



### C3.1.3 PROPERTIES OF SOLIDS

C3.1.3.1  
Determination of the melting point  
of salicylic acid

Determination of the melting point of salicylic acid (C3.1.3.1)

Cat. No.	Description	C3.1.3.1
667 500	Melting point determination apparatus	1
661 085	Melting point detection tubes, set of 100	1
667 306	Silicone gaskets, GL 18/6, set of 10	1
666 161	Chemical thermometer, -10...+250 °C/1 K	1
666 8471	Magnetic stirrer with hotplate	1
666 854	Stirring magnet, 50 mm x 8 mm diam.	1
666 523	Stand rod, 450 x 12 mm diam., M10 thread	1
666 555	Universal clamp 0...80 mm	1
301 09	Bosshhead S	1
602 725	Laboratory dish, 140 mm diam., 900 ml	1
664 154	Watch glass dish 80 mm Ø	1
604 5682	Powder spatula, steel, 185 mm	1
665 009	Funnel PP 75 mm Ø	1
656 017	Teclu burner, universal	1
667 187	Safety gas hose with end clamp, 1 m	1
674 0820	Paraffin, thick, 1 l	1
674 6210	Salicylic acid, 100 g	1

The solid state of a substance is defined as featuring a definite, nearly temperature-independent volume and stable shape. All substances which meet those criteria are known as solids.

In experiment C3.1.3.1, the thiele tube is used to determine the melting point of salicylic acid. The melting point is, along with the boiling point, a characteristic property of every substance. The melting point determination apparatus is filled with paraffin and fitted with a thermometer. A melting point tube is filled with the substance to be assayed. The tube is inserted with the open side into the device in a way that it is positioned alongside the thermometer. The melting point is determined by slow heating in the water bath.