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molten magnesium may be the surface of a casting or ingot production operation or the surface of a crucible of molten magnesium that feeds a casting operation.

Subpart U—Miscellaneous Uses of Carbonate

§ 98.210 Definition of the source category.

(a) This source category includes any equipment that uses carbonates listed in Table U–1 in manufacturing processes that emit carbon dioxide. Table U–1 includes the following carbonates: limestone, dolomite, ankerite, magnesite, siderite, rhodochrosite, or sodium carbonate. Facilities are considered to emit CO$_2$ if they consume at least 2,000 tons per year of carbonates heated to a temperature sufficient to allow the calcination reaction to occur.

(b) This source category does not include equipment that uses carbonates or carbonate containing minerals that are consumed in the production of cement, glass, ferroalloys, iron and steel, lead, lime, phosphoric acid, pulp and paper, soda ash, sodium bicarbonate, sodium hydroxide, or zinc.

§ 98.211 Reporting threshold.

You must report GHG emissions from miscellaneous uses of carbonate if your facility uses carbonates as defined in §98.210 of this subpart and the facility meets the requirements of either §98.2(a)(1) or (a)(2).

§ 98.212 GHGs to report.

You must report CO$_2$ process emissions from all miscellaneous carbonate use at your facility as specified in this subpart.

§ 98.213 Calculating GHG emissions.

You must determine CO$_2$ process emissions from carbonate use in accordance with the procedures specified in either paragraphs (a) or (b) of this section.

(a) Calculate the process emissions of CO$_2$ using calcination fractions with Equation U–1 of this section.

\[
E_{\text{CO}_2} = \sum_{i=1}^{n} M_i \times EF_i \times F_i \times \frac{2000}{2205} \quad \text{(Eq. U-1)}
\]

Where:
- \(E_{\text{CO}_2}\) = Annual CO$_2$ mass emissions from consumption of carbonates (metric tons).
- \(M_i\) = Annual mass of carbonate type \(i\) consumed (tons).
- \(EF_i\) = Emission factor for the carbonate type \(i\), as specified in Table U–1 to this subpart, metric tons CO$_2$/metric ton carbonate consumed.
- \(F_i\) = Fraction calcination achieved for each particular carbonate type \(i\) (decimal fraction). As an alternative to measuring the calcination fraction, a value of 1.0 can be used.
- \(n\) = Number of carbonate types.
- \(2000/2205\) = Conversion factor to convert tons to metric tons.

(b) Calculate the process emissions of CO$_2$ using actual mass of output carbonates with Equation U–2 of this section.

\[
E_{\text{CO}_2} = \left[ \sum_{k=1}^{m} (M_k \times EF_k) - \sum_{j=1}^{n} (M_j \times EF_j) \right] \times \frac{2000}{2205} \quad \text{(Eq. U-2)}
\]