



Product Data

Castrol Clearedge EP 690

Soluble Oil

Description

Castrol Clearedge™ 690 is a phenol and nitrite free soluble oil. It forms a transparent emulsion.

Application

Clearedge EP 690 is designed to cover the widest range of metalworking operations. Suitable for metal cutting and grinding of ferrous and non-ferrous materials, including copper and its alloys, aluminium and its alloys including high silicon grades, stainless steel, nimonic alloys and ceramic materials. Suitable for use in central coolant systems because of its versatility and long service life.

Advantages

- Highly stable emulsion. Long service life - economy.
- Phenol free. Lower disposal costs - economy.
- High capacity to cope with tramp oil contamination. Emulsion does not break down - long service life.
- Can be used on a wide range of materials and operations. Versatile. Allows product rationalization – one grade for all uses.
- Detergent product. Assists in machine cleanliness – less system maintenance.
- Wide dilution range. Versatile. Rationalisation – one grade for all uses.
- Wide water hardness tolerance. Suitable for all types of Australian tap water. No special water treatment necessary.

Typical Properties

Appearance Concentrate	Brown liquid
5% Emulsion Appearance	Transparent clear
Density @ 15°C, g/mL	0.972
Flash Point	Water content interferes with flash point determination
pH @ 5%	9.4
Corrosion test IP 287 % break point	5
Refractometer Factor	1
Copper Corrosion ASTM D130	Class 1b

Clearedge EP 690
106828_2006_03

Castrol and the Castrol logo are trademarks of Castrol Limited, used under licence.

All reasonable care has been taken to ensure that the information contained in this publication is accurate as of the date of printing. However, such information may, nevertheless, be affected by changes in the blend formulation occurring subsequent to the date of printing. Material Safety Data Sheets are available for all Castrol products. The MSDS must be consulted for appropriate information regarding storage, safe handling and disposal of a product. See www.msds.castrol.com.au

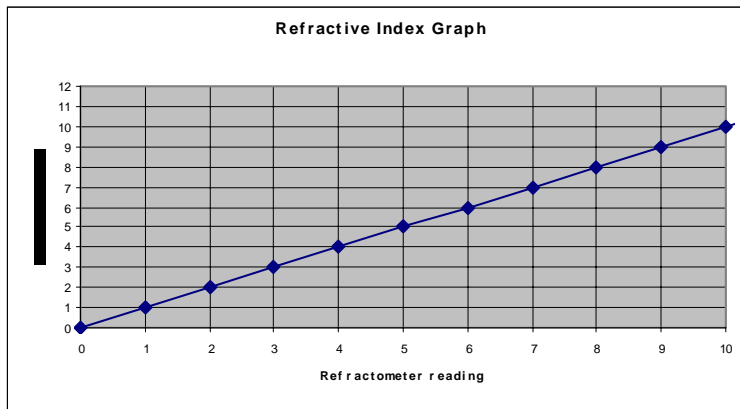
Castrol Australia Pty Limited, Industrial Lubricants and Services, GPO Box 5222, Melbourne VIC 3001
Technical Advice Line 1300 557 998 / Customer Service 1300 554 890
www.castrol.com/industrial

Product Data

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	3-5%	4-6%	4-6%	4-6%	5-10%	6-12%	4-6%	4-6%
Drilling	3-5%	4-6%	5-10%	5-10%	5-10%	6-12%	4-6%	4-6%
Grinding	3-5%	3-5%	3-5%	3-5%	5-10%	6-12%	3-5%	3-5%
Milling	3-5%	4-6%	5-10%	5-10%	5-10%	6-12%	5-10%	4-6%
Sawing	3-5%	5-10%	6-12%	6-12%	6-12%	6-12%	5-10%	5-10%
Screw Cutting	3-5%	5-10%	6-12%	6-12%	6-12%	6-12%	5-10%	5-10%
Tapping	3-5%	5-10%	6-12%	6-12%	6-12%	6-12%	5-10%	5-10%
Turning	3-5%	5-10%	5-10%	5-10%	6-12%	6-12%	5-10%	5-10%

Refractive Index



Additional Information

Clearedge EP 690 is classified as hazardous according to the criteria of NOHSC. It is irritating to skin, may cause sensitization by skin contact and presents a serious risk of damage to eyes. The personal protective equipment specified on the MSDS, safety goggles and appropriate gloves should be worn. For further information please refer to separate Material Safety Data Sheet available on request.

Clearedge EP 690 is classified as C2 combustible according to AS 1940 for storage and handling purposes.

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.

Clearedge EP 690
106828_2006_03
Castrol and the Castrol logo are trademarks of Castrol Limited, used under licence.

All reasonable care has been taken to ensure that the information contained in this publication is accurate as of the date of printing. However, such information may, nevertheless, be affected by changes in the blend formulation occurring subsequent to the date of printing. Material Safety Data Sheets are available for all Castrol products. The MSDS must be consulted for appropriate information regarding storage, safe handling and disposal of a product. See www.msds.castrol.com.au

Castrol Australia Pty Limited, Industrial Lubricants and Services, GPO Box 5222, Melbourne VIC 3001
Technical Advice Line 1300 557 998 / Customer Service 1300 554 890
www.castrol.com/industrial