

TECHNICAL DATA SHEET

SYN 90

Code 7141

High Performance Synthetic Metalworking Coolant

DESCRIPTION

Callington SYN 90 is a mineral oil-free, boron-free, oil rejecting, synthetic metalworking coolant. It is designed for difficult machining operations on metals such as stainless-steel alloys, titanium, and nickel alloys.

It is for use in soft water as well as hard waters and exhibits low foam, without the use of a silicon-based defoamer. It provides excellent stability under a wide range of water conditions, providing outstanding machine cleanliness, and an extremely long life.

FEATURES & BENEFITS

- Unique lubricity and surfactant technologies provides superior lubrication compared to conventional mineral oil based
- Neat cutting oils and soluble oils, without use of chlorinated or sulphurised additives
- Excellent stability and resistance to microbial growth, providing extremely long fluid life
- Mineral oil, chlorine, boron, silicon, formaldehyde release biocide and nitrite free
- Safe to use and environmentally friendly
- Excellent corrosion protection in hard water conditions
- Low foaming in all water conditions, eliminating the use of antifoams
- Rejection of tramp oil for easy removal, providing excellent machine and component cleanliness
- Compatible with yellow metals therefore safe to use in machines with copper, brass, and bronze components



APPLICATION

Callington SYN 90 exhibits exceptional machining characteristics and is capable of replacing mineral oil-based cutting oils and soluble oils, in operations such as broaching, gear hobbing and deep hole drilling.

Callington SYN 90 is extremely stable, provides excellent corrosion protection and is very clean in use, reducing product usage and maintenance requirements. It is equally suitable for use in large, centralised coolant systems and for small individual coolant sumps.

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RECOMMENDED DILUTIONS (consult your Callington sales engineer for recommendation specific to your application)

Material Operation	Stainless Steel	Titanium	Nickel Alloys
Grinding Honing	4%	4%	6%
Turning Drilling Milling	5%	5%	6%
Deep Hole Drilling	5%	5%	8%
Gear Cutting	6%	6%	8%
Broaching	8%	8%	8%

TYPICAL DATA (NOTE: DATA IS TYPICAL AND DOES NOT CONSTITUTE A SPECIFICATION).

Test items	Method	Typical Result
Appearance	Visual	Clear, pale yellow
Density @ 30°C, kg/m ³	ASTM D4052	1.060
Solution		
Appearance	Visual	Clear, colourless
pH 5%	DIN 51361, ASTM E70-97	9.0
Refractometer Factor		1.3

ORDERING INFORMATION

Product Code	Packaging
7141/51	20 litres
7141/64	200 litres

STORAGE

Keep container closed, prevent exposure to frost, and prevent water ingress. Store in cool, dry conditions, and avoid direct sunlight. Indoor storage is preferable.

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