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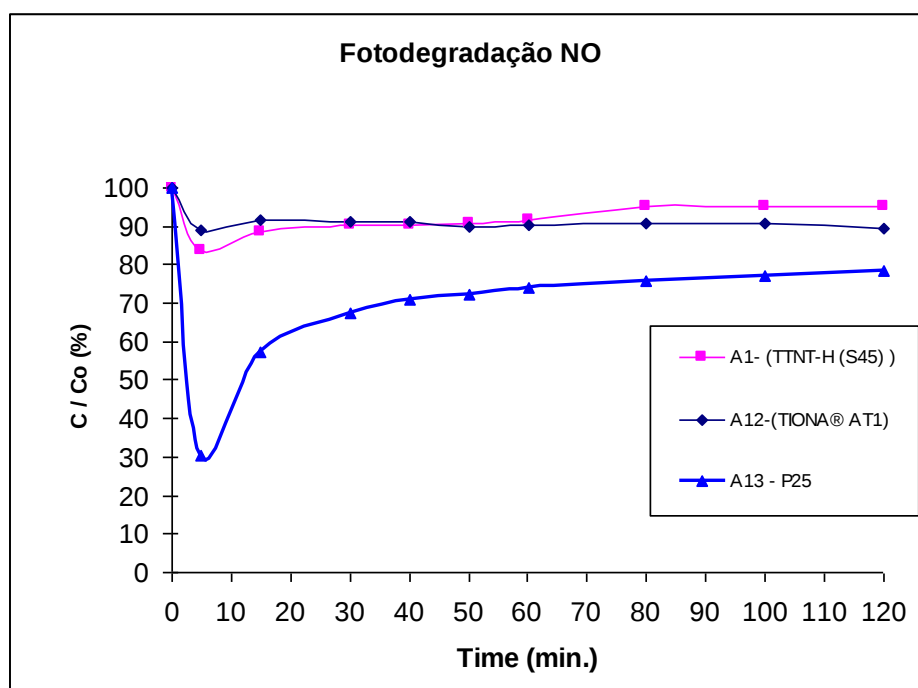
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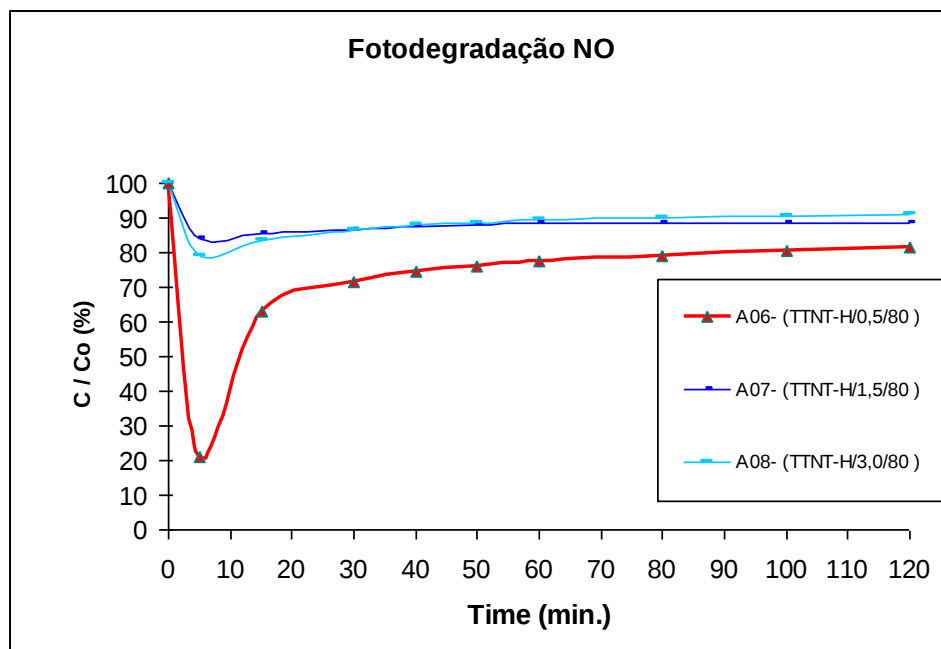
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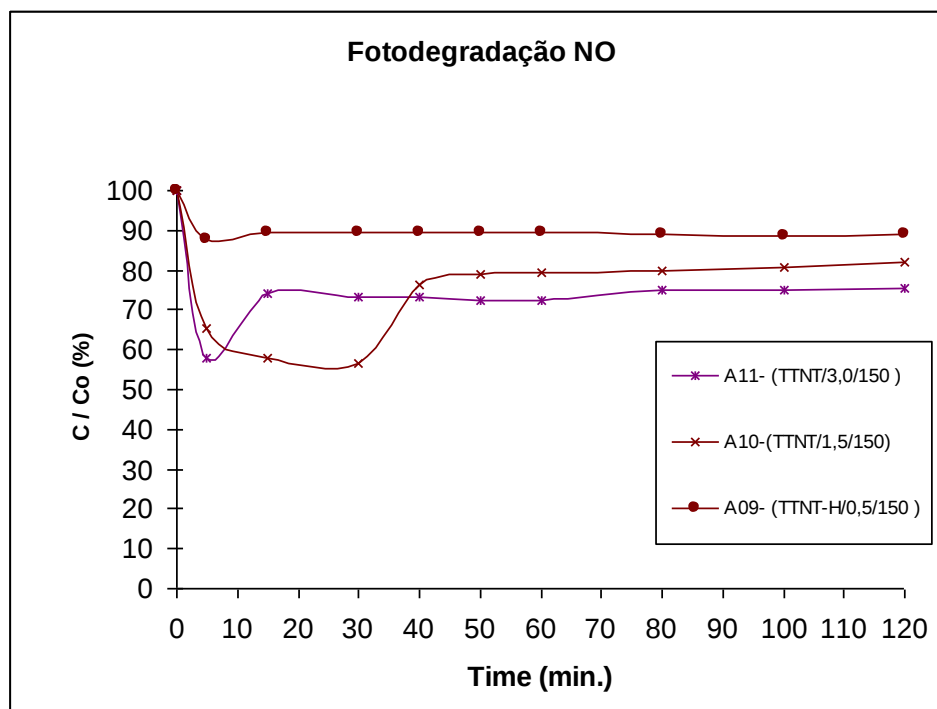
ANEXO 1 - Curvas da foto-oxidação dos materiais testados



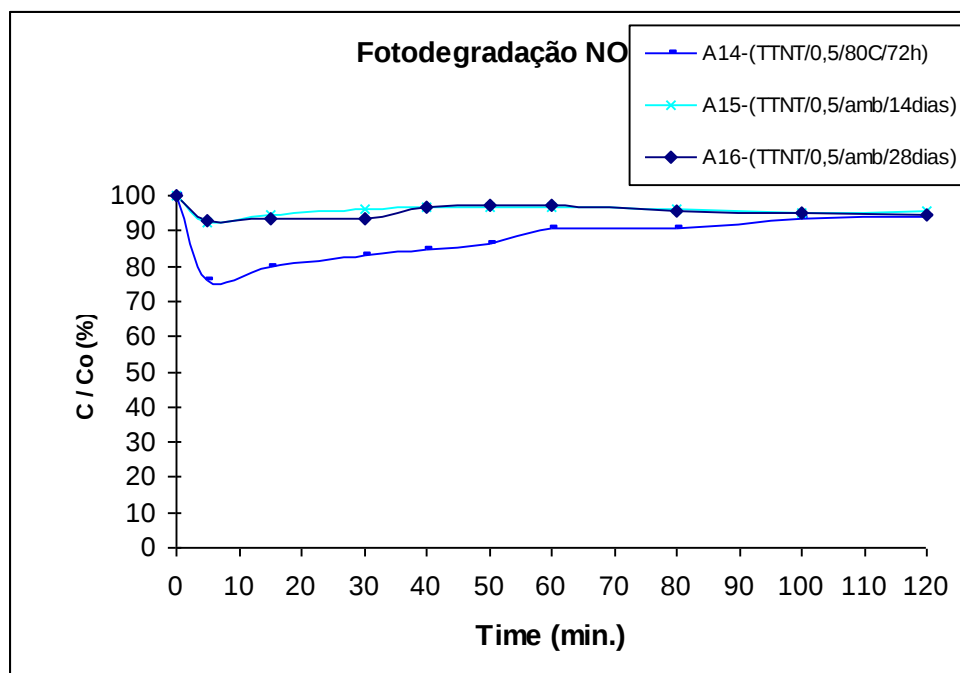
ANEXO 1 - Curvas da foto-oxidação dos materiais testados



ANEXO 1 - Curvas da foto-oxidação dos materiais testados



ANEXO 1 - Curvas da foto-oxidação dos materiais testados



ANEXO 2 – Macro utilizada para calcular as áreas

```
Dim mat(1 To 3, 1 To 4) As Double
```

```
Dim i, j, k, n, n_col, lin, col, out_lin, x_lin As Integer
```

```
Sub monta_mat()
```

```
Dim x, y As Double
```

```
lin = 7: col = 1: out_lin = 24
```

```
For n_col = 0 To 10
```

```
For n = 0 To 1
```

```
For i = 1 To 3
```

```
    x = Worksheets("plan1").Cells(lin + i - 1 + n + x_lin, col +  
n_col * 4)
```

```
    y = Worksheets("plan1").Cells(lin + i - 1 + n + x_lin, col + 1 +  
n_col * 4)
```

```
    mat(4 - i, 1) = x ^ 2: mat(4 - i, 2) = x: mat(4 - i, 3) = 1: mat(4 -  
i, 4) = y
```

```
Next i
```

```
For i = 1 To 3
```

```
    If Abs(mat(i, i)) < 0.00000001 Then GoTo errox
```

```
    For j = 4 To 1 Step -1
```

```
        mat(i, j) = mat(i, j) / mat(i, i)
```

```
    Next j
```

```
    For j = i + 1 To 3
```

```
        For k = 4 To i Step -1
```

```
            mat(j, k) = mat(j, k) - mat(i, k) * mat(j, i)
```

```
        Next k
```

Next j

Next i

mat(2, 4) = mat(2, 4) - mat(3, 4) * mat(2, 3)

mat(1, 4) = mat(1, 4) - mat(2, 4) * mat(1, 2) - mat(3, 4) * mat(1,

3)

Worksheets("plan1").Cells(out_lin + n, col + n_col * 4) = mat(1,

4)

Worksheets("plan1").Cells(out_lin + n, col + 1 + n_col * 4) =
mat(2, 4)

Worksheets("plan1").Cells(out_lin + n, col + 2 + n_col * 4) =
mat(3, 4)

Next n

Next n_col

Exit Sub

errox:

Worksheets("plan1").Cells(out_lin, col + n_col * 4) = "Erro"

End Sub

XX

X

Dim mat(1 To 3, 1 To 4) As Double

Dim i, j, k, n, n_col, lin, col, out_lin, x_lin As Integer

Sub monta_mat()

Dim x, y As Double

lin = 7: col = 1: out_lin = 24

For n_col = 0 To 10

```

For n = 0 To 1
For i = 1 To 3
    x = Worksheets("plan1").Cells(lin + i - 1 + n + x_lin, col + n_col * 4)
    y = Worksheets("plan1").Cells(lin + i - 1 + n + x_lin, col + 1 + n_col * 4)
    mat(4 - i, 1) = x ^ 2: mat(4 - i, 2) = x: mat(4 - i, 3) = 1: mat(4 - i, 4) = y
Next i
For i = 1 To 3
    If Abs(mat(i, i)) < 0.00000001 Then GoTo errox
    For j = 4 To 1 Step -1
        mat(i, j) = mat(i, j) / mat(i, i)
    Next j
    For j = i + 1 To 3
        For k = 4 To i Step -1
            mat(j, k) = mat(j, k) - mat(i, k) * mat(j, i)
        Next k
    Next j
Next i
mat(2, 4) = mat(2, 4) - mat(3, 4) * mat(2, 3)
mat(1, 4) = mat(1, 4) - mat(2, 4) * mat(1, 2) - mat(3, 4) * mat(1, 3)
Worksheets("plan1").Cells(out_lin + n, col + n_col * 4) = mat(1, 4)
Worksheets("plan1").Cells(out_lin + n, col + 1 + n_col * 4) = mat(2, 4)
Worksheets("plan1").Cells(out_lin + n, col + 2 + n_col * 4) = mat(3, 4)
Next n
Next n_col
Exit Sub
errox:
Worksheets("plan1").Cells(out_lin, col + n_col * 4) = "Erro"
End Sub

```