

Angle of Friction.

Angle of friction may be defined as the angle which the resultant of limiting friction and normal reaction makes with the normal reaction.

By definition angle θ is called the angle of friction

$$\tan \theta = \frac{F}{R}$$

$\therefore \tan \theta = \mu$ [As we know $\frac{F}{R} = \mu$]

or $\theta = \tan^{-1}(\mu)$

Hence coefficient of limiting friction is equal to tangent of the angle of friction.

