

For illustrative purposes:

**Calculation of Upper-Limit MIR for
Methyl Ethyl Ketoxime:**

Number of Carbons: 4

Molecular Weight of Methyl Ethyl Ketoxime:

87.121 g / mole

Molecular Weight of Ozone: 47.998 g / mole

Upper-Limit Kinetic Reactivity (ULKR)= 1

Upper-Limit Mechanistic Reactivity (ULMR)

= minimum of {7 x Number of Carbons, or 35}

ULKR = 1

ULMR = minimum of {28, 35} = 28

Upper-Limit MIR = ULKR x ULMR x Conversion

Factor (into gram basis)

= 1 x 28 x (47.998 / 87.121)

**= 15.43 g ozone formed per g methyl ethyl
ketoxime**

For illustrative purposes:

Calculation of Upper-Limit MIR for Morpholine:

Number of Carbons: 4

Molecular Weight of Morpholine:

87.121 g / mole

Molecular Weight of Ozone: 47.998 g / mole

Upper-Limit Kinetic Reactivity (ULKR)= 1

Upper-Limit Mechanistic Reactivity (ULMR)

= minimum of {7 x Number of Carbons, or 35}

ULKR = 1

ULMR = minimum of {28, 35} = 28

**Upper-Limit MIR = ULKR x ULMR x Conversion
Factor (into gram basis)**

= 1 x 28 x (47.998 / 87.121)

= 15.43 g ozone formed per g morpholine

For illustrative purposes:

**Calculation of Upper-Limit MIR for
Diethylenetriamine:**

Number of Carbons: 4

Molecular Weight of Diethylenetriamine:

103.167 g / mole

Molecular Weight of Ozone: 47.998 g / mole

Upper-Limit Kinetic Reactivity (ULKR)= 1

Upper-Limit Mechanistic Reactivity (ULMR)

= minimum of {7 x Number of Carbons, or 35}

ULKR = 1

ULMR = minimum of {28, 35} = 28

Upper-Limit MIR = ULKR x ULMR x Conversion

Factor (into gram basis)

= 1 x 28 x (47.998 / 103.167)

= 13.03 g ozone formed per g diethylenetriamine

For illustrative purposes:

**Calculation of Upper-Limit MIR for
Triethylamine:**

Number of Carbons: 6

Molecular Weight of Triethylamine:

101.191 g / mole

Molecular Weight of Ozone: 47.998 g / mole

Upper-Limit Kinetic Reactivity (ULKR)= 1

Upper-Limit Mechanistic Reactivity (ULMR)

= minimum of {7 x Number of Carbons, or 35}

ULKR = 1

ULMR = minimum of {42, 35} = 35

**Upper-Limit MIR = ULKR x ULMR x Conversion
Factor (into gram basis)**

= 1 x 35 x (47.998 / 101.191)

= 16.60 g ozone formed per g triethylamine