

A recurrence for A363871.

$$9(124880n^6 - 1052114n^5 + 3683651n^4 - 6860586n^3 + 7168877n^2 - 3985158n + 920790)(3^{n-1})^2(2^{n-1})^2(3^{n-2})^2n^{2a(n)} =$$

$$(98634220160n^{14} - 1225530185488n^{13} + 6905710941968n^{12} - 23356345050122n^{11} + 52889141835513n^{10} - 84686040694987n^9 + 98711983586427n^8 - 84942053158488n^7 + 54127313823543n^6 - 25373081721119n^5 + 8598744081737n^4 - 2040016673436n^3 + 320025941892n^2 - 29722489920n + 1235995200)a_{(n-1)} -$$

$$9(124880n^6 - 302834n^5 + 296281n^4 - 149522n^3 + 41085n^2 - 5848n + 340)(3^{n-5})^2(n-1)^2(3^{n-4})^2(2^{n-3})^2a_{(n-2)}$$

with $a(0) = 1$ and $a(1) = 37$.

Peter Bala, 27 Jun 2023