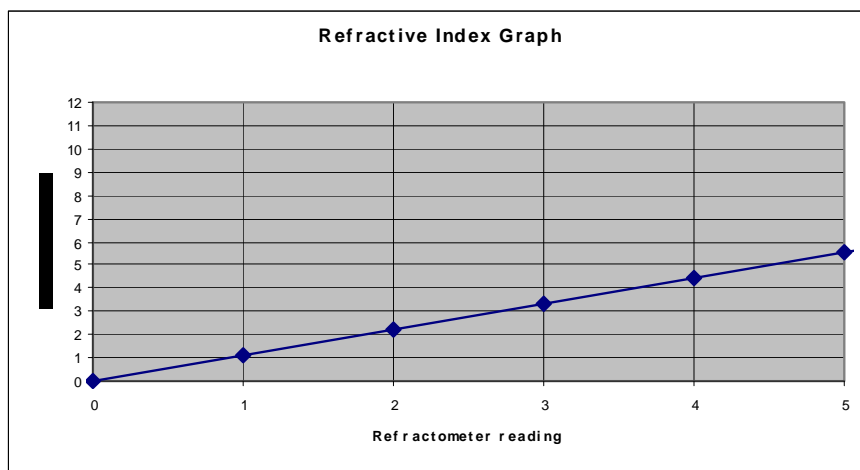
Appearance concentrate	Brown oil
5% Emulsion appearance	Milky white
Density @ 15 ⁰ C	0.9
Flash Point	Water content interferes with flash point determination
pH @ 5%	9.3
Corrosion test IP 287	3%
Refractometer Factor	1.1
Copper Corrosion ASTM D130	Class 1b

The above figures are typical values and do not constitute a specification.

Recommended Dilutions

MATERIAL	Cast Iron	Low Tensile Steel	High Tensile Steel	Stainless Steel	Low Alloy content Aluminium	High Alloy content Aluminium	Copper	Brass
OPERATION								
Boring	4-8%	4-6%	4-6%	4-6%	5-10%	6-12%	4-6%	4-6%
Drilling	4-8%	4-6%	5-10%	5-10%	5-10%	6-12%	4-6%	4-6%
Grinding	4-8%	4-8%	4-8%	4-8%	5-10%	6-12%	3-5%	3-5%
Milling	4-8%	4-6%	5-10%	5-10%	5-10%	6-12%	5-10%	4-6%
Sawing	4-8%	5-10%	6-12%	6-12%	6-12%	6-12%	5-10%	5-10%
Screw Cutting	4-8%	5-10%	N/A	N/A	6-12%	6-12%	5-10%	5-10%
Tapping	4-8%	5-10%	N/A	N/A	6-12%	6-12%	5-10%	5-10%
Turning	4-8%	5-10%	5-10%	5-10%	6-12%	6-12%	5-10%	5-10%

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Additional Information

Cooledge BI is classified as non hazardous according to the criteria of NOHSC. However, in line with safe handling practices, it is recommended that the handling instructions outlined in the Castrol Material Safety Data Sheet be followed.

Cooledge BI is classified as a C2 combustible liquid for storage and handling purposes. Store in a cool, dry, well-ventilated area out of direct sunlight. Avoid sparks, flames and other ignition sources. Store away from incompatible materials such as materials that support combustion (oxidising materials). Reference should be made to Australian Standard AS 1940 – The storage and handling of flammable and combustible liquids.

Spillage:

SMALL - 20 LITRES OR LESS

Soak up on Castrol Diatomaceous Earth or similar inert oil absorbent. Arrange for disposal through an approved facility.

LARGE - GREATER THAN 20 LITRES

Contain as soon as possible, remove by best means available and arrange recycling (preferred) or disposal through an approved facility.

Disposal:

New or used material must not be allowed to enter the ground, ground water, water courses, sewers or drainage systems. Advice may be sought from the Environmental Protection Authority or from the local waste disposal authority.

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It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Material Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.

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