

# International Standard



# 7060

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## Caprolactam for industrial use — Determination of crystallizing point

*Caprolactame à usage industriel — Détermination du point de cristallisation*

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## Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 7060 was developed by Technical Committee ISO/TC 47, *Chemistry*, and was circulated to the member bodies in July 1981.

It has been approved by the member bodies of the following countries :

Austria	Hungary	Philippines
Belgium	India	Poland
Brazil	Italy	Romania
China	Korea, Dem. P. Rep. of	South Africa, Rep. of
Czechoslovakia	Korea, Rep. of	Switzerland
Egypt, Arab Rep. of	Mexico	Thailand
France	Netherlands	United Kingdom
Germany, F.R.	New Zealand	USSR

No member body expressed disapproval of the document.

# Caprolactam for industrial use — Determination of crystallizing point

## 1 Scope and field of application

This International Standard specifies a method for the determination of the crystallizing point of caprolactam for industrial use.

## 2 Reference

ISO 1392, *Determination of crystallizing point — General method.*

## 3 Principle

Cooling a sample of liquid caprolactam, or a liquefied sample of crystalline caprolactam, and observation of the temperature at which crystallization occurs.

## 4 Reagents

The reagents specified in ISO 1392 are not required for this determination.

## 5 Apparatus

Use the apparatus specified in ISO 1392, clause 4, omitting the Dewar vessel (4.5).

The **thermometer** (see ISO 1392, sub-clause 4.4) shall cover the range 50 to 100 °C.

The **heating bath** (see ISO 1392, sub-clause 4.7) shall contain glycerine or silicone oil.

## 6 Procedure

### 6.1 Preparation of the sample

Use the procedure specified in ISO 1392, sub-clause 5.1.

Samples of crystalline caprolactam shall be melted in the crystallizing tube at 77 to 80 °C.

### 6.2 Preparation of the apparatus

Prepare the apparatus as specified in ISO 1392, sub-clause 5.3, omitting paragraphs a) and c).

### 6.3 Determination

Use the procedure specified in ISO 1392, sub-clause 5.4, taking temperature readings at intervals of 20 s.

## 7 Expression of results

Record the crystallizing point to the nearest 0,1 °C.

## 8 Test report

The test report shall include the following information :

- a) an identification of the sample;
- b) the reference of the method used;
- c) the result and the method of expression used;
- d) any unusual features noted during the determination;
- e) any operation not included in this International Standard, or in the International Standard to which reference is made, or regarded as optional.