

Calculated Propulsion Engine Low Load Multiplicative Adjustment Factors (LLAF Table)

| Column | Type | Comment |
|--------|--------|---------------------------|
| Load | string | Load factor in percentage |
| NOx | double | Nitrous Oxide |
| HC | double | Hydrocarbon |
| CO | double | Carbon Monoxide |
| PM | double | Particulate Matter |
| SO2 | double | Sulphur Dioxide |
| CO2 | double | Carbon Dioxide |
| N2O | double | Nitrogen Oxide |
| CH4 | double | Methane |

Propulsion Engine Emission Factors

| Column | Type | Comment |
|---------------|--------|--|
| fuel | string | Type of fuel used by vessel |
| fuel_category | int | Category of fuel |
| sulfur | string | Percentage of sulfur |
| engine_type | string | Type of engine |
| emission_tier | int | Emission tier |
| model_years | string | Model year |
| nox | double | Nitrous Oxide emission factors (g/kWh) |
| pm10 | double | Particulate Matter with diameter of 10 micrometers and smaller emission factors (g/kWh) |
| pm2_5 | double | Particulate Matter with diameter of 2.5 micrometers and smaller emission factors (g/kWh) |
| voc | double | Volatile organic compounds emission factors (g/kWh) |
| sox | double | Sulfur Oxide emission factors (g/kWh) |
| n2_O | double | Nitrogen Dioxide emission factors (g/kWh) |
| ch4 | double | Methane emission factors (g/kWh) |
| bsfc | int | Brake-specific fuel consumption emission factors (g/kWh) |

Auxiliary Engine Emission Factors

| Column | Type | Comment |
|---------------|--------|--|
| fuel | string | Type of fuel used by vessel |
| fuel_category | int | Category of fuel |
| sulfur | string | Percentage of sulfur |
| engine_size | string | Type of engine |
| emission_tier | int | Emission tier |
| model_years | string | Model year |
| nox | double | Nitrous Oxide emission factors (g/kWh) |
| pm10 | double | Particulate Matter with diameter of 10 micrometers and smaller emission factors (g/kWh) |
| pm2_5 | double | Particulate Matter with diameter of 2.5 micrometers and smaller emission factors (g/kWh) |
| voc | double | Volatile organic compounds emission factors (g/kWh) |
| s_ox | double | Sulfur Oxide emission factors (g/kWh) |
| n2_o | double | Nitrogen Dioxide emission factors (g/kWh) |
| ch4 | double | Methane emission factors (g/kWh) |
| bsfc | int | Brake-specific fuel consumption emission factors (g/kWh) |

Boiler Engine Emission Factors

| Column | Type | Comment |
|---------------|--------|--|
| fuel | string | Type of fuel used by vessel |
| fuel_category | int | Category of fuel |
| sulfur | string | Percentage of sulfur |
| n_ox | string | Nitrous Oxide emission factors (g/kWh) |
| pm10 | double | Particulate Matter with diameter of 10 micrometers and smaller emission factors (g/kWh) |
| pm2_5 | double | Particulate Matter with diameter of 2.5 micrometers and smaller emission factors (g/kWh) |
| voc | double | Volatile organic compounds emission factors (g/kWh) |
| sox | double | Sulfur Oxide emission factors (g/kWh) |
| n2_O | double | Nitrogen Dioxide emission factors (g/kWh) |
| ch4 | double | Methane emission factors (g/kWh) |
| bsfc | int | Brake-specific fuel consumption emission factors (g/kWh) |