

**PRODUCT INFORMATION**  
**WATER-MISCIBLE METAL WORKING FLUID**

## ESTRAMET S 77

is a mineral oil-free high-performance product based on synthetic ester oils. This coolant of the latest generation combines high performance with ideal cost efficiency. The product is especially recommended for hard to machine materials such as high-alloyed steel, aluminium-, titanium- and nickel-based alloys. The translucent fluid is an alternative to polymer-based, mineral oil-free coolants.

### BENEFITS

- Translucent fluid (semi-transparent)
- Free from mineral oil, boron, formaldehyde, fungicide, and active sulphur
- Broad application area (e.g., turning, drilling, milling, and grinding)
- Particularly suitable for high-alloyed steel, aluminium-, titanium-, and nickel-based alloys
- Outstanding for demanding machining operations (e.g., deep drilling or reaming)
- Clean machines and work pieces thanks to high washing power
- Very high stability and therefore long service life
- Outstanding foaming characteristics even with water hardness from 10°d
- Good corrosion protection

### DATA OF PRODUCT | WATER-MIXED

DETERMINATION	METHOD	UNIT	VALUE
pH-value 5.0%	DIN 51 369	---	9.4
Corrosion test	DIN 51 360/2	[w/w] - K0	3.5

### DATA OF PRODUCT | CONCENTRATE

DETERMINATION	METHOD	UNIT	VALUE
Density, 20°C	DIN 51 757	[kg/m <sup>3</sup> ]	976
Kin. viscosity, 40°C	DIN EN 16 896	[mm <sup>2</sup> /s]	59
Refractive index, n <sub>D</sub> <sup>20</sup>	DIN 51 423	---	1.449

### RECOMMENDED CONCENTRATION (DEPENDING ON APPLICATION AND CONDITIONS)

- Standard concentration at room temperature: 3.5 - 8.0%
- Product can be use in a higher concentration. Please contact your coolant partner for more information.
- See also "Technical information: New fill general".

### FACTORS (OTHER FACTORS ON REQUEST)

Refractometer 1.1%/°Bx  
Testkit 7.4%/ml

### SHELF LIFE | OPERATING AND STORAGE CONDITIONS

6 months under ambient storage conditions.

### INDUSTRIAL HEALTH, SAFETY AND ENVIRONMENTAL PROTECTION

For more details about health and safety please read the information on the safety data sheet.

### DISPOSAL

In compliance with the local waste regulations.