# **Technical Data Sheet**

## Multidraw VSV 77 R

### **Product description**

- · water-miscible drawing lubricant concentrate
- · on the basis of synthetic ester
- contains EP additives
- corrosion protection inhibitors
- low tendency to develop foam

#### Characteristics

Colour / Appearance:	brownish yellow
Density/15°C / DIN EN ISO 12185:	1030 kg/m³
pH-value (10 % in distilled H2O) / DIN 51 369:	8.3
Conductance (10 % distilled water):	2800 µS/cm
Correction factor for determination of the concentration - refractometer:	2.1

### Application

**Multidraw VSV 77 R** is a drawing lubricant concentrate of medium viscosity for wet drawing of steel cord. The product can be used in dipped as well as in sprayed drawing machines.

**Multidraw VSV 77 R** offers a long lifetime of drawing dies and a long service life of the emulsion with excellent machine cleanliness. When using this product, a good rubber adhesion of the wire is guaranteed.

The product is characterized by its very low tendency to develop foam.

**Multidraw VSV 77 R**-emulsions are very stable. During usage, the drawing emulsion is enriched with insoluble copper-, zinc- and iron compounds; a removal of this mud by sedimentation increases the service life of the bath. For keeping the drawing emulsion in a good working condition, pH-value, temperature, concentration, conductivity and copper content have to be controlled. Evaporating loss has to be compensated by adding soft water.

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#### Working concentration

The working concentration of **Multidraw VSV 77 R** depends on the application conditions, as e.g. drawing speed, wire diameter, wire quality, type of machine and is usually between 8 and 12 %. Good operating temperatures are between 35 °C and 40 °C.

#### Preparation of the emulsion

For the preparation of the emulsion we recommend de-mineralised or softened water.

The preparation of the **Multidraw VSV 77 R** emulsion is effected by pouring the drawing oil concentrate slowly into the prepared water and mixing it thoroughly at the same time.

#### Determination of the concentration

The concentration control of the drawing emulsion is easily made by refractometer. If necessary, the drawing emulsion has to be centrifuged before.

#### Storage

**Multidraw VSV 77 R** is best stored between > 5 °C and +30 °C. Maximum storage period is 6 months.

#### Note / Attention

Due to the high product viscosity, Multidraw VSV 77 R is not suitable for preparation with mixing devices.

If there is not used the whole content of the drum for the emulsion preparation, the content in the container has to be homogenised before removal. According to storage and product age, phase separation and/or sedimentation in the container could occur. Nevertheless, the product can be used without any quality loss after an appropriate homogenisation. If a sedimentation occurs, it has to be stirred up or emptied by flushing. Especially defoaming components can sediment.

#### Miscellaneous

This product is dermatologically tested. An Epicutan-test confirms the good skin compatibility. We will send you the test certificate on request.

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