

# Automotive, Technology

## Material testing of elastomers in blow-by-mixtures

### Summary

Test samples of elastomer are fixed on a sample holder and put into a Berghof reactor filled with a blow-by-mixture. The closed reactor is heated up to a desired temperature and keeps this temperature for a required period. The design of the sample holder allows tests of samples in liquid phase as well as in the gas phase, even at the same time, if necessary.

This procedure is a common method of preparing elastomer samples for tensile tests.

### Examples for reagents and Equipment

**Example for test samples** dumbbell specimen type 2 according to ISO 37

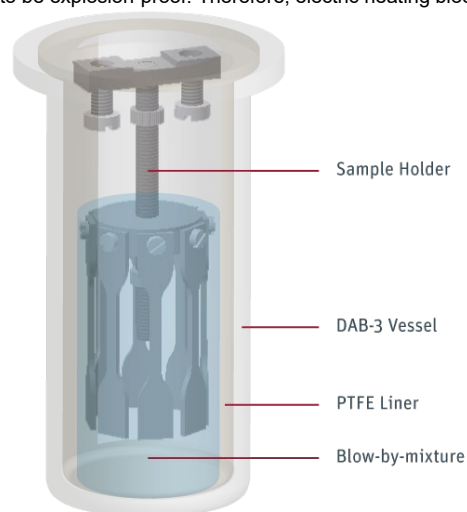
**Examples for blow-by-mixtures** acidic test mixtures aqueous or organic test mixtures

Equipment	Reactor	Sample holder available*	Heating instrument	Thermostat
	DAB-3	✓	-	-
	DAB-3XXL	✓	-	-
	BR-500	✓	BTM-500	✓
	BR-700	✓	BTM-700	✓
	NR-1500	✓	welded double jacket	✓
	NR-3000	✓	welded double jacket	✓

**Note:** When working with blow-by-mixtures, the reactor has to be explosion-proof. Therefore, electric heating blocks cannot be used.

### Technical Drawing

DAB-3 with sample holder  
(Please note: This technical drawing serves only as an illustration. It does not show real dimensions)



**Note:** This application serves only as a guide line and may need to be optimized for your sample.  
\* In addition to standardized sample holders, customer specific sample holders can be developed and produced