



Product Data

Castrol Cooledge SL™ General Purpose Soluble Cutting Fluid

Description

Cooledge SL is a general purpose soluble cutting fluid of the non-EP type, based on solvent refined premium quality mineral oil and good package of emulsifier and corrosion inhibitors. It forms milky white emulsion.

Cooledge SL is recommended for general purpose metal cutting operations of ferrous and non ferrous materials, where high quality coolant is required.

Advantages

- ◆ *Highly stable emulsion*
- ◆ *Low foaming*
- ◆ *Excellent rust protection*
- ◆ *Broad spectrum product*
- ◆ *Operator friendly*
- ◆ *Economical in use*

Recommended Emulsion Strength

Operation	Mild Steel	Alloy Steel	Copper Alloys	Aluminium Alloys
Milling, Fuming & Drilling	1:20	1:20	1:20	1:20
Reaming Tapping & Screwing	1:15	1:10	1:20	1:20
Grinding	1:30	1:30	1:30	1:30

Coolant Management System -

A) System Cleaning (Preparation of Machine)

Before changing an emulsion ensure that machines are thoroughly cleaned. The system cleaning may be carried out as detailed here under:

- ◆ *Circulate the old coolant in the system with 2% of 'Techniclean MTC-4' for at least 24 hours prior to change over Coolant.*
- ◆ *Drain \ discharge the coolant and clean the coolant tank manually.*
- ◆ *Refill the tank with 1% solution of Techniclean MTC-4 and circulate it for 2 hours.*
- ◆ *Drain the solution.*
- ◆ *Charge the sump with clean water and circulate the same for 2 hours. Drain the water completely.*
- ◆ *Recharge the system with 1 % solution of Coolant to be charged and -circulate for at least one hour and then drain completely.*

The system is now ready for fresh charge of new coolant.

Cooledge SL
01.11.2006, Version Number 1.0
"Cooledge SL" and Castrol are trademarks of Castrol Limited, used under licence.

All reasonable care has been taken to ensure that the information included 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 India Limited products. MSDS must be consulted for appropriate information regarding storage, safe handling and disposal of a product

Castrol India Limited, Industrial Lubricants & Services, Rayala Towers, II Tower, V Floor, 781-785, Anna Salai, Chennai – 600 002.
Tel: +91 44 42198899 Fax: +91 44 28416305 Toll Free: 1800 - 425 - 4588 (BSNL) Help Line: 044-39019019
Email:customer.service@castrol.com



Product Data

B) Coolant Preparation

Always add oil to water under agitation. Ensure that separate clean container is used for mixing, and do not use galvanised containers. Do not mix in machine sumps.
REMEMBER A GOOD MIXING ENSURES LONGER COOLANT LIFE.

C) Coolant Maintenance:

To ensure optimum performance of emulsion

- Check the emulsion strength regularly and adjust if necessary as per the chart shown below.
- To minimize bacteria problem maintain correct pH value by checking at regular interval.
- Avoid Contamination from workshop debris and tramp oils.

Characteristics

Characteristics	Typical Value
Appearance	3Dark Brown clear liquid
Specific gravity@29.5 °C	0.895 (T)
Flash point (PMCC) °C (neat)	140
pH (5% Emulsion in D/W)	9.0 (T)
Corrosion Test (IP 125)	Passes
Emulsion Stability (for 24 hr)	
5% in Tap Water	Stable
5% in 400ppm Hard Water	Stable
Heat Stability Test (at OC & 50C)	Passes
Nitrite	non added

These are Typical Values & do not constitute a specification.

Cooledge SL conforms to BIS-1115-1986 specification. Please specify product code 202 - 7011 in the purchase order

WEAK EMULSION	OVER STRENGTH EMULSION
Make up an emulsion of 10% strength and make additions in litres as shown below for every 100 litres in the system.	Make up an emulsion of 1 % strength and make additions in litres as shown below for every 100 litres in the system.
Note: Always use premixed emulsions for topping-up.	Note : If may be necessary to drain some of the existing coolant to facilitate these additions

Cooledge SL
01.11.2006, Version Number 1.0
"Cooledge SL" and Castrol are trademarks of Castrol Limited, used under licence.

All reasonable care has been taken to ensure that the information included 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 India Limited products. MSDS must be consulted for appropriate information regarding storage, safe handling and disposal of a product

Castrol India Limited, Industrial Lubricants & Services, Rayala Towers, II Tower, V Floor, 781-785, Anna Salai, Chennai – 600 002.
Tel: +91 44 42198899 Fax: +91 44 28416305 Toll Free: 1800 - 425 - 4588 (BSNL) Help Line: 044-39019019
Email:customer.service@castrol.com



Product Data

Required Strength	Emulsion	1.25	3						
		1.67	8	5					
		2	12.5	9.5	4				
		2.5	20	16.5	11	6.5			
		3.3	35	31	25	20	12.5		
		5	80	75	67	60	55	33	
			1	1.25	1.67	2	2.5	3.3	5

Measured Emulsion Strength

Required Strength	Emulsion	10							
		5	125						
		3.3	286	71					
		2.5	500	167	56				
		2	800	133	50				
		1.67	1250	500	250	125	50		
		%	10	5	3.3	2.5	2	1.6	7

Measured Emulsion Strength

	1	100:1	
% Concentration			Dilution Ratio
	1.25	80:1	
	1.67	60:1	
	2	50:1	
	2.5	40:1	
	3.8	30:1	
	5	20:1	
	10	10:1	

Cooledge SL
01.11.2006, Version Number 1.0
"Cooledge SL" and Castrol are trademarks of Castrol Limited, used under licence.

All reasonable care has been taken to ensure that the information included 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 India Limited products. MSDS must be consulted for appropriate information regarding storage, safe handling and disposal of a product

Castrol India Limited, Industrial Lubricants & Services, Rayala Towers, II Tower, V Floor, 781-785, Anna Salai, Chennai – 600 002.
Tel: +91 44 42198899 Fax: +91 44 28416305 Toll Free: 1800 - 425 - 4588 (BSNL) Help Line: 044-39019019
Email:customer.service@castrol.com