

## Technical Products from Smithers Rapra

### No Business Can Afford to Compromise On Quality

Within any industry the value of precision cannot be overestimated, and this is regarded as of fundamental importance when working with polymers, whether you are involved with consultancy, testing, analysis or production.

The following Technical Products, available from Smithers Rapra, are manufactured in our own laboratories (with the exception of oils). All our technical products are manufactured to the highest possible standards and support you to gain the highest levels of accuracy in your test results.

### Hardness Blocks

Standard hardness blocks are essential for the calibration of IRHD pocket hardness meters (BS 903:PART A57) and are used by many laboratories for checking other durometers and deadload meters. Each set is supplied in a sturdy box, with a glass base to preserve quality. The Rapra blocks have excellent ageing properties and are supplied in sets of 6 blocks covering the hardness range 40-90 IRHD or Shore A. Individual blocks can be provided, please email [info@rapra.net](mailto:info@rapra.net) for details.

Every block is individually tested and a UKAS test certificate issued.

Sets should be returned to Rapra for re-testing, dependant on use this varies between 6 months and two years. The blocks should be replaced when they appear worn or the hardness of the block is not acceptable at the time of testing.

Dimensions - Each block is 60mm × 50mm × 9mm. Round blocks (45mm diameter) and blocks of other dimensions are available on request. Sets of smaller blocks for use with micro hardness testers are also available.

### Reference Oils

The compatibility of rubbers against reference oils (ASTM No. 1 oil, IRM 902 and IRM 903) is a common test called for in material specifications. The tests are often used to indicate compatibility against lubricating oils and greases, but are also a valuable quality tool to ensure consistency in rubber formulation.

The oils are available in 5 litre or 25 litre containers. All Reference Oils are supplied with the relevant Health & Safety sheets and Certificates of Conformity.

### Sliders

The slider names provide their hardness value, standard rubber sliders are  $76 \pm 1.0$  mm ×  $25.4 \pm 1.0$  mm ×  $6.35 \pm 0.5$  mm and can be supplied as a replacement rubber to be adhered to a backing plate or as a slider/backing plate assembly.

Slider 55 (TRRL rubber) was developed as a soft tyre compound to assess the skid resistance of roads but

is now used to simulate the soft sole of shoe material found on "Trainer" type shoes and has even been used as a substitute for skin when evaluating swimming pool surrounds. Slider 96 (Four S) was developed as a hard shoe heel material and is still the primary test rubber when evaluating internal flooring materials for pedestrian use.

Sliders can be supplied in single units, loose or mounted on an aluminum base plate. The minimum order value is £75

Sliders can be provided in bespoke sizes and thicknesses

## Delivery

Hardness Blocks, Reference Oils and Sliders are usually delivered within 7 – 10 working days from receipt of order, subject to availability.

## Scanning Vibrating Needle Curemeter (SVNC)

The Rapra Scanning Vibrating Needle Curemeter (SVNC) is a simple, versatile and relatively low cost instrument for monitoring cures in liquid formulations as in cast elastomers, sealants, polyurethane foams and thermosetting resins.

## The Rapra Foam Vibrating Needle Curemeter (FVNC)

The Foam FVNC provides the continuous recording of the amplitude cure profiles as with the standard instrument. In addition further data is recorded relating the development of exotherm and the rate of rise for the foam sample to those of cure.

*"By using the Foam VNC as a quality control measure on our goods inward we identified a faulty batch of polyol before it entered our production line. This instance alone has recouped the cost of purchasing the instrument".*

*"Studying the cure profile of our range of elastomers products we found significant time saving was possible in our moulding processes. By reducing our de-mould times many tens of thousands of dollars have been saved in production costs".*

## Smithers Rapra

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