



## Product Data

# Syntilo<sup>®</sup> 11

Fully Synthetic Soluble Cutting Fluid

### Description

**Castrol Syntilo<sup>®</sup> 11** is a fully synthetic soluble cutting fluid. It forms a colourless transparent solution.

### Application

**Castrol Syntilo<sup>®</sup> 11** is suitable for cutting and grinding operations on ferrous metals. Produces outstanding results on high production N/C machines operating at high surface speeds. Particularly successful in the glass working industry where diamond drills are used. **Castrol Syntilo<sup>®</sup> 11** contains materials which may react adversely with copper alloys.

### Benefits and Qualities

- Fully synthetic - contains no mineral oil.
- Low misting and fuming characteristics.
- Highly stable emulsion - even in hard water - prolongs life of coolant.
- Excellent lubricating, cooling and wetting properties.
- Formulated without phenols, nitrites or sulphurised or chlorinated additives which can cause disposal or health problems.
- Excellent low foaming characteristics.
- Clear solution allows visibility of work piece and operation.
- Contains corrosion inhibitors to prevent corrosion of ferrous metals.

### Method of Use

	Mild & Low Carbon Steel	High Tensile Steel	Glass
Milling	2.5% (1:40)	2.5% (1:40)	-
Drilling, turning, boring & sawing	2.5% (1:40)	2.5% (1:40)	-
Grinding	2%(1:50)	2% (1:50)	-
Diamond drilling & grinding	-	-	1.25%(1:80)

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**B979/94/Ind1 replaces B730/89/Ind1**  
**Bulk Item Code 022277**

## Measuring Emulsion Strength

To ensure optimum performance of the emulsion, check the emulsion strength weekly and adjust if necessary. A quick, easy and accurate method is by using a refractometer, such as the Atago NIO Hand Sugar Refractometer, available from Castrol. The following graph converts the refractometer readings to percentage concentration for **Castrol Syntilo® 11**.

### Method of Use

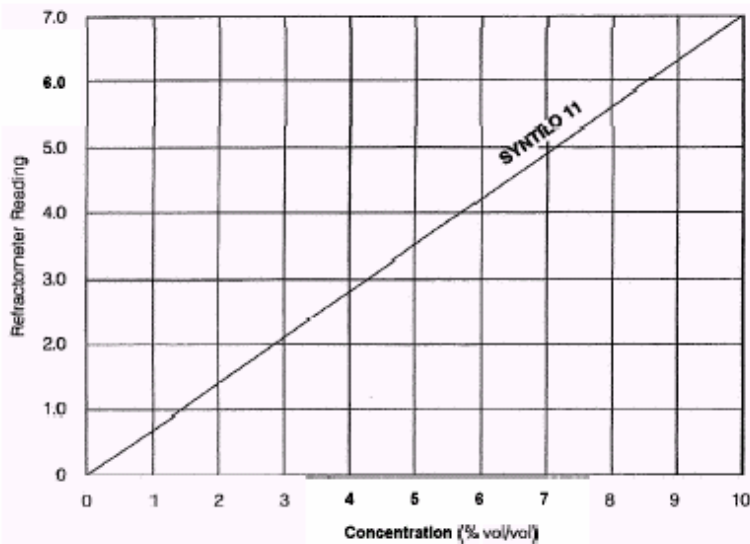
1. Zero instrument according to manufacturer's instructions, including allowance for temperature variations.
2. Allow coolant to circulate and then take a representative sample of coolant from coolant system, preferably from the 'clean' tank. Avoid picking up tramp oil. If necessary, allow sample to stand a few minutes and remove the oil from the surface.
3. Pour a large drop of coolant sample on the prism and close flap. Ensure a full film of coolant is trapped between the flap and the prism. Hold the instrument up to the light and take the percentage reading.
4. Convert the reading to give the concentration of the coolant from the following graph.
5. After use, rinse the refractometer flap and prism surfaces in tap-water and wipe dry.

### Technical Data

- Density @ 15°C : 1.08g/ml
- Closed Flash Point (Neat) : Above 100°C
- pH, (2.5% aqueous solution) : 9.4
- Corrosion Test (IP125) : Rust free @ 1:80
- Nitrite : None Added

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

### Refractive Index Graph



## Health, Safety & Environment

Health and Safety information – see separate Material Safety Data Sheet available on request.

- Spillage: Increase ventilation. Evacuate all unnecessary personnel. Wear full protective equipment and clothing to minimise exposure. If possible contain the spill. Place inert absorbent material such as vermiculite, sand or dirt onto spillage. Collect the material and place into a suitable labelled container. Do not dilute material but contain. If large quantities of this material enter the waterways contact the Environmental Protection Authority, or your local Waste Management Authority.
- Disposal: Dispose of waste according to federal, E.P.A., state and local regulations. Assure conformity with all applicable regulations.

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 Industrial Australia Inc. products. The MSDS must be consulted for appropriate information regarding storage, safe handling and disposal of a product.

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