

**Product Name :**  
Dart Impact Tester

**Product Code :**  
PLASTIC SUK-AS03LAB006



**Description :**

Dart Impact Tester

**Technical Specification :**

Impact resistance or impact failure load of plastic films is defined as the weight of a hemispherical shaped dart, falling on the film held in a suitable clamp from a specified height, which causes failure of 50% of specimens tested.

The Dart Impact Tester for plastic films consists of a vacuum clamp of specified shape and size on which the specimen can be supported at its periphery in a horizontal plane, a dart with incremental weights, a vacuum pump with electric motor to provide the vacuum needed for holding the test specimen, and a clamping ring for holding thicker films during the test.

The dart used for striking the film under test has a hemispherical head of 38.1 mm diameter made of fiber reinforced bakelite and an aluminium shaft with mild steel tip for suspending it from an electromagnet. A set of annular shaped stainless steel weights is provided for changing the total mass of the dart for

giving different impact energies. A foam padding is placed inside the clamp to avoid damage to the dart head if it passes through the test specimen.

The electromagnet for holding and releasing the dart is fixed on a bracket vertically above the centre of the clamp. An arrangement for fixing the bracket at three different locations to give the desired dropping heights is also provided.

The equipment is built on a rigid steel frame and is finished in shore blue matalic painting and bright chrome plating to give it a corrosion resistant finish.

**Technical Specifications**

127mm diameter of clamp
38mm diameter of dart head
Dimensions of dart 15mm long with 12.7 mm long mild steel tip
Material of dart head bakelite

Weight of dart with locking collar	
Incremental weight of	
Dropping height and 1524 mm	
<b>Related Standards</b>	
Specification for Low Density Polythelene Films	
Specification High Density Polythylene Films	
Specification for Testing Plastics	
Method 306 F: Impact Resistance of Flexible Films by Falling Dart	

www.astrascientific.com, **Email:** info@astrascientific.com

**Address:** K-88, 20th Street, Annanagar, Chennai, India – 600040 **Phone:** +91-8860605265



**Astra Scientific**