Calculation of the Oral Provisional Reference Dose:

$$PRfDo = \frac{LOEL}{(UFH)\,(UFA)\,(UFS)\,(UFL)\,(MF)}$$

where:
PRfDo = Provisional Oral Reference Dose (mg/kg/day);
LOEL = Lowest Observable Effect Level (mg/kg/day) = 3;
UF = Uncertainty Factors (unitless);
H = intrahuman variability accounts for variation in sensitivity among the human population =10;
A = animal to human extrapolation = 10;
S = extrapolation from subchronic exposure to chronic exposure = 10;
L = extrapolation from a LOEL to a NOEL = 10;
D = insufficiency in the toxicological database = 3;
MF = Modifying Factor (unitless) = 3
A modifying factor of 3 was used because of the following characteristics of C8:

- Long half-life in humans (approximately 1 – 3.5 years);
- Potential for bioaccumulation;
- Potential for biopersistence;
- Unusual physical properties such as solubility and partition coefficient.

Therefore, the PRfDo equals 3 x 10E-5.