PRICEMAT

Updated: 31 Mar 2016

Use PRICEMAT to calculate the price (expressed per 100 par value) of a security that pays interest at maturity. The PRICEMAT formula is:

$$P = \left[\frac{100 + \left(\frac{DIM}{B} \times R \times 100 \right)}{1 + \left(\frac{DSM}{B} \times Y \right)} \right] - \left[\frac{A}{B} \times R \times 100 \right]$$

Where:

A	=	Number of days from issue date to settlement date
B	=	Number of days in the year
DIM	=	Number of days from issue date to maturity date
DSM	=	Number of days from settlement date to maturity date
P	=	Price per 100 par value
R	=	Annual interest rate in decimal terms
Y	=	Annual Yield

Syntax

```
Public Shared Function PRICEMAT(
    ByVal Settlement As Date,
    ByVal Maturity As Date,
    ByVal Issue As Date,
    ByVal Rate As Double,
    ByVal Yld As Double,
    ByVal Basis As String,)
```

Arguments

Settlement

the settlement date of the instrument. *Settlement* is an expression that returns a **Date**, or of a type that can be implicitly converted to **Date**.

Maturity

the maturity date of the instrument. *Maturity* is an expression that returns a **Date**, or of a type that can be implicitly converted to **Date**.

Issue

the issue date of the instrument. *Issue* is an expression that returns a **Date**, or of a type that can be implicitly converted to **Date**.

Rate

the coupon rate of the instrument in decimal format (10% = 0.10). *Rate* is an expression that returns a **Double**, or of a type that can be implicitly converted to **Double**.

Yld

the yield on the instrument in decimal format (10% = 0.10). *Yld* is an expression that returns a **Double**, or of a type that can be implicitly converted to **Double**.

Basis

the daycount convention associated with the bond. *Basis* is an expression that returns a **String**, or of a type that can be implicitly converted to **String**. Permissible values are:

Basis	Day count basis
0, "BOND"	US (NASD) 30/360
1, "ACTUAL"	Actual/Actual
2, "A360"	Actual/360
3, "A365"	Actual/365
4, "30E/360 (ISDA)", "30E/360", "ISDA", "30E/360 ISDA", "EBOND"	European 30/360
5, "30/360", "30/360 ISDA", "GERMAN"	30/360 ISDA
7, "NL/365"	No Leap Year /365
8, "NL/360"	No Leap Year /360
9, "A/364"	Actual/364

Return Type
Double

Remarks
- If Settlement IS NULL then Settlement equals the current system processing date.
- If Basis is NULL then Basis = 0.
- If Basis is invalid then an error is returned.

See Also
- BONDCF - Cash flows for a bond paying regular periodic interest
- DIRTYPRICE - Dirty price of a bond
- DIRTYYIELD - Yield of a bond from the dirty price
- DIS - Price, discount rate, and/or yield of a discount security
- DISC - Discount rate
- DISFACTORS - Factors for the price calculation of a discount security
- IAM - Price and/or yield of a security paying interest at maturity
- IAMFACTORS - Factors for the price calculation of a security paying interest at maturity
- ODDFPRICE - Price of a bond with an odd first coupon
- ODDFYIELD - Yield of a bond with an odd first coupon
- ODDLPRICE - Price of a bond with an odd last coupon
- ODDLYIELD - Yield of a bond with an odd last coupon
- OFC - Calculate the price and/or yield of a bond with an odd first coupon using the ODDFPRICE equation
- OFCFACTORS - Returns the components of the ODDFPRICE equation

- OFL - Calculate the price and/or yield of a bond with an odd first and an odd last coupon using the OFLPRICE equation
- OFLFACTORS - Returns the components of the OFLPRICE equation
- OFLPRICE - Calculate the price of a security with an odd first and odd last period
- OFLYIELD - Calculate the yield of a security with an odd first and odd last period
- OLC - Calculate the price and/or yield of a bond with an odd last coupon using the ODDLPRICE equation
- OLCFACTORS - Returns the components of the ODDLPRICE equation
- PRICE - Price of a security paying regular periodic interest
- PRICEACT - Price of a bond where coupon amounts are based on number of days in the coupon period
- PRICEACTV - Cash flows and discount factors for a bond where coupon amounts are based on number of days in the coupon period
- PRICEDISC - Price of a discounted security
- PRICEFR - Price of a bond with forced redemptions
- PRICESTEP - Price of a security with step-up rates
- RPI - Calculate the price and/or yield of a bond with regular periodic coupons
- RPIFACTORS - Factors for the calculation of the price of a bond that pays regular periodic interest
- TBILLEQ - Bond equivalent yield of a Treasury Bill
- TBILLPRICE - Price of a Treasury Bill
- TBILLYIELD - Yield of a Treasury Bill
- YIELD - Yield of a bond paying regular periodic interest
- YIELDACT - Yield of a bond where coupon amounts are based on number of days in the coupon period
- YIELDDISC - Yield on a discount security
- YIELDFR - Yield of a bond with forced redemptions
- YIELDMAT - Yield on an interest-at-maturity security
- YIELDSTEP - Yield of a security with step-up rates